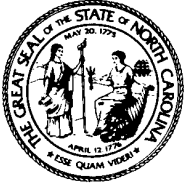


PERFORMANCE AUDIT
DEPARTMENT OF COMMERCE
STATE INFORMATION PROCESSING SERVICES (SIPS)

APRIL 1998



RALPH CAMPBELL, JR.
STATE AUDITOR

STATE OF NORTH CAROLINA
Office of the State Auditor

300 N. SALISBURY STREET
RALEIGH, N. C. 27603-5903
TELEPHONE: (919) 733-3217
FAX: (919) 733-8443

April 15, 1998

The Honorable James B. Hunt, Jr., Governor
Mr. Rick Carlisle, Acting Secretary
Department of Commerce
Mr. Edward Renfrow, State Controller
Members of the North Carolina General Assembly

Ladies and Gentlemen:

We are pleased to submit this performance audit of the *Department of Commerce, State Information Processing Services (SIPS)*. This audit was mandated by the 1997 General Assembly in Senate Bill 352, Section 25.1. The objectives of the audit were to review the growth in the number of employees, examine the distribution of work within SIPS, examine changes in employees' salaries, analyze expenditures of receipts, and review the business plan and rate setting process.

This report consists of an executive summary, program overview, and operational findings and recommendations. Both the Acting Secretary of Commerce and the State Controller have reviewed a draft copy of this report. Their written comments are included as Appendices E and F.

We wish to express our appreciation to Mr. Carlisle, Mr. Renfrow, and their staffs for the courtesy, cooperation, and assistance provided us during this effort.

Respectfully submitted,

(original signed by Mr. Campbell)

Ralph Campbell, Jr.
State Auditor

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EXECUTIVE SUMMARY

We have conducted a performance audit of the State Information Processing Services (SIPS), which was recently transferred to the Department of Commerce (Department) from the Office of the State Controller (OSC). This audit was mandated by the 1997 General Assembly in Senate Bill 352, Section 25.1. As specified in the legislation, the audit focused on the growth in the number of employees, the distribution of work within SIPS, the changes in employees' salaries, the use of receipts, and the cost of services including a review of the business plan and rate setting process.

SIPS was created to improve the acquisition and use of information technology resources throughout State government. General Statute §143B-426.40 established statutory authority for SIPS to provide technology services to State agencies and local governments (cities and counties). SIPS recovers the cost of services through direct billings to clients.

The draft report was reviewed by both Department and OSC management. Their responses are included as Appendix E, page 61, and Appendix F, page 67, respectively.

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AUDIT OBJECTIVES, SCOPE, AND METHODOLOGY

North Carolina General Statute §147-64 empowers the State Auditor with authority to conduct performance audits of any State agency or program. Performance audits are reviews of activities and operations to determine whether resources are being used economically, efficiently, and effectively.

This performance audit of the State Information Processing Services (SIPS), within the Department of Commerce, was mandated by the 1997 General Assembly in Senate Bill 352 (“The Current Operations and Capital Improvements Appropriations Act of 1997”), Section 25.1. The State Auditor was directed to conduct a performance audit to address, but not be limited to, “. . . the growth in the number of SIPS employees, the distribution of work within SIPS, increases in employees’ salaries, use of SIPS’ receipts, and all other indicators of cost of services in relation to service delivery, including a review of the business plan and rate setting process.”

Given this mandate, our specific objectives were to:

- determine the current organizational structure and staffing levels of each section, and to review the growth in the number of employees;
- identify the functions, responsibilities, and workload of each section to examine the distribution of work within SIPS;
- examine the changes in employees’ salaries and the reasons for those salary changes;
- analyze expenditures to determine how receipts collected by SIPS were used; and
- review the business plan and review and evaluate the rate setting process.

The scope of the audit encompassed all aspects of the operations of SIPS, as well as the Information Resource Management staff to the Information Resource Management Commission (IRMC). In addition, the operations of the Department of Commerce (Department) and the IRMC were included to the extent necessary to conduct the review of SIPS. Since SIPS was located within the Office of the State Controller (OSC) until April 1997, the audit also included, to the extent necessary, a review of that Office.

During the period November 12, 1997, through February 20, 1998, we conducted the on-site fieldwork for the audit of SIPS. To achieve the audit objectives, we employed various auditing techniques which adhere to the generally accepted auditing standards as promulgated in *Government Auditing Standards* issued by the Comptroller General of the United States. These techniques included:

- review of existing General Statutes and North Carolina Administrative Code as they relate to SIPS;
- review of policies and procedures of SIPS, the Department of Commerce, and the Office of the State Controller;
- survey of all current employees as identified by SIPS’ management;
- survey of a sample of SIPS’ customers as identified on SIPS’ billing list;
- in-depth interviews with 87 members of SIPS’ staff and 12 persons external to the organization;
- review of existing studies and reports conducted on SIPS’ operations;

AUDIT OBJECTIVES, SCOPE, AND METHODOLOGY

- examination of organizational charts, payroll data, job descriptions, time records, and workload indicators;
- review of a sample of personnel files;
- analysis of a sample of expenditures;
- review of contracts between SIPS and vendors, as well as convenience contracts initiated by SIPS for use by all state agencies;
- comparison of convenience contracts rates to rates offered by SIPS; and
- analysis of the balances in the reserve fund and compliance with federal regulations.

This report contains the results of the audit as well as specific recommendations aimed at improving the operations of SIPS in terms of economy, efficiency, and effectiveness. Because of the test nature and other inherent limitations of an audit, together with the limitations of any system of internal and management controls, this audit would not necessarily disclose all weaknesses in the system or lack of compliance. Also, projection of any of the results contained in this report to future periods is subject to the risk that procedures may become inadequate due to changes in conditions and/or personnel, or that the effectiveness of the design and operation of the policies and procedures may deteriorate.

BACKGROUND INFORMATION

The General Assembly, “. . . *in recognition of the need to better manage the acquisition and use of information technology in general state government, . . .*” created the State Information Processing Services (SIPS) in 1983 by consolidating the existing data centers within state government. Centers consolidated were the State Computer Center, the Department of Transportation, the Department of Correction, and the Employment Security Commission. SIPS was originally placed in the Department of Administration but was moved to the Office of State Controller (OSC) by executive order on March 1, 1987. Executive Order 111 transferred all technology functions from OSC to the Department of Commerce (Department) on April 14, 1997. Senate Bill 869 of the 1997 Session of the General Assembly codified this organizational change. General Statute (GS) §143B-426.40 stipulates that SIPS shall provide technology services to State agencies, including universities and community colleges, as well as local governments (cities and counties). These services are provided through use of IBM mainframe computers, UNIX servers, and statewide voice, data, and video networks. SIPS operates as an internal service fund¹ and, as such, the costs of providing services are recovered through direct billings to clients.

The General Assembly established the Computer Commission in 1983 to review and coordinate technology issues. This commission, renamed the Information Technology Commission in 1989, was the forerunner to the Information Resource Management Commission (IRMC) which was created in 1992 as a result of a recommendation by the Governmental Performance Audit Committee. GS §143B-426.21 gives the IRMC responsibility for developing a statewide information technology strategy and approving technology plans of executive agencies. During the 1997 legislative session, this role was expanded to include review of technology plans for the Administrative Office of the Courts.

MISSION AND VISION²

SIPS’ stated mission is “. . . to help state and local governments achieve success by providing responsive, competitive, and state-of-the-art information management and communications services that support the mission and programs of client agencies.” Furthermore, SIPS “. . . intends to be the information technology service leader in state government.” By sharing resources, SIPS aims to “. . . reduce unit costs of computing and telecommunications, raise the level of technology available to all agencies, improve information sharing among agencies, and improve the information technological infrastructure for State government. Respect for the individual employee, a focus on clients, and a teamwork philosophy are the established principles guiding SIPS’ daily operations.”

¹ An “internal service fund” is a fund used to account for services provided exclusively to other state agencies on a cost reimbursement basis.

² SIPS Home Page on the World Wide Web

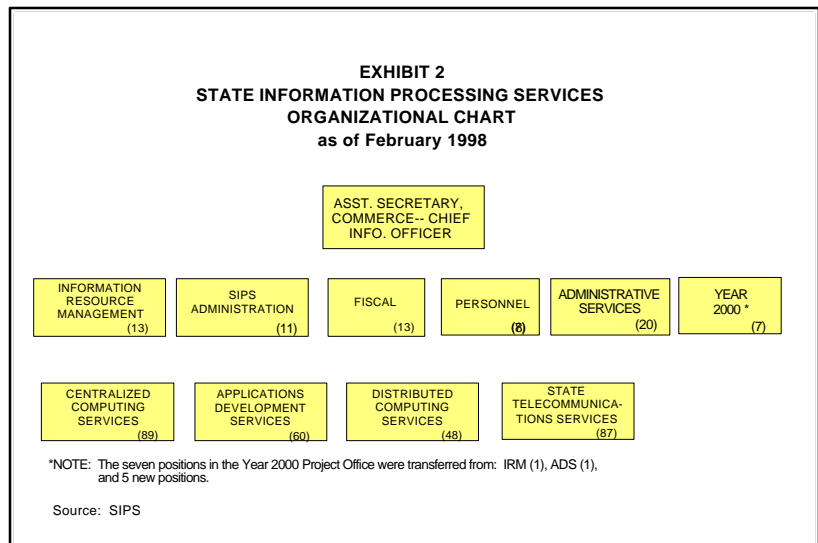
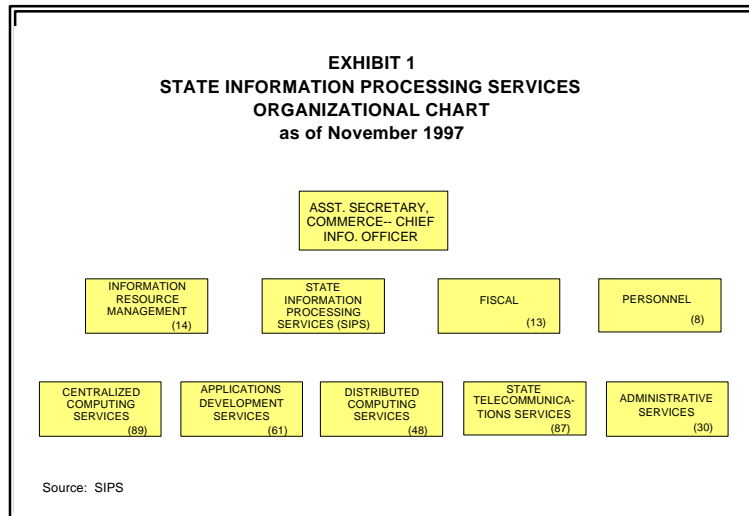
BACKGROUND INFORMATION

ORGANIZATIONAL STRUCTURE AND STAFFING

Exhibit 1 depicts the organizational structure in place at the beginning of the audit. SIPS, the IRM staff, and the Fiscal and Personnel offices that support them report to the Assistant Secretary of Commerce who has been designated as the State's Chief Information Officer. SIPS' organization features four operational sections, and an administrative services section, including security. Each of the four operational sections provides different services to State agencies. During the audit, SIPS established a Year 2000 Project Office to oversee that project's management and changed the organizational reporting structure of the Administrative Services section. Exhibit 2 shows the organizational structure in place at the completion of the audit fieldwork. Below, we outline the duties and responsibilities of the sections as they were as of November 1997.

The **Administrative Services** section is responsible for the overall direction of the agency. The section is led by the Director of SIPS who oversees the operational arm of the organization. Duties include the development of the annual business plan, approval of policies and procedures, and coordination of efforts between SIPS and other State agencies, local government agencies, and outside vendors. The approval of contracts between SIPS and vendors, the maintenance of SIPS' facilities, and procurement of assets are other functions of the administration section. Finally, this section handles building security and security of the hardware and software maintained by SIPS. In total, there are 30 positions for the Administrative Services section.

The **Fiscal Services** section handles financial transactions for SIPS and IRM. The 13 employees within this section are responsible for monitoring the agency's budget, processing payroll, check writing, and preparing the agency's financial statements. In addition, personnel within this section oversee the rate setting process.



BACKGROUND INFORMATION

The **Personnel Services** section consists of seven and one-half positions with responsibility for overseeing all aspects of personnel management for the agency's 350 positions. Duties include recruiting, hiring, orienting, and training of staff, as well as administration of State policies, procedures, and guidelines.

The Department of Commerce provides staff (fourteen positions designated as the **IRM** section) to assist the IRMC in completing its mission. The functions provided are consultation for agencies for all technology procurements and implementation of the statewide technological architecture, coordination of statewide architecture components, quality assurance for statewide technology projects, and strategic technology planning for current and future statewide technology projects. The IRM section's financial and personnel functions are handled by SIPS staff.

Applications Development Services (ADS) provides an array of systems development and support for State and local agencies. This section is arranged into four general applications programming teams (assigned based on application specialties), a database administration team, and a team specializing in emerging technologies involving client/server applications. The primary users of these services are those agencies that do not have the budgetary means to employ their own information systems staff. In addition, staff are responsible for developing Requests for Proposals and evaluating bids received for convenience contracts. Convenience contracts are used by State agencies when ADS does not have the resources or expertise to provide the necessary service. In total, Applications Development Services employs 61 persons.

Centralized Computing Services consists of 89 positions with responsibility for operating the cost-shared computer center (utilizing IBM mainframes and UNIX servers) 24 hours a day, 365 days per year. The computer center is staffed on a three-shift basis with each shift overlapping by thirty minute segments. This section acts as the repository for the State's critical data and insures the security of information stored within the computer center. Further, system programmers provide programming and maintenance on the systems that house the data. Other employees within the section act as couriers to transport reports to user agencies.

Distributed Computing Services performs systems integration, testing, evaluation, and support for agencies' local applications. The 48 employees in this section assist agencies with design of local area networks (LAN) and wide area networks (WAN) and planning for use of Internet web sites. The Customer Support Center (Help Desk), located within this section, is staffed around the clock. Help Desk staff take incoming calls from user agencies when system or applications problems arise and either correct the problem or route the caller to the appropriate individual within SIPS to resolve the situation. SIPS utilizes a software package to track problems and their resolution through the Help Desk procedures.

State Telecommunications Services (STS) plans, designs, implements, and manages multiple telecommunications services for State and local agencies. The STS staff consults with government entities to determine the most appropriate service and coordinates implementation of selected services such as telephones, data communications, and video telecommunications. The 87 employees within the section provide both planning and installation of cabling to enhance telecommunications services and service the existing networks throughout the State.

BACKGROUND INFORMATION

Finally, the North Carolina Information Highway (NCIH) is contained within STS. The NCIH acts as the integrated network that links local networks to the Internet, as well as provides an array of high-speed data and video transmission for use by State agencies, universities, community colleges, local school systems, and hospitals.

In January 1998, SIPS established the **Year 2000 Project Office** to coordinate efforts in converting State computer systems to comply with Year 2000 requirements. The seven employees in the Project Office will oversee the progress of the conversion process and monitor payments on the convenience contracts. In addition, staff will assist in assessing which non-information technology assets (such as elevators and traffic lights) also require conversion and will assist local government agencies in acquiring necessary services.

According to Office of State Personnel records as of October 1, 1997, SIPS has 349 permanent full-time positions and one permanent part-time position with 52 vacancies. (Table 1) Total budgeted salaries equals \$17,047,941, with an average salary of \$48,708. In accordance with SIPS' status as an internal service fund, all but four of these positions are receipt-supported. Those four positions are classified as School Technology Consultants within the IRM section.

TABLE 1 STATE INFORMATION PROCESSING SERVICES BREAKDOWN OF POSITIONS AS OF 10-1-97			
Section	Permanent	Less Vacant	Total Available
Administrative Services	30	6	24
Fiscal Services	13	2	11
Personnel Services	8	0	8
Applications Development Services	61	8	53
Centralized Computing Services	89	10	79
Distributed Computing Services	48	10	38
State Telecommunications Services	87	13	74
Information Resource Management	14	3	11
Total	350	52	298

Source: Office of State Personnel records.

FINANCIAL INFORMATION

Table 2 summarizes the financial data for SIPS for FY94-95 through FY96-97. As an internal service fund, SIPS receives almost all of its funds through a fee-for-service arrangement. These fees are set annually based on input from user agencies, projections of service levels, and equipment and staffing needs provided through the

TABLE 2 STATE INFORMATION PROCESSING SERVICES SUMMARY OF FINANCIAL DATA			
	FY94-95	FY95-96	FY96-97
Revenues			
OSC Administration	\$2,807,185	\$1,104,206	\$742,432
SIPS Administration	2,269,367	3,720,407	5,695,147
Central Computing Services	38,938,614	37,178,261	42,142,561
Distributed Computing Services	1,468,600	4,365,524	2,772,035
State Telecommunications Services	42,962,618	48,418,376	53,179,357
NC Information Highway	2,307,780	5,041,200	6,975,742
Applications Development Services	4,649,406	3,745,636	5,046,037
Total Revenues	\$95,403,570	\$103,573,610	\$116,553,311
Expenditures			
Personal Services	\$12,472,192	\$14,445,476	\$15,608,768
Purchased Services	44,567,364	56,158,522	64,916,437
Supplies	650,565	1,089,028	703,527
Property, Plant, Equipment	11,497,753	25,871,292	13,204,486
Other Expenses	80,848	327,300	322,699
Transfers	5,075,463	4,791,641	15,677,009
Total Expenditures	\$74,344,185	\$102,683,259	\$110,432,926
Excess Revenues	\$21,059,385	\$890,351	\$6,120,385

Source: SIPS Monthly Budget Reports

annual business planning process. (See page 29 for further discussion.) The annual business plan and its associated rates are approved by the Information Resource Management Commission. Any excess revenues are used to cover operating costs during the monthly billing process and to fund equipment purchases as necessary to maintain adequate capacity. In addition, the General Assembly has approved the use of excess revenues to fund statewide projects for the conversion to the Year 2000.

BACKGROUND INFORMATION

YEAR 2000

Computers and their associated applications were originally designed using a two-digit designation for each year ("98" represents the year 1998). The Year 2000 problem refers to the fact that when January 1, 2000, arrives, those programs will recognize the date as January 1, 1900. As a result, all computer hardware and software must be redesigned to properly account for a four-digit year. SIPS has contracted with Anderson Consulting to provide project management services to oversee the Year 2000 conversion process for systems that support State agency operations. The Applications Development Services section prepared a Request for Proposal for vendors to submit bids to provide these conversion services to individual State agencies. Currently, there are fifteen approved conversion convenience contracts for the Year 2000 project. Table 3 contains a list of State agencies that have already entered into convenience contracts

to resolve the Year 2000 conversion problems. In addition, other agencies are using their own staff to complete the conversion process.

TABLE 3 STATE INFORMATION PROCESSING SERVICES YEAR 2000 CONVERSION PROJECTS AGENCIES CURRENTLY USING CONVENIENCE CONTRACTORS AS OF 3/12/98
Office of the Secretary of State
Department of Public Instruction
Department of Justice
Department of Agriculture
Department of Insurance
Department of Administration
Office of the State Controller
Department of Environment and Natural Resources
Department of Health and Human Services
Department of Commerce
Department of Revenue
Source: SIPS Fiscal Officer

Auditor's Note: Appendix D, page 59 is a report issued by the Office of the State Auditor to the IRMC on March 3, 1998, reflecting Year 2000 activities for 60 state agencies.

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FINDINGS AND RECOMMENDATIONS

This section of the report details the specific findings and recommendations resulting from the work performed by the audit team. In order to assist the reader in following and understanding the findings, we have arranged them in order of the specific objectives of the audit: growth in the number of employees, distribution of work, changes in salaries, use of receipts, and costs of services.

GROWTH IN EMPLOYEES

Objective: To determine the current organizational structure and staffing levels of each section, and to review the growth in the number of employees.

Our review of the growth in the number of employees involved analysis of staffing levels by section for the period FY92-93 through FY96-97, analysis of the number of vacant positions and the length of time those positions remained vacant, review of workload indicators for each section, and review of the business plans for the period FY92-93 through FY97-98 to determine the necessity of the positions. Table 4 shows the increases in the number of approved and budgeted positions from FY92-93 through FY96-97. Following this table are findings related to our analysis of the organizational structure and the growth in the number of employees.

TABLE 4											
STATE INFORMATION PROCESSING SERVICES											
ANALYSIS OF CHANGE IN NUMBER OF POSITIONS BY FISCAL YEAR											
SECTION	FY92-93	FY93-94		FY94-95		FY95-96		FY96-97		TOTAL CHANGES FY92-93 to FY96-97	
	Total Positions	Total Positions	Percent Change	Total Positions	Percent Change	Total Positions	Percent Change	Total Positions	Percent Change	Positions	Percent
Administration	24	33	38%	41	24%	40	(2%)	50	25%	26	108%
CCS	81	80	(1%)	89	11%	87	(2%)	89	2%	8	10%
STS	68	78	15%	89	14%	92	3%	87	(5%)	19	28%
DCS	5	10	100%	11	10%	32	191%	48	50%	43	860%
ADS	57	58	2%	63	9%	59	(6%)	59	0%	2	4%
IRM	10	11	10%	21	91%	20	(5%)	15	(25%)	5	50%
Total	245	270	10%	314	16%	330	5%	348	5%	103	42%

Note: All changes reflect both creations of new positions as well as internal transfers of positions from section to section based on reorganizations.
Source: SIPS Position Listings

Conclusion: Based on our analyses, we conclude that the growth experienced by SIPS for the period analyzed was reasonable and necessary to meet the increased demand for services. The number of SIPS employees increased from 245 on June 30, 1993, to 348 as of June 30, 1997, a total increase of 42% for the period. The largest increase (44 positions) occurred during FY94-95 primarily due to implementing support for local area networks (LAN) and the initial North Carolina Information Highway sites. The Administrative Services, State Telecommunications Services (STS), and Distributed Computing Services (DCS) sections showed the most change during the five-year period. STS and DCS had staff increases resulting from increased user-agency demand for services related to LAN's, the

FINDINGS AND RECOMMENDATIONS

Internet, and other client/server applications. Administrative Services grew to support staff increases throughout the organization.

THERE ARE SIGNIFICANT WORKLOAD DIFFERENCES AMONG THE THREE SHIFTS OF THE CENTRALIZED COMPUTING SERVICES OPERATIONS SECTION.

The computer room is staffed around the clock with computer operators and courier drivers.

The staffing levels by shift are depicted in Table 5. We obtained workload indicators for the computer room consisting of CPU utilization levels and tape mounts (loading of tapes into the tape drive) for the mainframe. Our analysis indicated that 55% of mainframe processing occurs during the 8:00AM to 4:30PM

TABLE 5 CCS OPERATIONS STAFFING AND WORKLOAD BY SHIFT						
SHIFT	STAFFING*	TOTAL MIPS**	AVERAGE MIPS/MO	PERCENT OF TOTAL	TAPE MOUNTS	PERCENT OF TOTAL
12:00AM--8:30AM	10	35,157.57	2,929.80	23.34%	39,030	29.15%
8:00AM--4:30PM	12	82,784.04	6,898.67	54.95%	30,860	23.05%
4:00PM--12:30AM	10	32,713.59	2,726.13	21.71%	42,740	31.92%
WEEKEND					21,250	15.88%
TOTALS		150,655.20	12,554.60	100.00%	133,880	100.00%
<small>*Weekend staff consists of 1 person from the 12:00AM-8:30AM shift; 1.5 persons from 8:00AM-4:30PM; and 1 person from the 4:00PM-12:30AM shift. **MIPS (Millions of Instructions Per Second) is a measure of computer machine speed. The total MIPS refers to the amount of processing performed on each shift.</small>						
<small>Source: CCS Operations Monthly Status Reports</small>						

shift, while only 22% and 23% of processing take place during the other two shifts, respectively. However, processing functions may differ by shift. For example, the tape mounts increase during the “off-hours” shifts. Despite this, our analysis indicates that staffing levels by shift could be adjusted to more closely match the workload. Interviews and employee surveys also indicated that staffing during the "off-hours" shifts should be reviewed. Specific concerns were noted relative to the need for couriers on these shifts.

RECOMMENDATION

Management should examine the staffing levels by shift and determine whether some positions may be reassigned to different shifts or eliminated. An analysis should be performed at least annually to ensure that necessary functions are neither under-staffed nor over-staffed for extended periods.

THE PERSONNEL SERVICES SECTION IS OVER-STAFFED.

Each State agency maintains a personnel section to handle personnel administrative functions: recruitment, hiring, salary administration, employee benefits, and training. Smaller agencies, which cannot justify a large personnel staff, rely on the Office of State Personnel for assistance for some of these functions. The size of an agency’s personnel section depends on factors such as the number of total agency staff, the agency’s budget, and the agency staff’s technical ability. SIPS currently has five full-time and one part-time professional positions (a personnel officer III, two personnel technician III’s, a personnel analyst II, a computer training specialist III, and a part-time personnel technician III) and two non-professional positions (personnel assistant IV and V). These individuals provide services to approximately 350 employees. The

FINDINGS AND RECOMMENDATIONS

Personnel Services section increased from two professional positions in FY92-93 to four professionals in FY93-94 and five and one-half professional positions with two non-professional positions in FY97-98. According to SIPS management, these increases were needed due to high turnover rates and the difficulty in recruiting for the technical positions at SIPS. OSP has documented that recruiting and retaining qualified technical information systems personnel for agencies statewide is a problem. However, our analysis of turnover for SIPS does not show a high turnover rate. (See page 23). The current staffing level of the SIPS Personnel Services section results in a ratio of one personnel professional to sixty-four employees (1:64). The average ratio of personnel professionals to employees across State government is one professional to 235 employees (1:235). According to the Office of State Personnel, agencies of comparable size to SIPS have ratios ranging from one professional to ninety-three employees (1:93), up to a ratio of one professional to 250 employees (1:250). Based on these ratios, it is our opinion that SIPS' Personnel Services section is over-staffed.

RECOMMENDATION

Management should evaluate the need for the number of professional personnel positions currently at SIPS. Using the lowest ratio mentioned above, the current professional staffing level could be reduced to three and three quarter equivalent professional positions. Elimination of one full-time position and the part-time position would result in annual savings of \$81,782 in salary and benefits.

SIPS HAS NOT FILLED VACANCIES IN A TIMELY MANNER.

We reviewed SIPS' use of its personnel resources to assess effectiveness. On December 31, 1997, SIPS had 46 vacant permanent positions, 35 of which had been vacant for more than three months. (Table 6, page 14) Thirteen of these positions have been vacant for a year or longer. Management stated that many of these positions were vacant as a result of either difficulty hiring employees at the current salary levels or a lack of qualified applicants. In addition, some positions were vacant because they were established for user-agency projects that have not materialized. This accounts for fourteen budgeted positions of the 46 vacant positions, as denoted by asterisks in Table 6. During the annual business planning process, SIPS receives information from user agencies as to planned projects for the coming year. SIPS bases its position requirements and annual rate computation³ on these projections. While management should be commended for not filling vacancies until a need is clearly demonstrated, SIPS should utilize the existing vacancies to fill expected needs rather than continually requesting approval to establish more positions.

³ All positions that are budgeted for the coming year are included in the rate computation. If the positions do not materialize, the rates are adjusted to reflect this during the next year.

FINDINGS AND RECOMMENDATIONS

TABLE 6 STATE INFORMATION PROCESSING SERVICES POSITION VACANCIES AS OF DECEMBER 31, 1997							
Position Number	Position Title	Date Vacant	Length of Time Vacant	Position Number	Position Title	Date Vacant	Length of Time Vacant
4665-0000-0065-127	Data Base Analyst	07/01/96 *	548 days	4663-0000-0063-298	Network Control Tech II	07/31/97	153 days
4664-0000-0064-120	Office Assistant IV	07/01/96 *	548 days	4660-0000-0060-426	SIPS Financial Admin	08/19/97	134 days
4663-0000-0063-106	Computing Consultant IV	07/01/96 *	548 days	4661-0000-0061-534	Program Assistant V	08/22/97	131 days
4663-0000-0063-102	App Anal Prog Specialist	07/01/96 *	548 days	4666-0000-0066-001	Computer Trng Coord	08/31/97	122 days
4665-0000-0065-124	Applications Anal Prog II	07/01/96 *	548 days	4663-0000-0063-218	Network Control Supvr II	08/31/97	122 days
4662-0000-0062-069	Systems Programmer II	07/01/96 *	548 days	4664-0000-0064-356	Telecomm Sys Analyst I	09/01/97	121 days
4662-0000-0062-070	Systems Programmer III	07/01/96 *	548 days	4664-0000-0064-369	Telecomm Sys Analyst I	09/01/97	121 days
4662-0000-0062-067	Systems Programmer II	07/01/96 *	548 days	4664-0000-0064-533	Telecomm Sys Analyst II	09/01/97	121 days
4665-0000-0065-129	Applications Anal Prog II	07/01/96 *	548 days	4664-0000-0064-036	Telecomm Sys Analyst I	09/01/97	121 days
4664-0000-0064-110	Telecommunications Eng	07/01/96 *	548 days	4660-0000-0060-023	Stock Clerk II	09/01/97	121 days
4665-0000-0065-019	Data Base Analyst	10/01/96	456 days	4660-0000-0060-392	Personnel Technician III	09/15/97	107 days
4665-0000-0065-293	Applications Anal Prog I	10/28/96	429 days	4662-0000-0062-513	Systems Programmer I	10/01/97	91 days
4664-0000-0064-058	Telecommunications Eng	12/31/96	365 days	4665-0000-0065-284	App Anal Prog Specialist	10/13/97	79 days
4663-0000-0063-257	Network Control Tech II	04/18/97	257 days	4662-0000-0062-488	Systems Programmer I	10/13/97	79 days
4665-0000-0065-275	Applications Anal Prog II	05/22/97	223 days	4665-0000-0065-146	App Anal Prog Specialist	10/24/97	68 days
4664-0000-0064-480	Telecomm Equip Tech III	06/17/97	197 days	4664-0000-0064-550	Telecomm Analyst II	11/01/97	60 days
4660-0000-0060-091	Computing Consultant IV	06/30/97	184 days	4665-0000-0065-082	Applications Anal Prog II	11/01/97	60 days
4666-0000-0066-003	Program Assistant V	07/01/97 *	183 days	4663-0000-0063-377	Network Control Tech I	11/12/97	49 days
4666-0000-0066-007	Applications Anal Prog II	07/01/97 *	183 days	4663-0000-0063-539	Network Control Tech II	11/24/97	37 days
4666-0000-0066-008	Applications Anal Prog II	07/01/97 *	183 days	4664-0000-0064-111	Telecomm Equip Tech III	12/04/97	27 days
4666-0000-0066-009	Appl Anal Prog Specialist II	07/01/97 *	183 days	4665-0000-0065-018	Applications Anal Prog II	12/05/97	26 days
4661-0000-0061-142	Appl Anal Prog Spclst II	07/01/97	183 days	4662-0000-0062-410	Computer Ops Librarian	12/31/97	0 days
4665-0000-0065-289	Applications Anal Prog I	07/25/97	159 days	4660-0000-0060-246	Information Center Mgr I	12/31/97	0 days

Source: SIPS Position Listing and Separation Report

RECOMMENDATION

SIPS should continue to aggressively attempt to fill all necessary positions, utilizing the special entry rates approved by OSP (see footnote on page 24). The current position vacancies should serve as an adequate buffer for any new project that was not anticipated. Therefore, SIPS should refrain from requesting and establishing any further positions until a project is actually begun. SIPS should also consider using outside contractors to cover resource needs which may not require long-term employee commitment.

CURRENT DUTY STATION DESIGNATIONS RESULT IN SUBSTANTIAL OVERTIME PAYMENTS.

SIPS employs nine telecommunications equipment technicians, all of whom have Raleigh designated as their duty station. These technicians are dispatched daily to locations throughout

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the State to install or provide maintenance on network telecommunications equipment. Travel time and overtime can be significant when the problem area is located several hours driving time from Raleigh. On many occasions, the technicians leave Raleigh between 2 and 3AM and return the same day between 8 and 10PM. The following examples illustrate travel that occurred due to the technician's current duty station designation.

- One technician left Raleigh, performed service in Murphy, Marion, and Spindale, and returned to Raleigh the same day resulting in a 20-hour day. Fourteen hours of this day can be attributed to travel.
- Another technician left and returned to Raleigh each day after traveling three successive days to the following areas:

Day1: Edenton, Elizabeth City, Nags Head, and Rocky Mount. (6.5 hours overtime)

Day2: Greensboro and Reidsville. (1 hour overtime)

Day3: Morganton, Winston-Salem, High Point, Lexington, Asheboro, Sanford, and Lillington. (5 hours overtime)

- A technician worked in Lexington and Polkton, returned to Raleigh; the next day he worked in Lexington and Winston-Salem. The return trip to Lexington was for a different problem than that of the first day.

Table 7 shows the amount of overtime payments made to the employees in these nine technician positions. The concerns noted are not only related to the overtime payments resulting, but also to the potential liability to the State. Individuals who have worked 12 to 20 hours are performing State-related duties that could potentially harm themselves and others due to fatigue. Our review of the SIPS' policies and procedures did not reveal a policy that addressed limitations on distance and travel time for a commuting trip. The above examples may result from the employee's choice to return home to avoid an overnight stay.

TABLE 7 STATE INFORMATION PROCESSING SERVICES OVERTIME PAYMENTS RECEIVED BY TELECOMMUNICATIONS EQUIPMENT TECHNICIANS FOR THE PERIOD JANUARY – DECEMBER, 1997							
Employee	Hourly Rate	Salary @ 12/31/97	Overtime Rate	Overtime Pay Received	Overtime Hours	Total Compensation	% Increase Total Compensation
1	\$20.65	\$42,961	\$30.98	\$11,226	362	\$54,187	26.1
2	22.43	46,660	33.65	3,342	99	50,002	7.2
3	20.00	41,600	30.00	10,521	351	52,121	25.3
4	22.20	46,184	33.30	15,507	466	61,691	33.6
5	24.10	50,130	36.15	10,278	284	60,408	20.5
6*	19.52	40,611	29.28	1,236	42	41,847	3.0
7	21.33	44,368	32.00	2,434	76	46,802	5.5
8	24.59	51,151	36.89	27,654	750	78,805	54.1
9**	22.36	46,506	33.54	7,699	230	54,205	16.6
10***	19.16	39,862	28.74	2,541	88	42,403	6.4
Total		\$450,033		\$92,438		\$542,471	

* Position held through January.
 ** Position held through June.
 *** Position entered in July.
 Note: Overtime rate is calculated at 1.5 times hourly rate.
 Source: SIPS Position Listing, SIPS Payroll Register

RECOMMENDATION

SIPS' management should immediately analyze the travel for its telecommunications equipment technicians to determine where and how often the technicians travel. Management should then change the duty station for the technicians as indicated by the analysis. To minimize travel time and overtime payments, the technicians should be assigned to locations throughout the state, with their homes being designated as their official duty station within that area. Until the duty stations are

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reassigned, SIPS should establish a policy limiting the distance that can be traveled without an overnight stay.

Auditor's Note: SIPS is currently attempting to fill a telecommunications equipment technician position that will be assigned to the Hickory area.

Auditor's Note: In October 1997, the Office of the State Auditor issued a Feasibility Study on establishing a formal telework/telecommuting program for state employees.

CERTAIN SUPERVISORY POSITIONS MAY BE MISCLASSIFIED.

Two positions within Computer Network Services are classified as Telecommunications Equipment Maintenance Supervisors. During the interview process, each of the individuals in these positions stated that they supervised the same eight employees as part of their responsibilities. The employees, however, stated that their supervisor was the Computer Network Manager. Examination of performance evaluations for the eight employees indicated that the Computer Network Manager conducted the evaluations. A review of official time sheets revealed that the Manager approved each of the eight employees' leave and time worked. Both of these functions are duties of the direct supervisor. Neither duty was included in the responsibilities of the two Telecommunications Equipment Maintenance Supervisors. Additionally, we found no documentation to support the assertion that these two individuals supervised anyone. Therefore, we conclude that these two positions are misclassified and that the position titles do not reflect the actual reporting lines and responsibilities.

RECOMMENDATION

Management should review the responsibilities assigned to the Telecommunications Equipment Maintenance Supervisors and the Computer Network Manager. This review should determine which responsibilities are necessary for each position to obtain the most efficient and effective operations. Classification titles and resulting pay grades should be representative of the duties assigned to each position. Changes made as a result of the review in title classifications or lines of authority should be promptly communicated to all staff. Management should consider requesting assistance from the Office of State Personnel in the classification study.

SIPS DOES NOT HAVE AN INTERNAL INFORMATION SYSTEMS AUDITOR.

In 1989, the Office of the State Controller created an internal audit position that provided limited information system audits and assisted the SIPS' financial administrator. In 1995, OSC revised the duties of the position to assess the internal controls of its information systems. In July 1996, the position was reclassified to EDP Systems Auditor. When SIPS was transferred from OSC to the Department of Commerce, the position remained under OSC, leaving SIPS

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without an internal audit position. In our opinion, an internal audit position is necessary for SIPS to receive an objective assessment of control areas relating to security administration, disaster recovery, computer operations, program maintenance, telecommunications, physical security, and application development procedures.

RECOMMENDATION

SIPS should take action to re-establish the information systems audit function. The auditor should report to a high level of management within SIPS' organization to assure objectivity. We suggest the position report to the State's Chief Information Officer.

DISTRIBUTION OF WORK

Objective: To identify the functions, responsibilities, and workload of each section to determine the distribution of work within SIPS.

To examine the distribution of work, we determined the duties and responsibilities of each section, observed employees performing their daily tasks, and analyzed time records to determine which sections required employees to work overtime to accomplish their assigned tasks. Table 8 reflects the amount of overtime and compensatory time recorded in the automated leave system from January 1997 through December 1997.

TABLE 8 STATE INFORMATION PROCESSING SERVICES OVERTIME AND COMPENSATORY TIME* JANUARY 1997 - DECEMBER 1997					
Section	Overtime Earned	Comp. Time Earned	Comp. Time Taken	Overtime Taken	Net
CCS	713	3,570	3,337	398	548
STS	295	1,264	1,170	0	389
Fiscal Services	6	389	261	0	134
DCS	86	289	263	0	112
Personnel	11	85	86	11	(1)
ADS	0	699	753	0	(54)
Administration	22	648	754	0	(84)
Totals	1,133	6,944	6,624	409	1,044
*Amounts reported in hours. Source: SIPS Automated Leave System					

Conclusion: Based on our analyses, we could not determine if the work reported by section was accurate. Time sheets and leave reports indicate that employees in Centralized Computing Services and State Telecommunications Services work considerably more overtime and compensatory time than other sections within SIPS, as shown in Table 8. Further audit testwork indicated that overtime and compensatory time may not be accounted for accurately.

SIPS' COMPENSATORY TIME POLICY IS NOT CONSISTENTLY APPLIED AMONG SECTIONS.

SIPS' on-line policies and procedures (note finding on page 19) state that “. . . compensatory time shall be granted consistently and fairly within a division to ensure equitable treatment of

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all employees.” Our interviews revealed that some employees maintain their compensatory (comp) time separately from what is reported on their monthly leave reports. In some sections, the comp time is not recorded; rather, it is handled internally based on a verbal agreement between the employee and supervisor. Other sections report all comp time earned on their monthly time sheets. Further analysis revealed that employees are improperly taking compensatory time before it is earned. In a review of all time sheets submitted between August 1996 and November 1997, we noted eighty-two instances where employees took compensatory time before they had earned it. The *State Personnel Manual* stipulates that compensatory leave “. . . is granted on an hour for hour basis . . .” and should be taken “. . . as soon as possible *after it is credited.*” (emphasis added)

RECOMMENDATION

Management should immediately require consistent application of the compensatory time policy among all sections. Employees should record all compensatory time earned and taken on monthly leave reports to accurately reflect time worked. The employees’ supervisors should ensure that employees do not take compensatory leave before it is earned. Furthermore, the Personnel Services section should review the monthly leave reports to verify that policies are appropriately followed.

EMPLOYEES ARE INCONSISTENTLY RECORDING OVERTIME AND COMPENSATORY TIME.

Each month employees submit a monthly leave report to the Personnel Services section detailing vacation and sick leave earned and taken, as well as overtime earned and compensatory time earned and taken. This report is the official agency record of time earned and taken for all employees. During interviews, certain employees in the STS section indicated that they worked significant overtime; however, analysis of the monthly leave reports did not support those claims. We contacted the payroll clerk to determine whether these employees were, in fact, paid overtime. Further analysis revealed these employees received overtime payments. The payroll clerk indicated she received different forms from each section within SIPS as source documentation for overtime payments. We compared the forms submitted to payroll to the monthly leave reports submitted to Personnel Services. The information recorded on these documents did not agree. We calculated 7,781 hours of overtime for 1997 that was paid to employees but not reflected on monthly leave reports submitted to Personnel Services. See Table 9.

TABLE 9 STATE INFORMATION PROCESSING SERVICES OVERTIME DISCREPANCIES JANUARY--DECEMBER 1997				
Section	Overtime Hours Reported To Payroll	Overtime Hours Reported To Personnel	Hours Difference	Overtime Paid But Not Reported To Personnel
CCS	1,102	712	390	\$9,985
DCS	5,142	381	4,761	122,053
STS	2,638	8	2,630	84,949
Total	8,882	1,101	7,781	\$216,987

Source: SIPS Payroll Clerk, SIPS Automated Leave System

Both the employee and supervisor, under a statement certifying that the form indicates “. . . a correct record of attendance and hours worked for the reported period,” sign the monthly leave report. The forms submitted to the payroll clerk are also signed by the employee and

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supervisor; however, these forms may not include the certification statement. The on-line policies state that “. . . all employees. . . shall maintain appropriate records that document the amount of time worked in a work week.” Furthermore, these policies stipulate that “. . . a uniform time reporting system” will be utilized. The reporting of differing information indicates that employees are either not adequately informed of the policies or are not properly following the policies in place.

RECOMMENDATION

Management should immediately discontinue the submission of separate documents for leave reporting and overtime payment. A single document should serve as the source for all time reports or payments for overtime. The policies should include a sample of the official time report to ensure that all employees utilize the correct form.

EMPLOYEES ARE UNSURE OF THE PROPER POLICIES AND PROCEDURES TO FOLLOW.

Throughout our formal interviews, employees consistently expressed concern regarding the actual procedures in place. At the outset of the audit, we asked for a copy of the agency's policies and procedures. SIPS directed us to the on-line index within SIPS' LAN. Review of the on-line procedures showed that SIPS has not updated its policies and procedures to reflect its transfer from the Office of State Controller to the Department of Commerce. No policies had an effective date after June 3, 1997. When we asked the SIPS Personnel Services section for specific policies, we were provided policies under the heading "Information Technology Services" with effective dates after June 3, 1997. Inquiry of the SIPS Personnel Director revealed that a new policies and procedures manual was awaiting final approval by the Assistant Secretary of Commerce (Chief Information Officer) and a formal name change for the agency to Information Technology Services by the General Assembly.

RECOMMENDATION

SIPS should immediately update its policies and procedures to reflect the organizational move from the Office of the State Controller to the Department of Commerce. This update should include any policy changes implemented since June 1997. Furthermore, SIPS should communicate the current policies and procedures to all employees.

THERE IS A LACK OF COMMUNICATION WITHIN SIPS AND BETWEEN SIPS AND EXTERNAL AGENCIES.

Interviews and employee surveys (see Appendix A, page 45) indicated that sections within SIPS are unaware of projects that other sections are working on. As a result, the potential exists for two sections to begin a project simultaneously without collaboration between the sections. In addition, communication lines between SIPS and the IRM staff, (see Exhibit 1, page 6), do not operate effectively. SIPS is often unaware of projects that IRM is developing.

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Therefore, SIPS cannot properly plan for new technology initiatives developed by IRM and approved by the IRMC that SIPS must ultimately support. Furthermore, IRM staff members do not know the proper contact person within SIPS or the status of certain vendor contracts. Finally, user agencies are often unaware of the services SIPS provides (see finding on page 38) or the person to contact for assistance. A major concern noted in the customer surveys was finding the proper SIPS employee to resolve problems, provide advice, and answer technical questions. To improve communication with customers, SIPS created the SIPS Advisory Board and implemented technical user group meetings. However, surveys indicated that these measures have not solved the communication problems.

RECOMMENDATION

SIPS' management should concentrate efforts on improving communication within SIPS and with external agencies. SIPS should consider holding monthly staff meetings with section heads to distribute information. Another option would be instituting a monthly newsletter to effectively inform employees of policy changes and initiatives within each section. Cooperation and communication between SIPS and IRM should be enhanced through periodic planning meetings and by the changes in organizational structure recently implemented⁴. SIPS' management should consider establishing a position for a liaison between SIPS and user agencies. The liaison should inform agencies of SIPS' direction and services provided and gather information from the users as to their business needs.

SIPS DOES NOT HAVE A FORMAL TRAINING PROGRAM IN PLACE.

SIPS employees have not been cross-trained. We found that employees in the Fiscal Services section do not have backups to fill their roles during absences. Programmers within the Applications Development Services section specialize in certain applications. In some instances, there are no other employees within SIPS who support those applications. During the audit, we learned that SIPS contracted with a consultant in 1997 to perform a detailed skills assessment of all positions and employees in the organization. Through input from employees and their supervisors, the consultant determined necessary skills for each position and compared those skill sets to the current employees' abilities. In addition, the consultant provided a database linking training courses to the skills that are currently lacking for each employee and position. OSC management budgeted training costs to the employee level to ensure that training occurred. However, employee responses to our survey and comments in the interviews revealed that many employees have not been allowed or encouraged to take advantage of training opportunities. This was especially true for employees working in sections that bill clients for services rendered. The major reason cited for not utilizing training opportunities was pressure exerted by supervisors to perform billable tasks.

⁴ See the current organizational chart on page 6.

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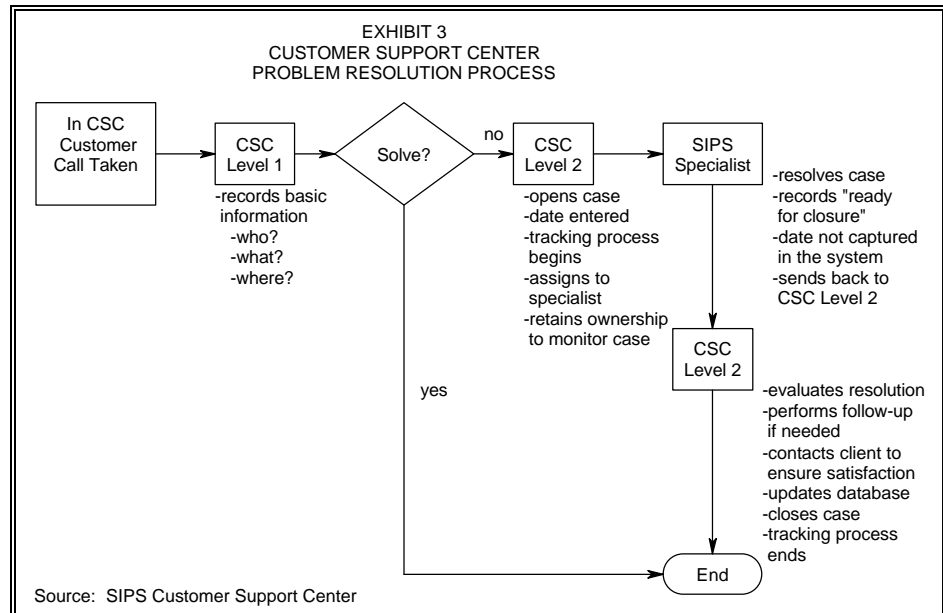
RECOMMENDATION

SIPS should immediately cross-train employees throughout the organization to ensure that all tasks performed and applications supported have backups. Furthermore, management should ensure that employees are given time to take advantage of training opportunities. SIPS should utilize the data provided through the consultant's skills assessment and track employee progress toward acquiring necessary skills. Acquiring necessary skills for each position should be made a part of each employee's personal development plan.

CUSTOMER SUPPORT CENTER PROBLEM RESOLUTION STATISTICS ARE INACCURATE.

The Customer Support Center (CSC) handles customer problems with the use of an on-line, problem tracking software package. Weaknesses in the customer problem reporting process and shortcomings in the tracking software have resulted in the inaccurate compilation of problem resolution statistics. Customers do not always call the CSC Help Desk to report problems. Instead, they often circumvent the customer support process by calling the Centralized Computing Services (CCS) section or the State Telecommunications Services (STS) section directly to report computer or telephone network related problems. When this occurs, the individual receiving the call usually initiates action to correct the problem but will not always let the Help Desk know to open a case. Therefore, these instances are not reflected in the resolution statistics, and useful data to detect recurring problems is not captured.

Currently, the CSC's problem tracking software only captures the dates cases are opened and closed rather than the date the problem is actually solved. Exhibit 3 shows the process followed when responding to customer problems. As shown in the exhibit, the tracking process begins when a CSC Level 2 opens a case and assigns the problem to a SIPS specialist for resolution. The specialist returns the resolved case to Level 2 where the case is closed. Since the process does not capture or track the resolution date, the tracking statistics are incomplete. SIPS is in the process of compiling requirements to upgrade the tracking software to capture the resolution date for tracking purposes.



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RECOMMENDATION

SIPS should continue to upgrade the tracking application to include resolution dates in the compilation of statistics. Further, SIPS should instruct personnel in all sections to report all calls to the Help Desk. Management should consider the feasibility of providing software access to the person resolving the case to enable direct recording of the problems or revise the software to capture statistics on cases begun by someone other than a Help Desk employee.

CHANGES IN EMPLOYEES' SALARIES

Objective: To examine the changes in employees' salaries and the reasons for those salary changes.

We obtained payroll information from the Office of State Personnel and SIPS' Personnel Services section. Using this data, we determined the amount of salary increases by section for the period FY92-93 through FY96-97. This data is summarized in Table 10. The total percentage increase in all salaries from FY92-93 through FY96-97 was 46.7%. Of this total, 18% represented salary increases approved by the General Assembly for all State employees. Further analysis was performed for FY94-95 through FY96-97 to isolate salary increases due to creation of new positions, hiring of new employees, in-range adjustments to reflect changes in job requirements, adjustments to retain employees with outside job offers, special entry rate adjustments based upon assessments by external consultants, and legislative increases. In addition, we reviewed the studies performed by external consultants and examined separation files to determine the reasons employees left SIPS. Finally, we judgmentally selected a sample of 68 employees and reviewed those employees' personnel files, position files, and recruitment packages in detail.

**TABLE 10
STATE INFORMATION PROCESSING SERVICES
CHANGES IN EMPLOYEE SALARIES**

SECTION	FY92-93		FY93-94		FY94-95		FY95-96		FY96-97		TOTAL CHANGE FY92-93 through FY96-97				
	SALARIES PAID	SALARIES PAID	AMOUNT INC/(DEC)	% CHANGE	SALARIES PAID	AMOUNT INC/(DEC)	% CHANGE	SALARIES PAID	AMOUNT INC/(DEC)	% CHANGE	SALARIES PAID	AMOUNT INC/(DEC)	% CHANGE	\$	%
OSC ADMIN.	\$218,736	\$324,444	\$105,708	48%	\$795,016	\$470,572	145%	\$1,174,522	\$379,506	48%	\$678,462	(\$496,060)	(42%)	\$459,726	210%
SIPS ADMIN.	482,050	830,194	348,144	72%	927,318	97,124	12%	1,100,142	172,824	19%	1,840,000	739,858	67%	1,357,950	282%
CCS	2,568,888	3,087,972	519,084	20%	3,026,224	(61,748)	(2%)	2,929,028	(97,196)	(3%)	3,044,197	115,169	4%	475,309	19%
DCS	165,975	281,858	115,883	70%	422,939	141,081	50%	1,079,291	656,352	155%	1,123,090	43,799	4%	957,115	577%
STS	1,781,706	2,288,952	507,246	28%	2,179,115	(109,837)	(5%)	2,579,045	399,930	18%	2,995,841	416,796	16%	1,214,135	68%
ADS	1,580,350	2,001,755	421,405	27%	414,983	(1,586,772)	(79%)	413,470	(1,513)	0%	292,552	(120,918)	(29%)	(1,287,798)	(81%)
Totals	\$6,797,705	\$8,815,175	\$2,017,470	30%	\$7,765,595	(\$1,049,580)	(12%)	\$9,275,498	\$1,509,903	19%	\$9,974,142	\$698,644	8%	\$3,176,437	47%

Note: See Table 4, page 11 for the number of positions resulting in these salary costs.
Source: SIPS Monthly Budget Reports

Conclusion: Total salaries paid at SIPS increased \$3,176,437 (46.7%) from June 30, 1993, to June 30, 1997. The highest increase (\$2,017,470 or 30%)

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occurred during FY93-94. The Administrative Services and State Telecommunications Services sections accounted for the largest portion of the increases during the period analyzed. For FY94-95 through FY96-97, the most prominent reasons for the salary increases were creation of new positions (47%), legislative increases (43%), and position reallocations (7%). Therefore, we conclude that overall SIPS salary increases were reasonable and appropriate.

TURNOVER RATES DO NOT SUPPORT MANAGEMENT'S ASSERTIONS REGARDING RETENTION PROBLEMS.

SIPS' management often cites turnover as a major concern causing the high number of position vacancies (see finding on page 13) and as support for a need to increase salaries. OSC examined its turnover rates during 1996 and concluded that its turnover rates compare favorably to State agency and industry standards. We calculated turnover rates for FY94-95 through FY96-97 and compared those rates to State agency rates computed by OSP. (See Table 11) While "better employment" is the most prevalent reason indicated for leaving SIPS, the total turnover rates for SIPS are less than that of other State agencies. "Retirement" is the second most cited reason for separation as shown in Table 12.

TABLE 11 SIPS TURNOVER RATES COMPARED TO OTHER STATE AGENCIES for the period FY94-95 through FY96-97				
FISCAL YEAR	STATE AGENCIES		SIPS	
	PAY SEPARATIONS	TOTAL TURNOVER	PAY SEPARATIONS	TOTAL TURNOVER
95	2.76%	11.25%	1.91%	6.37%
96	3.23%	12.67%	3.94%	11.52%
97	3.62%	13.60%	3.74%	9.77%
AVERAGE	3.20%	12.51%	3.20%	9.22%
Note: Pay separation denotes those employees leaving employment due to better pay offers.				
Sources: OSP, SIPS Separation Reports				

TABLE 12 REASONS FOR LEAVING SIPS' EMPLOYMENT								
Reasons for Leaving	FY94-95		FY95-96		FY96-97		OVERALL TOTAL	
	Number of Employees	Percent of Total	Number of Employees	Percent of Total	Number of Employees	Percent of Total	Number of Employees	Percent of Total
Better Employment	6	30%	13	34%	13	38%	32	35%
Retirement	3	15%	6	15%	8	23%	17	19%
Transfer	0	0%	3	7%	0	0%	3	3%
Moved	1	5%	4	11%	0	0%	5	5%
Temp. Appt. Term	1	5%	1	3%	0	0%	2	2%
Disability Worker's Comp	1	5%	2	5%	1	3%	4	4%
Parental Famil Med. Leave	3	15%	4	11%	4	12%	11	12%
Other Leave w/o Pay	0	0%	1	3%	0	0%	1	1%
Education	2	10%	0	0%	0	0%	2	2%
Personal	2	10%	0	0%	4	12%	6	7%
Reduction in Force	0	0%	4	11%	2	6%	6	7%
Resigned w/o Notice	0	0%	0	0%	1	3%	1	1%
Dismissed	1	5%	0	0%	0	0%	1	1%
Death	0	0%	0	0%	1	3%	1	1%
Total	20	100%	38	100%	34	100%	92	100%
Source: SIPS Position History, SIPS Separation Reports								

Interviews indicated that some employees have transferred from SIPS to other agencies at the same pay grade and job classification for the same salary due to differences in job responsibilities. SIPS' job duties required them to support multiple systems and agencies, while they are responsible for only one agency and fewer systems in their new jobs.

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RECOMMENDATION

Before seeking additional salary increases, SIPS should carefully examine the actual turnover rates for each section and each job classification. Management should only request salary adjustments for those job classes with a documented retention problem. SIPS should work closely with OSP to examine the job classifications for all technical positions. OSP should continue to periodically compare job responsibilities for technical positions, such as those in SIPS, to similar positions across State government and private industry to assure that salary levels remain competitive.⁵ Reclassifications should be requested from the State Personnel Commission where necessary.

JOB DESCRIPTIONS AND POSITION CLASSIFICATIONS DO NOT REFLECT ACTUAL JOB DUTIES.

At the outset of the audit, we obtained job descriptions for all positions. During the formal interview process and the examination of personnel files, we noticed that several employees' current job duties do not match the responsibilities delineated in their job descriptions. These discrepancies are due to job descriptions not being updated for a number of years. For example, according to the employee in the position, the job description for a network control technician in STS dated 1989 bears no resemblance to current responsibilities. Of the 68 personnel files reviewed, 37 (54%) did not have updated job descriptions. Since most of SIPS' positions are technical information systems positions where the environment changes rapidly, job description updates are especially critical to properly recruit and hire qualified individuals.

In addition, the position classifications do not accurately reflect job responsibilities. Employees' descriptions of the duties they perform are different than their position title would seem to indicate. For instance, some employees in CCS are classified as system programmers although their functions involve monitoring system performance and do not include any programming. An employee in ADS is classified as an applications programmer although this employee performs tasks such as preparing requests for proposals and monitoring contract progress. An OSC internal audit released in 1996 also identified problems with position classifications. However, these problems have yet to be resolved.

RECOMMENDATION

SIPS' Personnel Services section should review all job descriptions to ensure that the descriptions match the employees' actual duties. In addition, SIPS should establish a formal system for updating job descriptions. SIPS should request a formal OSP classification study where

⁵ The Office of State Personnel is charged with conducting periodic "market" comparisons of State government positions. OSP has previously identified the need to upgrade information systems positions, such as those at SIPS, to keep them competitive with private industry. The last such upgrade of this type position took place in June 1997.

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SIPS' Personnel Services section works with OSP to examine the classifications of all positions.

Auditor's Note: In response to rapidly changing information systems technology, OSP and SIPS are currently piloting a "broad-band" project. This project is designed to classify job functions with broad specifications, generally resulting in fewer classifications.

PROCEDURES MAY NOT ENSURE THAT THE MOST QUALIFIED APPLICANTS ARE SELECTED FOR INTERVIEW.

On June 12, 1997, Governor James B Hunt, Jr. issued Executive Order Number 113 entitled "Merit-Based Hiring Process."⁶ This Executive Order required each state cabinet agency to design and submit to the Office of State Personnel for approval ". . . a process for the recruitment and selection of the most highly qualified candidates for employment based upon specific job related knowledge, skills and abilities." The Executive Order requires applicants be evaluated and categorized by a ". . . qualified, independent individual or panel based on the specific knowledge, skills, and abilities." The Executive Order further stipulates that the hiring manager or supervisor only be given the pool of the most highly qualified applicants for consideration. The Personnel Services Section has designated a Personnel Technician III to screen all applications to determine the pool of most qualified applicants for all posted positions at SIPS. Each section at SIPS has positions with very complex educational and working knowledge requirements. It is our contention that a Personnel Technician does not possess the technical expertise to effectively evaluate the highly technical and complex skills required of the applicants and to choose the most qualified for the hiring manager to consider. In fact, the individual currently handling this task expressed concern over her ability to properly determine which applicants are most qualified.

RECOMMENDATION

Given the requirements of Executive Order 113 and SB886 regarding Merit Based Hiring, management should develop new procedures for reviewing applications for selection for interview. At a minimum, the person reviewing applications should have the technical knowledge to effectively evaluate the applicants' qualifications. In our opinion, due to the highly technical nature of its positions, SIPS should assemble a panel to review applications to determine the pool of most qualified applicants.

⁶ In September 1997, the General Assembly passed legislation similar to the executive order seeking to assure the selection of the most qualified persons for State government employment (SB886). The State Personnel Commission subsequently adopted policies and procedures pursuant to this legislation.

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ADEQUATE DOCUMENTATION IS LACKING TO SUPPORT CERTAIN PERSONNEL ACTIONS.

We examined a sample of sixty-eight personnel files. The personnel files and corresponding documentation were reviewed to determine whether employees were qualified for the positions, positions were properly posted, and personnel files contained adequate documentation. The review resulted in four areas of concern as noted below:

- three applicants (4.4%) were promoted and/or hired who did not meet the minimum qualifications as established by the Office of State Personnel (OSP); documentation was not available to justify the deviation;
- for one position (1.5%) the application was accepted two days after the closing date for the position, this applicant was interviewed by a different team than other applicants for the same position, and the applicant chosen did not possess the “best” qualifications based on employment history and training;
- one employee (1.5%) was given a salary increase of \$10,889 (26.7%) in order to retain this employee without adequate documentation of an outside job offer as required by OSP policy; the amount of increase created salary inequities within the section; and
- one recruitment package (1.5%) could not be located.

All concerns were reviewed in detail with the Personnel Services section.

RECOMMENDATION

The Personnel Services section should take immediate steps to adequately document all transactions. For any deviation from policies and procedures, the personnel staff should adequately document the reason for not complying with those policies and procedures. Given the requirements of the Merit Based Hiring statute (SB886) passed in September 1997, it is even more imperative that actions be properly documented.

USE OF RECEIPTS

Objective: To analyze expenditures to determine the use of receipts collected by SIPS.

We examined a sample of 159 expenditures totaling \$18,583,746 (8.7% of total expenditures) from FY95-96 and FY96-97. This sample was selected judgmentally after reviewing a complete listing of expenditures for those years. These expenditures were reviewed for adherence to internal controls, compliance with State and federal regulations, reasonableness, and necessity to carry out SIPS’ statutory responsibilities. Also, we reviewed control procedures for fixed assets and contracts management. We obtained a listing of all purchase orders from FY95-96 through FY96-97 and examined a sample of 22 contracts to determine whether the files contained adequate documentation and proper approval authority.

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Conclusion: The majority of the expenditures reviewed consisted of payments for software license agreements, purchase of hardware components, and payments to contractors for consulting services. SIPS has established internal control procedures to prevent or detect errors or irregularities. With minor exceptions, the expenditures adhered to internal control procedures, complied with regulations, and were reasonable and necessary to carry out SIPS' responsibilities.

SOME PAYMENTS WERE NOT PROPERLY APPROVED AND REVIEWED.

We reviewed the supporting documentation for the sample of 159 expenditures from FY95-96 and FY96-97. We further compared the expenditure coding to the accounting system for accuracy. We noted only minor problems with expenditure coding, timely submission of travel reimbursements, supporting documentation, mathematical accuracy, and payment of invoices after the due date. Overall, internal controls over expenditures appear to be operating effectively although we did have some concerns as explained below.

SIPS' Policies and Procedures state that “. . . all types of purchases require the receipt by SIPS purchasing section personnel of a requisition which has been approved by the appropriate level of management. No exceptions to this policy will be made.” However, our sample contained two instances where employees circumvented the purchasing system to purchase items through direct pay invoices. In one instance, the Facilities Maintenance Supervisor authorized payment of \$61,877 for office furniture without obtaining a requisition or purchase order. Also, a Telecommunications Analyst requested payment of \$5,249 for consulting services that was approved without a requisition or purchase order.

RECOMMENDATION

Fiscal Services personnel should consistently adhere to the internal control procedures. More care should be taken in completing, reviewing, and approving cash disbursements.

SIPS' CONTRACTS ARE NOT CENTRALLY MANAGED.

During the audit we learned that SIPS' purchasing unit within the Administrative Services section does not maintain files for all contracts. Rather, each section within SIPS develops Requests for Proposals (RFP's), reviews proposals, and maintains contract files. In addition, SIPS does not maintain a listing or database of contracts with outside vendors. Since monitoring and management of contracts is decentralized throughout the organization, SIPS could not effectively respond to our request for a listing of vendor contracts. The only information SIPS could provide was a printout of purchase orders extracted from the North Carolina Accounting System. This listing included purchases made under State term contracts, newspaper advertising, miscellaneous small purchases, and other items not associated with a SIPS contract. Further, the listing did not identify contract or Request for Proposal numbers which made it more difficult to effectively track contracts. Without centralized control of

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contracts, management cannot effectively monitor post-award activities, track contractor performance, or be informed of contract expirations. Although OSC identified these same problems during an internal audit released in 1996, the purchasing system was not changed.

RECOMMENDATION

SIPS should establish central control over contract management to include maintaining a complete, up-to-date listing of all SIPS contracts with outside vendors and central monitoring of contract files. The process should allow pre-award activities to continue to include input from applicable SIPS sections.

THERE ARE WEAKNESSES IN THE ACCOUNTABILITY OF FIXED ASSETS.

During the audit, we learned that some SIPS employees are assigned computers to use at their homes during emergency situations. However, SIPS personnel were unable to provide a listing of computer equipment assigned to employees for use in their homes. Fiscal Services personnel indicated that the fixed assets system does not correctly identify the location of fixed assets and that the system includes some equipment that has been lost, stolen, or sent to State Surplus Property for disposal.

In addition to computer equipment, SIPS also assigned 154 pagers (at annual base costs of \$17,627) to employees whose expertise is needed during non-working hours. While reviewing the assignment of pagers, we noted that one pager was currently assigned to an employee who retired in November 1996. SIPS staff were unable to determine the location of that pager. As of March 10, 1998, SIPS has incurred \$472 in monthly rental costs since November 1996 for this pager. Furthermore, five of the pagers have nationwide access at a cost up to \$31 per month more than pagers limited to statewide access. For FY96-97, this access cost SIPS \$1,937 extra. We found no justification for the need of nationwide access.

RECOMMENDATION

SIPS should take steps to account for all pagers and re-assess the need for nationwide coverage. SIPS should also conduct a thorough physical fixed asset inventory and investigate all items that cannot be located. Items that cannot be located should be reported to the State Bureau of Investigation for possible investigation of misappropriation. Once the fixed asset system is updated with the appropriate locations for all equipment, management should require notification when equipment is moved, lost, stolen, or sent to State Surplus Property. The fixed asset system should be updated at least annually to reflect current location of equipment.

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COST OF SERVICES

Objective: To determine the cost of services including a review of the business plans and rate setting process.

We obtained and reviewed the annual business plans for the period FY92-93 through FY97-98. To understand the rate setting process, we interviewed agency personnel and reviewed policies and procedures and reports prepared by the agency. The rate setting process is summarized below. Finally, we compared rates for services offered by SIPS to rates provided by vendors on the approved convenience contracts.

RATE SETTING PROCESS

The rate-setting process is a subjective tool used by SIPS to derive a rate that will provide adequate revenue to support the costs of providing technology services to its customers. Appropriate rate setting is especially important because SIPS is receipt-supported.

Determination of Usage Demand

The initial step in the determination of rates is the calculation of the usage demand. SIPS determines the usage demand through **two different methods** using historical trends, anticipated growth, and management's experience. One methodology includes the Demand Projection and Utilization System (DPU) and the other does not.

The DPU is a statewide database containing agencies' historical usage and demand estimates for many of SIPS' services. This information is used as the basis for the demand projections. The DPU allows agencies to estimate their resource requirements using both historical patterns and current and future project plans. The DPU tracks the resource usage billed monthly to each customer, allows on-line data retrieval, and allows for the automatic calculation of projections using either historical trends or a specified growth rate. The growth rate is based on historical trends, anticipated growth in technology services, and the experience of the rate administrators at both SIPS and the user agencies.

Each major customer must project its usage requirements, gain internal approval of its projections, and certify its projections to SIPS' administration. Certified projections facilitate the agency's efforts to attain funding from the General Assembly essential for its technology needs. Also, the certified projections are used to document service requirements, to assist in responding to legislative inquiries, and to aid SIPS in resource planning. Each agency's chief financial officer, information systems director, and the agency head must sign official projections. The projections are then forwarded to the SIPS Fiscal Services section. Final projections from the agencies are due in December prior to the fiscal year in which the rate structure will be implemented.

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SIPS uses the agencies' certified projections to develop its business plan which must be approved by the Secretary of the Department of Commerce. These projections provide assistance to the Department in its attempt to have adequate SIPS resources in place to meet agency demand.

The second methodology relies on historical trends, anticipated growth, an agency survey, and management's experience to project demand usage. This system is used only in the State Telecommunications Services section of SIPS. (See finding on fragmented process, page 35).

Business Plan

SIPS uses the information gathered through the DPU to help estimate the resources necessary to meet the expected demand projections for each fiscal year. Through the business planning process, SIPS section managers establish initiatives and detailed requirements. These managers also complete supporting schedules which address each cost element necessary to provide and deliver the services offered at the expected demand level. Cost centers are established to identify the costs of each service. The business plan budgets and schedules are subjected to review and approval by SIPS management, the Secretary of the Department of Commerce, and the Office of State Budget and Management.

Calculation of Rates

Rates are established annually for each billable service to recover the projected costs of delivering SIPS' services by dividing the projected costs by the projected demand (stated in units). Projected costs are those costs that have been identified in the business plan and allocated to the billable services, plus actual over/under-recovery adjustments from prior periods. Adjustments result from an analysis of variances between the projected revenues and actual revenues from prior periods. This analysis allows for an adjustment in the rate to more accurately reflect the amount necessary to recover the costs of a service. Demand units, contained in the DPU, have been certified by customers and include necessary adjustments by the SIPS' rate administrator for historical trends, planned initiatives, and anticipated technology growth. After the rates are calculated, they are reviewed and approved by the IRMC, then published and circulated to SIPS' customers as the official rates for the fiscal year. While rates are monitored on an informal basis during the year, they are only adjusted annually except in unusual circumstances. The rates in effect for FY97-98 are shown in Appendix C, page 53.

Conclusion: Our analysis of rates was limited to those provided by the Applications Development Services section and Systems Integration within the Distributed Computing Services section because other convenience contracts do not exist. Tables 13 and 14 contain a comparison of vendor rates to SIPS' rates. SIPS' rates are comparable to those of vendors on the approved convenience contracts. In some areas, SIPS' rates are lower; in others the convenience contract rates are lower. The business planning and rate setting processes are adequately documented and provide a reasonable means for determining the cost of services.

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TABLE 13 SYSTEMS INTEGRATION SERVICES RATE COMPARISON					
FISCAL YEAR 1996-1997	SERVICE TYPE & AREA	CONTRACTED PERSONNEL CATEGORIES	AVAILABLE CONTRACTORS	CONTRACTOR RATES BELOW SIPS RATES	PERCENT
	Long Term (3-12 months):				
	Asheville	Network Technician	16	9	56%
		Lan Administrator	16	12	75%
		Senior Systems Integrator	16	6	38%
		Systems Integrator	16	10	63%
		Requirements Analyst	15	4	27%
		Project Manager	15	5	33%
	Charlotte	Network Technician	23	14	61%
		Lan Administrator	23	17	74%
		Senior Systems Integrator	22	9	41%
		Systems Integrator	23	15	65%
		Requirements Analyst	22	6	27%
		Project Manager	22	9	41%
	Fayetteville	Network Technician	19	12	63%
		Lan Administrator	19	14	74%
		Senior Systems Integrator	19	6	32%
		Systems Integrator	19	11	58%
		Requirements Analyst	19	5	26%
		Project Manager	19	7	37%
	Greensboro	Network Technician	23	13	57%
		Lan Administrator	23	17	74%
		Senior Systems Integrator	23	9	39%
		Systems Integrator	23	14	61%
		Requirements Analyst	22	6	27%
		Project Manager	22	8	36%
	Greenville	Network Technician	14	8	57%
		Lan Administrator	14	10	71%
		Senior Systems Integrator	14	5	36%
		Systems Integrator	14	7	50%
		Requirements Analyst	14	4	29%
		Project Manager	14	5	36%
	Raleigh	Network Technician	27	16	59%
		Lan Administrator	27	19	70%
		Senior Systems Integrator	27	10	37%
		Systems Integrator	27	16	59%
		Requirements Analyst	27	7	26%
		Project Manager	27	8	30%
	Wilmington	Network Technician	18	12	67%
		Lan Administrator	18	14	78%
		Senior Systems Integrator	18	7	39%
		Systems Integrator	18	11	61%
		Requirements Analyst	18	6	33%
		Project Manager	18	7	39%

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TABLE 13 (continued)					
FISCAL YEAR 1996-1997	SERVICE TYPE & AREA	CONTRACTED PERSONNEL CATEGORIES	AVAILABLE CONTRACTORS	CONTRACTOR RATES BELOW SIPS RATES	PERCENT
	Short Term (4 hours to 3 months):				
	Asheville	Network Technician	7	2	29%
		Lan Administrator	7	4	57%
		Senior Systems Integrator	7	2	29%
		Systems Integrator	7	1	14%
	Charlotte	Network Technician	10	4	40%
		Lan Administrator	10	5	50%
		Senior Systems Integrator	9	2	22%
		Systems Integrator	10	1	10%
	Fayetteville	Network Technician	8	3	38%
		Lan Administrator	8	4	50%
		Senior Systems Integrator	8	2	25%
		Systems Integrator	8	1	13%
	Greensboro	Network Technician	9	3	33%
		Lan Administrator	9	4	44%
		Senior Systems Integrator	9	2	22%
		Systems Integrator	9	1	11%
	Greenville	Network Technician	7	2	29%
		Lan Administrator	7	4	57%
		Senior Systems Integrator	7	2	29%
		Systems Integrator	7	1	14%
	Raleigh	Network Technician	9	3	33%
		Lan Administrator	9	4	44%
		Senior Systems Integrator	9	2	22%
		Systems Integrator	9	1	11%
	Wilmington	Network Technician	7	2	29%
		Lan Administrator	7	4	57%
		Senior Systems Integrator	7	2	29%
		Systems Integrator	7	1	14%
	Urgent (Raleigh Only):	Network Technician	9	0	0%
	INSERT FOOTNOTE	Lan Administrator	9	1	11%
		Senior Systems Integrator	9	0	0%
		Systems Integrator	9	0	0%
	Emergency (Raleigh Only):	Network Technician	8	0	0%
		Lan Administrator	8	0	0%
		Senior Systems Integrator	8	0	0%
		Systems Integrator	8	0	0%
FOOTNOTE: SIPS personnel are only available to respond to urgent and emergency service requests in the Raleigh area.					

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TABLE 13 (continued)					
FISCAL YEAR 1997-1998	SERVICE TYPE & AREA	CONTRACTED PERSONNEL CATEGORIES	AVAILABLE CONTRACTORS	CONTRACTOR RATES BELOW SIPS RATES	PERCENT
	Long Term (3-12 months):				
	Asheville	Network Technician	11	7	64%
		Lan Administrator	11	8	73%
		Senior Systems Integrator	11	4	36%
		Systems Integrator	11	7	64%
		Requirements Analyst	11	2	18%
		Project Manager	11	2	18%
	Charlotte	Network Technician	16	10	63%
		Lan Administrator	16	11	69%
		Senior Systems Integrator	16	6	38%
		Systems Integrator	16	10	63%
		Requirements Analyst	16	4	25%
		Project Manager	16	4	25%
	Fayetteville	Network Technician	13	8	62%
		Lan Administrator	13	8	62%
		Senior Systems Integrator	13	3	23%
		Systems Integrator	13	7	54%
		Requirements Analyst	13	2	15%
		Project Manager	13	2	15%
	Greensboro	Network Technician	17	10	59%
		Lan Administrator	17	11	65%
		Senior Systems Integrator	17	6	35%
		Systems Integrator	17	11	65%
		Requirements Analyst	17	4	24%
		Project Manager	17	4	24%
	Greenville	Network Technician	10	5	50%
		Lan Administrator	10	6	60%
		Senior Systems Integrator	10	3	30%
		Systems Integrator	10	5	50%
		Requirements Analyst	10	2	20%
		Project Manager	10	2	20%
	Raleigh	Network Technician	20	12	60%
		Lan Administrator	20	12	60%
		Senior Systems Integrator	20	6	30%
		Systems Integrator	20	12	60%
		Requirements Analyst	20	4	20%
		Project Manager	20	3	15%
	Wilmington	Network Technician	13	8	62%
		Lan Administrator	13	9	69%
		Senior Systems Integrator	13	3	23%
		Systems Integrator	13	8	62%
		Requirements Analyst	13	2	15%
		Project Manager	13	3	23%

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TABLE 13 (continued)					
FISCAL YEAR 1997-1998	SERVICE TYPE & AREA	CONTRACTED PERSONNEL CATEGORIES	AVAILABLE CONTRACTORS	CONTRACTOR RATES BELOW SIPS RATES	PERCENT
	Short Term (4 hours to 3 months):				
	Asheville	Network Technician	6	2	33%
		Lan Administrator	6	4	67%
		Senior Systems Integrator	6	2	33%
		Systems Integrator	6	2	33%
		Requirements Analyst	1	0	0%
		Project Manager	1	0	0%
	Charlotte	Network Technician	8	3	38%
		Lan Administrator	8	5	63%
		Senior Systems Integrator	7	2	29%
		Systems Integrator	8	2	25%
		Requirements Analyst	2	0	0%
		Project Manager	2	0	0%
	Fayetteville	Network Technician	6	1	17%
		Lan Administrator	6	3	50%
		Senior Systems Integrator	6	1	17%
		Systems Integrator	6	1	17%
		Requirements Analyst	1	0	0%
		Project Manager	1	0	0%
	Greensboro	Network Technician	7	2	29%
		Lan Administrator	7	4	57%
		Senior Systems Integrator	7	2	29%
		Systems Integrator	7	2	29%
		Requirements Analyst	2	0	0%
		Project Manager	2	0	0%
	Greenville	Network Technician	4	1	25%
		Lan Administrator	4	3	75%
		Senior Systems Integrator	4	1	25%
		Systems Integrator	4	1	25%
		Requirements Analyst	0	NA	NA
		Project Manager	0	NA	NA
	Raleigh	Network Technician	7	2	29%
		Lan Administrator	7	4	57%
		Senior Systems Integrator	7	2	29%
		Systems Integrator	7	2	29%
		Requirements Analyst	2	0	0%
		Project Manager	2	0	0%
	Wilmington	Network Technician	5	1	20%
		Lan Administrator	5	3	60%
		Senior Systems Integrator	5	1	20%
		Systems Integrator	5	1	20%
		Requirements Analyst	0	NA	NA
		Project Manager	0	NA	NA
	Urgent (Raleigh Only):	Network Technician	7	1	14%
		Lan Administrator	7	1	14%
		Senior Systems Integrator	7	1	14%
		Systems Integrator	7	1	14%
		Requirements Analyst	2	0	0%

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	Project Manager	2	0	0%
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TABLE 13 (concluded)					
	SERVICE TYPE & AREA	CONTRACTED PERSONNEL CATEGORIES	AVAILABLE CONTRACTORS	CONTRACTOR RATES BELOW SIPS RATES	PERCENT
	Emergency (Raleigh Only):	Network Technician	6	1	17%
		Lan Administrator	6	1	17%
		Senior Systems Integrator	6	0	0%
		Systems Integrator	6	0	0%
		Requirements Analyst	2	0	0%
		Project Manager	2	0	0%
Sources: Convenience contracts, SIPS Annual Business Plan					

TABLE 14 APPLICATIONS DEVELOPMENT SERVICES RATE COMPARISON				
CONTRACT PERIOD	CONTRACTED PERSONNEL CATEGORIES	AVAILABLE CONTRACTORS	CONTRACTED RATES BELOW SIPS RATES	PERCENT
07/01/96 - 12/31/96	Applications Project Manager	16	10	63%
	Applications Programmer Specialist	16	13	81%
	Senior Systems Analyst	16	16	100%
	Systems Analyst	16	16	100%
	Programmer Analyst	16	16	100%
	Programmer	16	16	100%
01/01/97-01/31/98	Applications Project Manager	16	9	56%
	Applications Programmer Specialist	16	11	69%
	Senior Systems Analyst	16	16	100%
	Systems Analyst	16	16	100%
	Programmer Analyst	16	16	100%
	Programmer	16	16	100%
02/01/98 - 06/30/98	Applications Project Manager	21	4	19%
	Applications Programmer Specialist	21	8	38%
	Senior Systems Analyst	21	7	33%
	Systems Analyst	21	12	57%
	Programmer Analyst	21	12	57%
	Programmer	21	13	62%
Sources: Convenience contracts, SIPS Annual Business Plan				

THE RATE SETTING PROCESS IS FRAGMENTED.

The Demand Projection and Utilization System (DPU) is a statewide database used to collect and track an agency's historical usage and demand estimates for SIPS' services. The purpose of this system is to provide:

- a basis for documented demand projections;
- an estimation of resource requirements for the customer and SIPS;
- assistance to agencies in response to legislative inquiries concerning technology; and
- an aid to SIPS in planning for adequate resources.

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All sections within SIPS use the DPU except State Telecommunications Services (STS). STS determines the projected demand by reviewing historical data, planned initiatives, anticipated technology growth, and by analyzing agency survey responses. STS divides this responsibility among four different analysts. The procedure used in STS prolongs the rate setting process due to the increased interaction between the rate administrator and the STS analysts that is necessary to develop the rates. Overall rate monitoring is also more difficult since the four analysts do not use the DPU methodology to arrive at the usage demands. Additionally, neither the SIPS rate administrator nor other agency personnel are able to track total demand as certified by the agency since the STS projections are not contained in the DPU.

RECOMMENDATION

SIPS management should require all sections to use one usage demand projection system to maximize efficient record-keeping and continuous analysis of rates. Interaction concerning rates should continue between fiscal employees and the section managers, but the rate setting function should be centralized within the Fiscal Services section. This would pinpoint the responsibility for the completion and monitoring of rates. Centralization would also facilitate rate changes and access to documentation used in compiling the rates, as well as enhance the business plan development process. Additionally, agencies would have a better gauge for budgeting and funding needs if their total service demand usage was contained in one system.

SIPS IS NOT EFFECTIVELY MONITORING RATES.

The SIPS rate process is coordinated primarily by one Systems Accountant. This employee is responsible for:

- coordinating usage demands with customers;
- calculating the final costs in servicing those demands;
- determining, along with SIPS management, the appropriate methodology of cost allocation;
- monitoring rates, including a monthly evaluation of actual vs. projected;
- assisting in the development of the SIPS' Business Plan;
- evaluating major acquisitions for IRM;
- reviewing Requests For Proposals for technology equipment (hardware);
- responding to operational studies performed by consultants;
- coordinating cost allocation plans; and
- providing reports to management as needed.

The coordination of customer usage demand involves continuous interaction between the Systems Accountant and customers. After the total customer usage demand is determined, the Systems Accountant obtains cost schedules from each section within SIPS. The cost schedules are analyzed to determine the appropriate allocation of those costs. This individual also has

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the primary responsibility for monitoring rates. However, other priorities and the lack of personnel in the section to assist this individual have limited SIPS' ability to monitor rates in the most efficient manner. Without an effective method of monitoring rates, SIPS may be unaware of over/under-recovery of expenditures to make necessary adjustments in a timely manner. This could be a contributing factor to the balance of the reserve fund. (See following discussion.)

RECOMMENDATION

Management should review the workload of the Systems Accountant assigned rate setting responsibilities. Management should explore the reassignment of some of his duties to other positions within SIPS. Any reassignments should include more emphasis on the rate monitoring function so that agencies are assessed rates that cover the cost of the services without creating excessive fund balances. A vacant position in the Fiscal Services section should be filled to facilitate the workload adjustment.

THE RESERVE FUND BALANCE MAY BE EXCESSIVE BASED ON FEDERAL REGULATIONS.

Internal service funds typically maintain a reserve fund balance to provide funds for operations while billings are being collected and to purchase necessary equipment upgrades. Office of Management and Budget (OMB) Federal Circular A-87 governs the allowable costs for state and local governments to charge against Federal grants. As an internal service fund, SIPS provides services to State agencies and bills those agencies for the services provided. For the agencies to charge those costs against a Federal grant, the costs must meet criteria specified in OMB Circular A-87. Circular A-87 states that internal service funds may “. . . *provide for the establishment and maintenance of a reasonable level of working capital reserve. . . of up to sixty days cash expenses.*” Table 15, page 38 shows the cash balance of SIPS' reserve fund at June 30 for the FY92-93 through FY96-97. In addition, the table depicts the number of days' cash expenses the reserve equates to for each fiscal year by fund. The total reserve for all funds was at its highest number of days (147) on June 30, 1995, and at its highest dollar amount (\$43,044,309) on June 30, 1997. The total reserve for each year exceeds the allowable level of 60 days cash expenses as set by OMB Circular A-87. The federal government allows states to request exceptions to the 60 day provision. SIPS should strive to maintain a 60 day balance and request exceptions only when a documented need exists.

RECOMMENDATION

SIPS should take measures to reduce the balance of the reserve fund and to ensure billed agencies' compliance with OMB Circular A-87. SIPS should consider reimbursing agencies for amounts previously billed, adjusting current rates, or reducing rates during the next business cycle to lower the reserve.

FINDINGS AND RECOMMENDATIONS

TABLE 15 CASH RESERVE BALANCES BY FUND FY92-93 through FY96-97						
FUND	FISCAL YEAR END	TOTAL EXPENDITURES	AVERAGE DAILY EXPENDITURES	RESERVE FUND BALANCE	# OF DAYS FUNDS AVAILABLE	
OSC	06/30/93	\$356,858	\$978	\$109,284	112	
ADMIN	06/30/94	550,015	1,507	210,778	140	
7100	06/30/95	1,390,080	3,808	1,627,883	427	
	06/30/96	1,841,227	5,044	890,861	177	
	06/30/97	1,045,253	2,864	588,040	205	
SIPS	06/30/93	\$1,454,676	\$3,985	\$633,453	159	
ADMIN	06/30/94	2,238,479	6,133	1,148,992	187	
7200	06/30/95	2,681,838	7,348	736,521	100	
	06/30/96	3,740,343	10,248	716,585	70	
	06/30/97	5,893,478	16,147	518,255	32	
CCS	06/30/93	\$21,700,795	\$59,454	\$13,617,689	229	
7217	06/30/94	29,642,979	81,214	8,051,289	99	
	06/30/95	24,031,336	65,839	15,847,460	241	
	06/30/96	39,970,002	109,507	16,961,563	155	
	06/30/97	41,535,262	113,795	20,004,262	176	
DCS	06/30/93	\$257,623	\$706	\$5,877	8	
7218	06/30/94	689,400	1,889	609,386	323	
	06/30/95	983,525	2,695	1,079,009	400	
	06/30/96	3,610,613	9,892	1,795,746	182	
	06/30/97	3,587,177	9,828	1,704,152	173	
STS	06/30/93	\$31,712,292	\$86,883	\$5,187,536	60	
7224	06/30/94	36,707,828	100,569	4,834,714	48	
	06/30/95	38,459,685	105,369	9,964,529	95	
	06/30/96	44,582,597	122,144	10,716,273	88	
	06/30/97	47,810,095	130,987	17,920,432	137	
NCIH	06/30/93	\$0	\$0	\$0	0	
7225	06/30/94	0	0	0	0	
	06/30/95	2,777,078	7,608	(1,123,068.55)	0	
	06/30/96	4,648,903	12,737	532,579	42	
	06/30/97	5,674,682	15,547	1,496,674	96	
ADS	06/30/93	\$4,657,725	\$12,761	\$791,533	62	
7228	06/30/94	4,419,389	12,108	1,164,269	96	
	06/30/95	4,020,643	11,015	1,871,059	170	
	06/30/96	4,289,575	11,752	1,300,688	111	
	06/30/97	4,886,980	13,389	812,495	61	
OAS	06/30/93	\$86,309	\$236	\$1,850	8	
7229	06/30/94	0	0	31,833	0	
	06/30/95	0	0	0	0	
	06/30/96	0	0	0	0	
	06/30/97	0	0	0	0	
TOTAL	06/30/93	\$60,226,279	\$165,004	\$20,347,222	123	
	06/30/94	74,248,090	203,419	16,051,261	79	
	06/30/95	74,344,186	203,683	30,003,393	147	
	06/30/96	102,683,260	281,324	32,914,297	117	
	06/30/97	110,432,926	302,556	43,044,309	142	

Source: SIPS Cash Management Control Reports, SIPS Monthly Budget Reports

SIPS NEEDS TO ACTIVELY PROMOTE ITS SERVICES.

We surveyed a random sample of 184 clients from SIPS' billing list and discussed in detail concerns with some of the clients completing surveys. (See Appendix B, page 49) A major concern expressed by users was that they were unaware of what services SIPS offered. The users stated they were willing to utilize SIPS as their vendor but did not know if SIPS offered the necessary services. In November 1996, OSC released a "menu of services" which

FINDINGS AND RECOMMENDATIONS

describes the sections within SIPS, provides an overview of each section's functions, and contains rates for FY96-97 for various services. However, clients surveyed indicated that users and potential users are not aware of this document. Currently, no specific person within SIPS acts as a liaison between SIPS and user agencies. With the number of competitive vendors as seen on page 31, SIPS needs to actively promote its services to potential users and solicit needs from those agencies.

RECOMMENDATION

SIPS should strengthen its marketing efforts. Consideration should be given to establishing a liaison position that links the organization to current users as well as potential clients. Duties of this position would be to gather information regarding future service requirements, to monitor current program performance, and to promote services currently available.

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ISSUE FOR FURTHER STUDY

We identified an issue which we feel should be reviewed in more detail. We briefly discuss this issue here. The Department of Commerce should consider this issue during its annual business planning process.

IRM EXPENDITURES ARE RECOVERED THROUGH THE SIPS' RATES.

The Information Resource Management section provides the following functions:

- staff for the Information Resource Management Commission;
- consultant for agencies for all technology procurements and implementation of the statewide technological architecture;
- coordinator of statewide architecture components;
- quality assurance for statewide technology projects; and
- strategic technology planning for current and future statewide technology projects.

The services provided by IRM are designed to increase the technological efficiency of all State agencies. However, the costs associated with these services are recovered through the SIPS' billing process. This means that only agencies acquiring services from SIPS are supporting the IRM efforts. As of 1/23/98, there were 16 budgeted positions for IRM with salaries totaling \$937,985. Budgeted expenditures for this section totaled \$1,478,863 and \$2,450,553 for FY96-97 and FY97-98, respectively.

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APPENDICES

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APPENDICES

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MAILED: 305
RETURNED: 176
% RETURNED: 57.7%

OFFICE OF THE STATE AUDITOR
PERFORMANCE AUDIT
STATE INFORMATION PROCESSING SERVICES (SIPS)
STAFF QUESTIONNAIRE

PURPOSE: The Office of the State Auditor is conducting a performance audit of the State Information Processing Services. As part of the audit procedures, we are gathering information to assist in the identification of the operational strengths and weaknesses. **Individual responses will remain strictly confidential.** Please complete and return this questionnaire in the enclosed envelope no later than **December 15, 1997.**

Section: _____

NUMBER AND PERCENTAGE OF RESPONSES ARE SHOWN BELOW. PERCENTAGES MAY NOT ADD BACK TO 100% BECAUSE OF ROUNDING.

1. How is your position classified? 173 RESPONSES

A. **Administrative** B. **Professional** C. **Technical** D. **Clerical/Support**
 34 19.7% 46 26.6% 77 44.5% 16 9.2%

2. How long have you been in your current position? 143 RESPONSES

A. **Less than 1 year** B. **1 to 5 years** C. **5 to 10 years** D. **more than 10 years**
 16 11.2% 96 67.1% 13 9.1% 18 12.6%

3. How long have you been employed at SIPS? 172 RESPONSES

A. **Less than 1 year** B. **1 to 5 years** C. **5 to 10 years** D. **more than 10 years**
 31 18.0% 86 50.0% 17 9.9% 38 22.1%

4. Under the current organizational structure, communications among staff members are: 163 RESPONSES

A. **Excellent** B. **Good** C. **Fair** D. **Poor** E. **Don't Know**
 33 20.2% 70 42.9% 44 27.0% 15 9.2% 1 0.6%

5. Under the current organizational structure, communications with other governmental agencies are: 186 RESPONSES

A. **Excellent** B. **Good** C. **Fair** D. **Poor** E. **Don't Know**
 19 10.2% 84 45.2% 37 19.9% 9 4.8% 37 19.9%

6. Do you understand the missions and operations of SIPS and how you fit in? 151 RESPONSES

A. **Yes** B. **No**
 138 91.4% 13 8.6%

7. How would you characterize staff morale? 189 RESPONSES

A. **Excellent** B. **Good** C. **Fair** D. **Poor** E. **Don't Know**
 29 15.3% 69 36.5% 41 21.7% 25 13.2% 25 13.2%

8. Are you normally able to complete your duties within a 40 hour week? 163 RESPONSES

A. **Yes** B. **No**
 92 56.4% 71 43.6%

9. How are hours worked in excess of 40 per week handled? 159 RESPONSES

A. **Paid Overtime** B. **Receive compensatory time** C. **Other (Please explain)**
 28 17.6% 97 61.0% 34 21.4%

10. Are you aware of any work delays or impediments to your job performance? If yes, please describe and offer your solutions. 177 RESPONSES

A. **Yes** B. **No** C. **Don't Know**
 41 23.2% 105 59.3% 31 17.5%

11. Do you have an internal policies and procedures manual available to you? **179 RESPONSES**

- A. Yes **134 74.9%** B. No **45 25.1%**

12. Has any specific technical training been provided to you in relation to your duties? If no, what type of training would enhance your job performance? **165 RESPONSES**

- A. Yes **148 89.7%** B. No **17 10.3%**

13. Training provided has been: **175 RESPONSES**

- A. Excellent **47 26.9%** B. Good **98 56.0%** C. Fair **18 10.3%** D. Poor **4 2.3%** E. Don't Know **8 4.6%**

14. How many agencies do you provide technology support on a continuing basis? **188 RESPONSES**

- A. 0 to 5 **70 37.2%** B. 5 to 10 **26 13.8%** C. more than 10 **92 48.9%**

15. What percentage of your workload is consumed in providing the following information technology services to other agencies?

	# RESPONSES	A.	B.	C.	D.
a. Training Employees	145	<input type="checkbox"/> 0 to 25 139 95.9%	<input type="checkbox"/> 26 to 50 6 4.1%	<input type="checkbox"/> 51 to 75 0 0.0%	<input type="checkbox"/> 76 to 100 0 0.0%
b. "Trouble-shooting"	149	<input type="checkbox"/> 0 to 25 73 49.0%	<input type="checkbox"/> 26 to 50 45 30.2%	<input type="checkbox"/> 51 to 75 17 11.4%	<input type="checkbox"/> 76 to 100 14 9.4%
c. General Assistance	159	<input type="checkbox"/> 0 to 25 64 40.3%	<input type="checkbox"/> 26 to 50 49 30.8%	<input type="checkbox"/> 51 to 75 24 15.1%	<input type="checkbox"/> 76 to 100 22 13.8%
d. Maintenance	130	<input type="checkbox"/> 0 to 25 84 64.6%	<input type="checkbox"/> 26 to 50 30 23.1%	<input type="checkbox"/> 51 to 75 8 6.2%	<input type="checkbox"/> 76 to 100 8 6.2%
e. Installation	122	<input type="checkbox"/> 0 to 25 85 69.7%	<input type="checkbox"/> 26 to 50 25 20.5%	<input type="checkbox"/> 51 to 75 4 3.3%	<input type="checkbox"/> 76 to 100 8 6.6%
f. Programming	118	<input type="checkbox"/> 0 to 25 89 75.4%	<input type="checkbox"/> 26 to 50 18 15.3%	<input type="checkbox"/> 51 to 75 7 5.9%	<input type="checkbox"/> 76 to 100 4 3.4%

16. The number of employees in your section who have accepted employment outside of SIPS within the last 12 months is: **166 RESPONSES**

- A. 0 to 2 **85 51.2%** B. 3 to 6 **50 30.1%** C. more than 6 **7 4.2%** D. Don't Know **24 14.5%**

17. Are there other jobs that overlap or duplicate your job? If yes, please describe. **168 RESPONSES**

- A. Yes **29 17.3%** B. No **139 82.7%**

18. Is the agency (SIPS) effectively managing its available resources (facilities, personnel, funding, etc.)? If no, please explain. **143 RESPONSES**

- A. Yes **106 74.1%** B. No **37 25.9%**

19. What organizational changes would you make to your work unit?

- **move school tech team to SIPS**
- **need more personnel in some sections; less in others**
- **provide more LAN support to sites**
- **supervisors need to be trained to be supervisors**
- **organize teams along technology lines, not agency support**
- **pay grades not competitive**
- **SIPS should be in Dept. of Administration, not Commerce**
- **top management needs stability**

20. Are there any other concerns you have concerning the operations of SIPS?

- **lack of direction**
- **poor communication within SIPS, with agencies**
- **no service level agreements**
- **personnel function not responsive to employee needs**
- **too much paperwork**
- **locate all SIPS employees in same building**
- **all sections within SIPS should be self-supporting; no subsidizing from other sections**
- **billable percentage requirement too high**
- **SIPS does not adhere to same procedures for technology purchases as it requires of clients**

ONLY if you would like to speak with the auditors about any issue, please provide your name, telephone number where you would like us to contact you, and the best time to reach you. This questionnaire and any other communications we have with you will be kept **STRICTLY CONFIDENTIAL**.

Name: _____ Telephone #: _____ Best Time to Call: _____
(Please Print)

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MAILED: 184
RETURNED: 75
% RETURNED: 40.8%

OFFICE OF THE STATE AUDITOR
PERFORMANCE AUDIT
STATE INFORMATION PROCESSING SERVICES (SIPS)
AGENCY QUESTIONNAIRE

PURPOSE: The Office of the State Auditor is conducting a performance audit of SIPS. As part of the audit procedures, we are gathering information to assist in the identification of the strengths and weaknesses of its operations. **Individual responses will remain strictly confidential.** Please complete and return this questionnaire in the enclosed envelope no later than **December 19, 1997.**

Agency: _____ Position/Title: _____

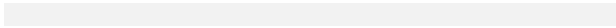
NUMBER AND PERCENT OF RESPONSES ARE SHOWN BELOW. PERCENTAGES MAY NOT ADD BACK TO 100% BECAUSE OF ROUNDING.

1. Please check the section(s) of SIPS that you have had contact and the quality of service received.

SECTION	TOTAL RESPONSES	QUALITY OF SERVICE				
		A.	B.	C.	D.	E.
a. <input type="checkbox"/> Administration	47	<input type="checkbox"/> Excellent 5 10.6%	<input type="checkbox"/> Good 25 53.2%	<input type="checkbox"/> Fair 5 10.6%	<input type="checkbox"/> Poor 1 2.1%	<input type="checkbox"/> No Opinion 11 23.4%
b. <input type="checkbox"/> State Computer Center	57	<input type="checkbox"/> Excellent 14 24.6%	<input type="checkbox"/> Good 30 52.5%	<input type="checkbox"/> Fair 5 8.8%	<input type="checkbox"/> Poor 1 1.8%	<input type="checkbox"/> No Opinion 7 12.3%
c. <input type="checkbox"/> System Integration Services	37	<input type="checkbox"/> Excellent 3 8.1%	<input type="checkbox"/> Good 15 40.5%	<input type="checkbox"/> Fair 5 13.5%	<input type="checkbox"/> Poor 2 5.4%	<input type="checkbox"/> No Opinion 12 32.4%
d. <input type="checkbox"/> State Telecommunication Services	58	<input type="checkbox"/> Excellent 11 19.0%	<input type="checkbox"/> Good 35 60.3%	<input type="checkbox"/> Fair 6 10.3%	<input type="checkbox"/> Poor 2 3.4%	<input type="checkbox"/> No Opinion 4 6.9%
e. <input type="checkbox"/> NC Information Highway	35	<input type="checkbox"/> Excellent 9 25.7%	<input type="checkbox"/> Good 13 37.1%	<input type="checkbox"/> Fair 3 8.6%	<input type="checkbox"/> Poor 0 0.0%	<input type="checkbox"/> No Opinion 10 28.6%
f. <input type="checkbox"/> Client Support Services	46	<input type="checkbox"/> Excellent 7 15.2%	<input type="checkbox"/> Good 21 45.7%	<input type="checkbox"/> Fair 8 17.4%	<input type="checkbox"/> Poor 2 4.3%	<input type="checkbox"/> No Opinion 8 17.4%
g. <input type="checkbox"/> Other _____	16	<input type="checkbox"/> Excellent 1 6.3%	<input type="checkbox"/> Good 2 12.5%	<input type="checkbox"/> Fair 1 6.3%	<input type="checkbox"/> Poor 1 6.3%	<input type="checkbox"/> No Opinion 11 68.8%

2. Please check the type(s) and quality of service received from SIPS. .

TYPE OF SERVICE	TOTAL RESPONSES	QUALITY OF SERVICE				
		A.	B.	C.	D.	E.
a. <input type="checkbox"/> Installation of Equipment	43	<input type="checkbox"/> Excellent 6 14.0%	<input type="checkbox"/> Good 20 46.5%	<input type="checkbox"/> Fair 5 11.6%	<input type="checkbox"/> Poor 1 2.3%	<input type="checkbox"/> No Opinion 11 25.6%
b. <input type="checkbox"/> Mainframe Applications	37	<input type="checkbox"/> Excellent 5 13.5%	<input type="checkbox"/> Good 13 35.1%	<input type="checkbox"/> Fair 5 13.5%	<input type="checkbox"/> Poor 1 2.7%	<input type="checkbox"/> No Opinion 13 35.1%
c. <input type="checkbox"/> Software Development	35	<input type="checkbox"/> Excellent 1 2.9%	<input type="checkbox"/> Good 9 25.7%	<input type="checkbox"/> Fair 6 17.1%	<input type="checkbox"/> Poor 2 5.7%	<input type="checkbox"/> No Opinion 17 48.6%
d. <input type="checkbox"/> Training	40	<input type="checkbox"/> Excellent 4 10.0%	<input type="checkbox"/> Good 11 27.5%	<input type="checkbox"/> Fair 7 17.5%	<input type="checkbox"/> Poor 4 10.0%	<input type="checkbox"/> No Opinion 14 35.0%
e. <input type="checkbox"/> Programming	31	<input type="checkbox"/> Excellent 1 3.2%	<input type="checkbox"/> Good 8 25.8%	<input type="checkbox"/> Fair 4 12.9%	<input type="checkbox"/> Poor 1 3.2%	<input type="checkbox"/> No Opinion 17 56.8%
f. <input type="checkbox"/> System Development	34	<input type="checkbox"/> Excellent 1 2.9%	<input type="checkbox"/> Good 12 35.3%	<input type="checkbox"/> Fair 4 11.8%	<input type="checkbox"/> Poor 1 2.9%	<input type="checkbox"/> No Opinion 16 47.1%
g. <input type="checkbox"/> Problem solving/Trouble-shooting	59	<input type="checkbox"/> Excellent 15 25.4%	<input type="checkbox"/> Good 16 27.1%	<input type="checkbox"/> Fair 18 30.5%	<input type="checkbox"/> Poor 3 5.1%	<input type="checkbox"/> No Opinion 7 11.9%
h. <input type="checkbox"/> System Maintenance	38	<input type="checkbox"/> Excellent 4 10.5%	<input type="checkbox"/> Good 12 31.6%	<input type="checkbox"/> Fair 10 26.3%	<input type="checkbox"/> Poor 1 2.6%	<input type="checkbox"/> No Opinion 11 28.9%
i. <input type="checkbox"/> Data Storage/Retrieval	38	<input type="checkbox"/> Excellent 5 13.2%	<input type="checkbox"/> Good 16 42.1%	<input type="checkbox"/> Fair 3 7.9%	<input type="checkbox"/> Poor 0 0.0%	<input type="checkbox"/> No Opinion 14 36.8%
j. <input type="checkbox"/> Other _____	26	<input type="checkbox"/> Excellent	<input type="checkbox"/> Good	<input type="checkbox"/> Fair	<input type="checkbox"/> Poor	<input type="checkbox"/> No Opinion



2 7.7%

7 26.9%

3 11.5%

1 3.8%

13 50.0%

3. What complaints do you have about SIPS services? **87 RESPONSES**

- | | | |
|--|---|---|
| A. <input type="checkbox"/> Service Costs
19 21.8% | D. <input type="checkbox"/> Continuing system problems
5 5.7% | F. <input type="checkbox"/> Difficult to access contact person
28 32.2% |
| B. <input type="checkbox"/> Timeliness
16 18.4% | E. <input type="checkbox"/> Too much downtime
3 3.4% | G. <input type="checkbox"/> Other _____
12 13.8% |
| C. <input type="checkbox"/> Does not meet our needs
4 4.6% | | |

4. How do you rate the expertise of the personnel contacted for service at SIPS? **74 RESPONSES**

- | | | | | |
|--|---|---|---|---|
| A. <input type="checkbox"/> Excellent
18 24.3% | B. <input type="checkbox"/> Good
41 55.4% | C. <input type="checkbox"/> Fair
12 16.2% | D. <input type="checkbox"/> Poor
1 1.4% | E. <input type="checkbox"/> Don't Know
2 2.7% |
|--|---|---|---|---|

5. How do you rate the responsiveness of SIPS to your technology problems? **73 RESPONSES**

- | | | | | |
|--|---|---|---|---|
| A. <input type="checkbox"/> Excellent
10 13.7% | B. <input type="checkbox"/> Good
29 39.7% | C. <input type="checkbox"/> Fair
24 32.9% | D. <input type="checkbox"/> Poor
4 5.5% | E. <input type="checkbox"/> Don't Know
6 8.2% |
|--|---|---|---|---|

6. How much did your agency spend on services provided by SIPS during the fiscal year 96-97? **66 RESPONSES**

- | | | | | |
|--|--|---|---|---|
| A. <input type="checkbox"/> less than \$100,000
56 84.8% | B. <input type="checkbox"/> \$100,001 to \$500,000
8 12.1% | C. <input type="checkbox"/> \$500,001 to \$1,000,000
1 1.5% | D. <input type="checkbox"/> \$1,000,001 to \$5,000,000
0 0.0% | E. <input type="checkbox"/> greater than \$5,000,000
1 1.5% |
|--|--|---|---|---|

7 Do you understand the rates charged by SIPS for the services provided? **66 RESPONSES**

- | | |
|--|---|
| A. <input type="checkbox"/> Yes
36 54.5% | B. <input type="checkbox"/> No
30 45.5% |
|--|---|

8. Does your agency receive computer services from private vendors? If the answer is No, please skip questions 9 to 12.

67 RESPONSES

- | | |
|--|---|
| A. <input type="checkbox"/> Yes
A.45 67.2% | B. <input type="checkbox"/> No
B.22 32.8% |
|--|---|

9 How were these vendors obtained? **59 RESPONSES**

- | | | | |
|---|---|---|---|
| A. <input type="checkbox"/> State Contract
19 32.2% | B. <input type="checkbox"/> SIPS Agency
8 13.6% | C. <input type="checkbox"/> Negotiated
24 40.7% | D. <input type="checkbox"/> Other _____
8 13.6% |
|---|---|---|---|

10 How would you rate the quality of service provided by the private vendor? **45 RESPONSES**

- | | | | | |
|--|---|--|---|---|
| A. <input type="checkbox"/> Excellent
11 24.4% | B. <input type="checkbox"/> Good
21 46.7% | C. <input type="checkbox"/> Fair
8 17.8% | D. <input type="checkbox"/> Poor
4 8.9% | E. <input type="checkbox"/> Don't Know
1 2.2% |
|--|---|--|---|---|

11. Compare the cost of services provided by SIPS to those of the private vendor. **45 RESPONSES**

- | | | |
|--|--|---|
| A. <input type="checkbox"/> SIPS is more expensive
5 11.1% | B. <input type="checkbox"/> SIPS is less expensive
8 17.8% | C. <input type="checkbox"/> Don't Know
32 71.1% |
|--|--|---|

12. Compare the quality of services provided by SIPS to those of the private vendor. **45 RESPONSES**

- | | | |
|--|---|---|
| A. <input type="checkbox"/> SIPS is better
9 20.0% | B. <input type="checkbox"/> Private vendor is better
15 33.3% | C. <input type="checkbox"/> Don't Know
21 46.7% |
|--|---|---|

13. How many employees does your agency employ in its Information Systems Section? **68 RESPONSES**

- | | | | |
|--|--|---|--|
| A. <input type="checkbox"/> 0
11 16.2% | B. <input type="checkbox"/> 1
6 8.8% | C. <input type="checkbox"/> 2 to 4
23 33.8% | D. <input type="checkbox"/> 5 or more
28 41.2% |
|--|--|---|--|

14. Are there services not provided by SIPS that would benefit you? If yes, please describe. **48 RESPONSES**

- | | |
|--|---|
| A. <input type="checkbox"/> Yes
11 22.9% | B. <input type="checkbox"/> No
37 77.1% |
|--|---|

15. Are there any other concerns you have about SIPS?

- trouble finding right person; can't find person in charge
- does not evaluate or market new services well
- can't get through to help desk
- erroneous billing and over-billing
- don't know what services offered or how to access them
- attitude is that agencies work for SIPS, not SIPS working for agencies
- SIPS rates too high for small agencies, especially when just seeking help

ONLY if you would like to speak with the auditors about any issue, please provide your name, telephone number where you would like us to contact you, and the best time to reach you. This questionnaire and any other communications we have with you will be kept **STRICTLY CONFIDENTIAL**.

Name: _____ Telephone #: _____ Best Time to Call: _____
(Please Print)

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APPENDIX C

APPENDIX C 1997-1998 SIPS RATE SCHEDULE STATE TELECOMMUNICATIONS SERVICES					
CATEGORY		DESCRIPTION	RATE	PER UNITS	
Line Rates	Single Line:	Southern Bell	\$20.50	Line/Mo	
		GTE	\$24.00	Line/Mo	
		SPRINT CAROLINA	\$20.50	Line/Mo	
		Southern Bell Non blocking	\$51.40	Line/Mo	
		GTE Non blocking	\$57.35	Line/Mo	
		SPRINT CAROLINA Non blocking	\$51.15	Line/Mo	
	Network Access Lines:	Southern Bell	\$26.50	Line/Mo	
		GTE	\$26.50	Line/Mo	
		SPRINT CAROLINA	\$26.50	Line/Mo	
	Key System:	Southern Bell	\$25.00	Line/Mo	
		GTE	\$27.50	Line/Mo	
		SPRINT CAROLINA	\$25.00	Line/Mo	
	PBX:	Southern Bell	\$65.00	Line/Mo	
		GTE	\$65.00	Line/Mo	
		SPRINT CAROLINA	\$65.00	Line/Mo	
	Administrative Fee-Phone Systems:	Digital Key	12%		
		PBX Systems	8%		
		Voice Processing	12%		
	Moves and Changes	Installations and Repairs:	Merlin and Single Line	\$45.00	Hour
Norstar			\$70.00	Hour	
Toshiba			\$70.00	Hour	
Materials			Cost		
Cabling and Wiring:		Category "A"			
		Elements	Cost		
		Time	\$40.00	Hour	
		Materials	Cost		
		Category "B"			
		Building Projects			
Campus Design	\$75.00	Hour			
Voice Mail		Regular	\$4.50	Month	
		Pager	\$4.50	Month	
		Extended	\$6.50	Month	
		Extra	\$9.00	Month	
		Special	\$10.50	Month	
		InfoBox	\$3.50	Month	
		Auto Attendant	\$0.06	Minute	
		Fax Mail	\$2.00	Month	
		Administrative Fee	12%		
		Voice Response		Mail Box	\$4.50
Applications	\$0.18			Minute	
SNA		SNA Logical Units @ 9.6	\$9.00	Port/Mo	
		DLSW	\$11.00	Port/Mo	
		ZZL-DLSW	\$12.00	Port/Mo	
		Above 9.6	\$9.00	Port/Mo	
	Client-Owned Control Units:	9.6 KBPS Circuit	\$137.00	Circuit/Mo	
		Above 9.6 KBPS Circuit	\$193.00	Circuit/Mo	
	SIPS-Owned Control Units:	DHR Transfers	\$20.00	Port/Mo	
		DHR (SIPS Purchased)	\$29.00	Port/Mo	
		DOT (SIPS Purchased)	\$30.00	Port/Mo	
		All Other	\$15.00	Port/Mo	
Point-to-Point	DSUs: (For Point-to-Point):	Installation	\$1,200.00	One-time	
		Maintenance	\$6.00	Month	
		Dedicated			
		Communication Line	Cost	Circuit	
AAMVAnet		Network Service	Cost	Unit	
DIAL-UP	Interpath	Supercruiser	\$22.50	Month	
		Personal PPP-Static IP	\$49.95	Month	
		Compuserve	\$34.00	Month	

APPENDIX C

APPENDIX C (continued) 1997-1998 SIPS RATE SCHEDULE STATE TELECOMMUNICATIONS SERVICES				
CATEGORY	DESCRIPTION	RATE	PER UNITS	
WAN	Circuit Installation	56/64 kbps circuit install	\$950.00 One-Time	
		Greater than 56/64 kbps	\$1,250.00 One-Time	
	Anchor	56/64 kbps Primary Port & Circuit	\$550.00	Month
		T-1 Primary Port & Circuit DDS	\$700.00 + cost	Month
		CDS Zero Mileage Areas (BELL SOUTH)	\$1,138.00	Month
		CDS Zero Mileage Areas (Sprint)	\$1,225.00	Month
		CDS Mileage Areas	\$700.00+ cost	Month
		Secondary Port	\$150.00	Month
		10 Mdps Primary Port & Circuit	\$2768.00 + cost	Month
		EDU Network Schools	5664 kbps Primary Port & Circuit (CDS)	\$350.00
	T-1 Primary Port & Circuit(CDS)		\$725.00	Month
	NCIH WAN	<i>T-1 Primary Port:</i>		
		Client-Provided Router and DSU	Circuit + \$240.00	Month
		STS-Provided Router and DSU	Cost	Month
		10 MB	Cost	Month
		Secondary Port	\$250.00	Month
	Packet Switch	Monthly Services:	X.25 Host Circuits	\$350.00 Circuit/Mo
			X.25 Host Circuits Kilo Seg.	\$1.13 Kilo Seg
			X.25 Local Dial-Up Min.	\$0.04 Minute
			X.25 Local Dial-Up Kilo Seg.	\$1.45 Kilo Seg
X.25 1-800			\$0.13 Minute	
Network User ID & Passwords			\$1.00 ID/Month	
One-Time:		User IDS and Passwords	\$5.00 One-Time	
		SIM/PC Software copies	\$185.00 One-Time	
Low Speed		\$100.00	Month	
High Speed		\$360.00	Month	
Secure WAN		56/64 (DDS)	\$650.00	Month
		T1 (DDS)	Cost	Month
		Secondary	\$250.00	Month
Long Distance		State Voice Network:	Intra-State	\$0.06 Minute
			Inter-State	\$0.06 Minute
	Toll		Tariff Minute	
	International		Tariff Minute	
	TSAA		Tariff Minute	
	1-800:	Switched	\$0.14 Minute	
		Dedicated	\$0.08 Minute	
	1-700 State Virtual Network:	Intra-State	\$0.20 Minute	
		Inter-State	\$0.20 Minute	
	Credit Card:	International	Tariff Minute	
		Intra-State	0.2 Minute	
		Inter-State	0.2 Minute	
		International	Tariff Minute	

APPENDIX C (continued) 1997-1998 SIPS RATE SCHEDULE STATE TELECOMMUNICATIONS SERVICES					
CATEGORY		DESCRIPTION	RATE	PER UNITS	
Wireless:	Cellular:	Access Charge	\$15.00	Month	
		Long Distance Use	\$0.10	Min.(+airtime)	
		Roamer Charges	Cost	Minute	
		<i>Air-Time Rates:</i>			
		0 to 60 minutes		no charge	
		61 to 100 minutes		\$0.22	Minute
		101 to 150 minutes		\$0.20	Minute
		151 to 200 minutes		\$0.17	Minute
		201 to 250 minutes		\$0.15	Minute
		251 to 400 minutes		\$0.14	Minute
	400+MINUTES		\$0.12	Minute	
	Pagers: Dial Page		Numeric local metro	\$4.50	Month
			Numeric Statewide	\$6.50	Month
			Alphanumeric local metro	\$10.50	Month
			Alphanumeric Statewide	\$12.50	Month
	PageNet		Numeric Statewide	\$4.00	Month
			Alphanumeric Statewide	\$7.50	Month
			800# Direct dial NC & SC 100/Mo	\$4.00	Month
			Voice Retrieval of numeric messages	\$0.75	Month
			Voice Mail Box-1	\$3.50	Month
			Voice Mail Box-2	\$5.50	Month
			Voice Mail Box-3	\$10.50	Month
			Group Call	\$1.00	Month
			PC Software	\$40.00	Month
			Numeric Southeast Region	\$16.50	Month
			Numeric Nationwide	\$28.50	Month
		Protection Loss/Theft	\$1.00	Month	

Source: Annual SIPS Business Plan

APPENDIX C 1997-1998 SIPS RATE SCHEDULE NORTH CAROLINA INFORMATION HIGHWAY			
Category	Description	Rate	Per Units
Video Service	Service Multiplexer	\$18,000.00	One-Time
	Premise Equipment	\$60,000.00	One-Time
	Codec	\$15,000.00	One-Time
	Room Reservations	\$2,500.00	One-Time
	Line Installation	\$1,000.00	One-Time
	Service Installation	\$2,295.00	One-Time
Monthly Service	NCIH Connection	\$2,992.00	Month
	Video Usage	\$23.00	Hour
	Data Usage	\$83.52	Month
Intra LATA PVC	1.5 MBS	\$20.85	Month
	1.5-16 MBS	\$41.17	Month
	16-30 MBS	\$82.34	Month
	30-34 MBS	\$390.00	Month
	34-40 MBS	\$459.00	Month
	40-45 MBS	\$516.10	Month
Inter LATA PVC (one end in Raleigh)	1.5 MBS	\$159.00	Month
	10 MBS	\$1,262.34	Month
	20 MBS	\$2,524.36	Month
	40 MBS	\$5,637.10	Month
Inter LATA PVC (no end in Raleigh)	1.5 MBS	\$297.76	Month
	10 MBS	\$2,483.51	Month
	20 MBS	\$4,967.00	Month
	40 MBS	\$10,815.65	Month

Source: Annual SIPS Business Plan

APPENDIX C 1997-1998 SIPS RATE SCHEDULE CENTRALIZED COMPUTING SERVICES			
Category	Description	Rate	Per Units
CPU Batch	Processor	\$5.50	CPU Minute
CPU On-line	CIDCS	\$24.00	CPU Minute
	IMS	\$24.00	CPU Minute
	TSO	\$24.00	CPU Minute
	ROSCOE	\$24.00	CPU Minute
Storage	Disk, Public	\$0.007	MB/Day
	Disk, Private	\$0.1825	MB/Month
	Tape, HSM	\$0.002	MB/Day
	Tape Mounts	\$2.00	Per/Each
	Tape Days	\$0.06	Tape/Day
	Optical On-Line	\$0.15	MB/Month
	Optical Off-Line	\$0.01	MB/Month
	Client Site DASD	\$0.41	MB/Month
Printing	Laser 3900 (at SIPS)	\$0.04	8.5" page
	Impact Printing (at SIPS)	\$1.00	1000 Lines
	Client Site	\$0.00	(NO CHARGE)
Client Server	CPU Time	\$0.20	CPU Minute
	DASD Storage	\$0.13	MB/Month
	Turn Key Application	\$800.00	Server/Mo
	Full Service-Client Owned	\$1,400.00	Server/Mo
Special Services	DISOSS Office Automation	\$8.00	User/Mo
Microfiche	Original	\$0.60	Copy
	Duplicate	\$0.07	Copy
16mm Film	Original	\$0.02	Frame
	Duplicate	\$0.0025	Frame
Supplies	1-Part GB Stock Paper	\$35.94	Case
	3-Part GB Stock Paper	\$36.00	Case
	1-Part White	\$24.00	Case
	1-Part Narrow White	\$12.00	Case
	1-Part Narrow Pink	\$18.40	Case
	3-Part Narrow	\$19.50	Case
	5 Inch Labels	\$14.80	Case
	3 Up Labels	\$29.00	Case
Labor Rates	Off-Line Operator	\$11.50	Hour
Storage Contracts	Forms: 100 Cubic Feet- Climate Control	\$216.00	Per Month
	Forms: 100 Cubic Feet-Non Climate	\$80.00	Per Month

Source: Annual SIPS Business Plan

APPENDIX C 1997-1998 SIPS RATE SCHEDULE APPLICATION DEVELOPMENT SERVICES		
Description	Rate	Per Units
ADS Management	\$72.00	Hour
Analyst Programmer	\$55.00	Hour
Application Program Spec.	\$62.00	Hour
Clerical Support	\$25.00	Hour
Database Analyst	\$60.00	Hour
Project Management	\$67.00	Hour
Programmer	\$48.50	Hour
Quality Assurance Specialist	\$65.00	Hour
Senior Systems Analyst	\$60.00	Hour
Systems Analyst	\$58.00	Hour
Database Administrator	\$55.00	Hour
RACF Administrator	\$55.00	Hour

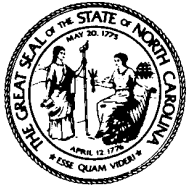
Source: Annual SIPS Business Plan

APPENDIX C

APPENDIX C 1997-1998 SIPS RATE SCHEDULE DISTRIBUTED COMPUTING SERVICES				
Rate Code	Category	Description	Rate	Per Units
	Facility	Video Conference Room (General Use)	\$210.00	Day
		Video Conference Facilities	\$75.00	Hour
Systems Integration Services	Lan Support	Class A Service	\$100.00	Year
		Centrally Managed File Server-S	\$1,860.00	Month
		Centrally Managed File Server-M	\$1,999.00	Month
		Centrally Managed File Server-L	\$2,543.00	Month
Internet Services		Internet Mailing List	\$25.00	List/Mo
		Internet Home Page\FTP 10 MB	\$25.00	User/Mo
		Internet Home Page\FTP 50 MB	\$110.00	User/Mo
		Internet Home Page\FTP 100 MB	\$190.00	User/Mo
		Internet Home Page\FTP 250 MB	\$380.00	User/Mo
		Internet Home Page\FTP 500 MB	\$550.00	User/Mo
		Internet Home Page\FTP 1000 MB	\$800.00	User/Mo
		Internet Services, Consulting	\$60.00	Hour
		Internet Services, Administration	\$48.50	Hour
		IMAP Email Services	\$4.00	Month
Integration Services		Network Product Technician	\$48.50	Hour
		Micro Computer Product Tech	\$48.50	Hour
		LAN Administrator	\$48.50	Hour
		Systems Integrator	\$55.00	Hour
		Requirements Analyst	\$60.00	Hour
		Senior Systems Integrator	\$60.00	Hour
		Project Manager	\$67.00	Hour
Customer Support Services		Concurrent User	\$200.00	Month
		Concurrent User License	\$2,035.00	License
		Clerical Support	\$25.00	Hour

Source: Annual SIPS Business Plan

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RALPH CAMPBELL, JR.
STATE AUDITOR

STATE OF NORTH CAROLINA
Office of the State Auditor

300 N. SALISBURY STREET
RALEIGH, N. C. 27603-5903
TELEPHONE: (919) 733-3217
FAX: (919) 733-8443

Report to IRMC
Agency Year 2000 Activities
March 3, 1998

During January 1998, the Office of the State Auditor reviewed the steps taken by agencies to satisfy any computer operating problems caused by the Year 2000. Our procedures included inquiry of agency personnel and reviewing documentation that supported the agency's activities. In general, we attempted to answer the following questions.

1. Has responsibility been assigned to an individual or group by the agency for its Year 2000 efforts?
2. Has the impact of Year 2000 been determined by the agency?
3. Does the agency have a defined strategy to ensure Year 2000 compliance?
4. Does the strategy appear complete and reasonable?
5. Is the agency acting upon its strategy?
6. Are new hardware and software system purchases certified as Year 2000 compliant by the vendor?

We reviewed 60 state entities and found that 53 had assigned the responsibility for its Year 2000 efforts to an individual or a group. Six entities (State Educational Assistance Authority, Rules Review Commission, Office of Administrative Hearings, State Board of Cosmetic Arts, Board of Psychology, and Board of Barber Examiners) had not started the process. The Board of Electrolysis does not use any computers in their operations.

The impact of Year 2000 had been determined in 53 of the 60 entities. The same six entities (State Educational Assistance Authority, Rules Review Commission, Office of Administrative Hearings, State Board of Cosmetic Arts, Board of Psychology, and Board of Barber Examiners) had not determined the impact or were not aware of an impact on their computer operations.

We found that all major state agencies had defined a strategy and were taking appropriate action to implement the needed corrections. These strategies appeared to be complete and reasonable. In addition, those agencies were requiring vendors to certify that software and hardware were Year 2000 compliant. Again, the six entities (State Educational Assistance Authority, Rules Review Commission, Office of Administrative Hearings, State Board of Cosmetic Arts, Board of Psychology, and Board of Barber Examiners) failed to satisfy these criteria.

The results of our review are consistent with the information provided by the Department of Commerce's Statewide Year 2000 Project. We will continue to monitor the efforts of the Department of Commerce and the individual agencies to achieve a smooth conversion to the Year 2000.

Conclusion:

Based on our review, we determined that 53 state entities were found to have no significant deficiencies in their Year 2000 efforts and 1 state entity to have a status of not applicable because it does not use computers in its operation. However, we found 6 entities, mostly boards, to have a significant weakness in its awareness of the Year 2000 crisis and the development of a strategy. As a result of this weakness, these entities may not complete their Year 2000 efforts timely.

April 13, 1998

The Honorable Ralph Campbell, Jr.
State Auditor
300 North Salisbury Street
Raleigh, NC 27603-5903

Dear Mr. Campbell:

I have reviewed the findings reported in your report of the Performance Audit of the North Carolina Department of Commerce's State Information Services. Attached are the written responses to each of the unresolved findings.

As you know, this is the first performance audit of SIPS since Governor Hunt transferred these operations from the Office of the State Controller last spring. As such, it provides the Department with a clear picture of the operations of SIPS and helps us to continue with our plans to improve the quality of services provided. I appreciate the level of detail and the professionalism with which your staff conducted this audit.

Richard C. Webb, Assistant Secretary of Commerce for Information Technology, will be responsible for implementing the recommendations contained in the audit. Please feel free to contact Rick or myself if you have any questions concerning the responses to this audit.

Sincerely yours,

(original signed by Mr. Carlisle)

Rick Carlisle

Enclosure

The response from the Department of Commerce has been reformatted to conform with the style and format of the rest of the audit report. However, no data has been changed.

April 13, 1998

The Honorable Ralph Campbell, Jr.
State Auditor
300 North Salisbury Street
Raleigh, NC 27603-5903

Dear Mr. Campbell:

The staff of the Department of Commerce's Information Technology Services and I have reviewed the findings reported in your report of the Performance Audit on State Information Processing Services. Attached are the written responses to each of the unresolved findings.

As you know, I recently implemented a new organizational structure for the Division of Information Technology Services. The findings in the performance audit were of assistance to me and my staff in the design of the new organization, and we are now working to implement the recommendations contained in the audit. Our staff shares a strong commitment to improving the quality of services provided to our customers, and we welcomed the formal review of this division that the performance audit represented.

If you have any questions concerning the responses to this audit, please feel free to contact Ms. Pat LaBarbera, Director of Financial Services, or me.

Yours very truly,

(original signed by Mr. Webb)

Richard C. Webb

RCW:sta
Enclosure

The response from the Department of Commerce has been reformatted to conform with the style and format of the rest of the audit report. However, no data has been changed.

**Department of Commerce, Information Technology Services
Response to March 1998 Performance Audit Draft**

p.12	<p>There are significant workload differences among the three shifts of the Centralized Computing Services operations section.</p> <p>The metric used (Millions of Instructions Per Second or MIPS) in developing this finding does not account for the changes in workload between shifts. Second and third Computer Operations shifts have more manual interactions such as increased tape mounts and printing. Annually we employ Real Decisions, (a Gartner Group Company) to perform a benchmark of the efficiencies of the computer center. This year, similar to previous years, the Real Decisions benchmark reported that the overall staffing level of the data center is 30% to 50% below the peer group to which it is measured. It also stated "The average operations staff for a 595 MIPS data center would be 82." The SIPS computer center has over 1,500 MIPS installed.</p>
p.12	<p>The Personnel Services Section is overstaffed.</p> <p>The audit states that other agencies the size of this one rely on the Office of State Personnel for assistance for some functions. Ralph Voight, OSP analyst stated that the ratio of employees to Personnel staff is not the only factor in determining size of a Personnel office. At the level of only 100 employees, he explained that because of the functions that must be performed a Personnel office still needs at least five people. Legislation passed on July 10, 1997, amending GS 126 (HB 275) requires OSP to delegate functions to the agencies and to negotiate decentralization agreements with departments and agencies. All Personnel and Human Resource organizations in state government will need to examine their staffing levels and adjust where delegated authority requires more services delivered by the agency personnel staff.</p> <p>The current structure of the Personnel office provides full personnel services to the agency including recruitment, salary administration, classification, benefits, and training, in addition to meeting the mandated requirements of the State Personnel Commission. (EEO, special tracking and reporting requirements on hiring, a safety program, employee relations, in-range adjustment authority, Performance Management and policy development and administration)</p>
p.14	<p>SIPS has not filled vacancies in a timely manner.</p> <p>This agency aggressively attempts to fill its vacancies. Personnel is developing specialized recruitment programs which include Internet posting of positions, developing a co-op program, and establishing relationships with colleges and universities. In an effort to improve minority recruitment, we are attempting to establish programs with historically black colleges and Universities.</p> <p>Estimates of the deficits in qualified IT workers range from 300,000 to more than a million nationwide. These numbers are elusive and only highlight the problem. The difficulty in finding people with the appropriate new technology skills is real and being felt by every agency in government. Current classifications in the state personnel system do not reflect the new technology skill set necessary for information technology work. Starting in October of 1997, SIPS began working with OSP to pilot a "Broad-banding" classification project to address new training and education requirements that are more flexible than what we now must use, and should allow us to qualify more individuals for positions.</p>

The response from the Department of Commerce has been reformatted to conform with the style and format of the rest of the audit report. However, no data has been changed.

**Department of Commerce, Information Technology Services
Response to March 1998 Performance Audit Draft**

p.14	<p>Current duty station's designation resulting in substantial overtime payments.</p> <p>We are attempting to place technicians in strategic areas around the state to reduce travel time and overtime payments. As stated earlier, recruiting and staffing for specialized skilled positions is extremely difficult to find and locate in remote locations. In addition, the breadth of skills are greater than those required where a pool of technicians exist therefore makes the remote positions hard to fill. In FY 98-99, we are attempting to hire additional staff and place them in field locations. Additionally, overtime policies for the organization will be reviewed.</p>
p.16	<p>Current supervisory personnel may be misclassified</p> <p>Personnel classification is being addressed by the "broad-banding" classification study currently underway with OSP.</p>
p.16	<p>SIPS does not have an internal information systems auditor.</p> <p>Agreed. A request to establish an internal EDP auditor, reporting to Rick Webb, Assistant Secretary for Information Technology and Chief Information Officer, has been submitted to OSP, and discussions with the personnel analyst indicates no barriers to establishing this position.</p>
p. 17	<p>Distribution of work.</p> <p>Workload is distributed by the skills possessed by individuals and the disciplines in which they work. Variations in workload create the need for overtime compensation.</p>
p.17	<p>SIPS compensatory policy is not consistently applied among sections.</p> <p>A new revised compensation policy was distributed to all employees in early December and placed into practice beginning January 1, 1998. On February 19, 1998, a memo was sent to all senior managers to remind them that compensatory time should be earned and granted according to policy and fairly among employees.</p>
p.18	<p>Employees are inconsistently recording overtime and compensatory time.</p> <p>A standard leave form and system is being developed for the agency. It will no longer include overtime which will be reported separately on a form with required signatures to be transmitted directly to the financial section for payroll processing.</p>
p.19	<p>Employees are unsure of the proper policies and procedures to follow.</p> <p>The policies and procedures are being updated to reflect the changes in the organization over the past year. The updated policies and procedures will be published on the agency LAN. We will include this in the new employee orientation as well as developing a formal process of change notification.</p>

The response from the Department of Commerce has been reformatted to conform with the style and format of the rest of the audit report. However, no data has been changed.

**Department of Commerce, Information Technology Services
Response to March 1998 Performance Audit Draft**

p. 19	<p>Lack of communication within SIPS, and between SIPS, and external agencies.</p> <p>Under a recent reorganization, communication issues are being addressed among employees and agencies. Agency assessments are being conducted in a proactive manner. In February, 1998, management held a planning session to address communication issues and explore ways to improve customer service. At the recommendation of the management, an input session was conducted by Real Decisions, Inc with IT professionals from various state agencies to gain customer feedback on communication and service issues.</p>
p. 20	<p>SIPS does not have a formal training program in place.</p> <p>The skills assessment referred to in this finding is being implemented as part of the Performance Management Program. Training plans based on the results of the recent skills assessment will be reflected in the upcoming fiscal year's budget. Cross training of employees is desired but not always feasible.</p>
p. 21	<p>Customer support center problem resolution statistics are inaccurate.</p> <p>Customer Support is key to our ability to provide quality services and products at the best possible price. The recent organizational change places more emphasis on customer service including the Customer Support Center and all associated processes. We agree that omission of the actual resolution date invalidates service statistics.</p>
p.23	<p>Turnover rates do not support management's assertions regarding retention problems.</p> <p>The audit does not explain the methodology used to determine turnover rates. SIPS will continue its work with OSP to examine job classifications for all technical positions and aggressively address the issue of salaries and competition with the private sector for qualified candidates.</p>
p.24	<p>SIPS Personnel Services section should review all job descriptions to ensure that the descriptions match the employee actual duties</p> <p>Review of job descriptions is being addressed by the "broad-banding" project. As stated in the audit note, the "broad-banding" project replaces the traditional classification study.</p>
p.25	<p>Procedures may not ensure that the most qualified applicants are selected for interview.</p> <p>Agreed. We are in the process of implementing procedures that will implement this recommendation.</p>
p.26	<p>Adequate documentation is lacking to support certain personnel actions.</p> <p>The Personnel Office has improved its documentation process.</p>
p. 27	<p>Some payments were not properly reviewed and approved.</p> <p>The condition has been addressed with a re-emphasis on internal controls.</p>

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**Department of Commerce, Information Technology Services
Response to March 1998 Performance Audit Draft**

p.28	<p>There are weaknesses in the accountability of fixed assets.</p> <p>We are now writing procedures for an annual inventory of physical fixed assets. This will be completed by the end of the fiscal year and the NCAS system updated to reflect the results. Procedures will also be developed to report location changes, abandonment and surplus actions as they occur and thus enable a timely recording of changes in the NCAS fixed asset system. A list of equipment located for business use in employees' homes has been provided to the auditors, and our procedures will be modified to remain current.</p> <p>SIPS staff has reviewed the assignment of pagers and corrected the noted exceptions and are reassessing the need for nationwide access.</p>
p. 30	<p>Rate setting process.</p> <p>SIPS management agrees that all sections should be required to standardize the usage projection and rate setting process as much as practical within good business practices. Organization changes were made to centralize this process in the financial area and going forward there will be a central responsibility for the setting and monitoring of rates. During the next fiscal year, management plans to review, change, modify or replace the Demand Projection System to enhance its effectiveness as a management tool.</p> <p>A systems accountant vacancy has been filled to provide an additional resource, which should enable the effective monitoring of rates in future years. Workload for the two systems account positions will be monitored, and 2 additional positions will be added to assist the operational staff with budget functions, reporting and preparing information for the business plan and rate setting process.</p>
p. 37	<p>The reserve fund balance may be excessive based on federal regulations.</p> <p>SIPS has taken measures to address the amount of balance in the reserve fund during the past 3 years. As provided by General Assembly statutes in previous years and in the 1997 Session, rates for services have not been adjusted to allow for fund accumulation to be directed toward the Year 2000 remediation effort. During the past two years, approximately \$11.5M was designated for a Year 2000 Statewide Special Fund. As rates are set for the coming year, projected excess balance will be addressed in accordance with OMB Circular A-87 regulations.</p>
p. 38	<p>SIPS needs to actively promote its services.</p> <p>As part of the Business Planning process for Fiscal Year 1998-1999, we have established a new section within Information Technology Services that will be responsible for marketing, client liaison, and monitoring of client satisfaction for all services provided by SIPS. The new section, Business Technology Services, will also have overall responsibility of the Customer Support Center.</p>

The response from the Department of Commerce has been reformatted to conform with the style and format of the rest of the audit report. However, no data has been changed.



State of North Carolina
Office of the State Controller

James B. Hunt, Jr.
Governor

Edward Renfrow
State Controller

April 13, 1998

The Honorable Ralph Campbell, Jr.
State Auditor
Office of the State Auditor
300 N. Salisbury Street
Raleigh, North Carolina 27603-59030

Dear Mr. Campbell,

I have reviewed the March, 1998 performance audit report entitled "Department of Commerce - State Information Processing Services." In your letter dated March 18, 1998, you requested that I prepare a written response for inclusion in the report. Upon review of the findings and recommendations, I believe it is more appropriate for the responses to each of the issues to be addressed by the current management. They are responsible for taking corrective action where deemed necessary. However, I do feel that there are a couple of pertinent issues, worthy of comment, but not addressed in the report. As you requested, I would like to take this opportunity to address these.

REAL DECISIONS STUDY

During FY94-95, the Office of the State Controller (OSC) initiated a "Data Center Benchmark Analysis" and a "Wide Area Data Network Comparative Benchmark Analysis" to be performed by Real Decisions, a Gartner Group company. Real Decisions utilizes a comparative benchmark methodology that provides the foundation for an organization to measure its performance against other organizations and its own development from year to year. Utilizing a client database representing more than 600 organizations, comparisons are made against selected peers, similar in size and organizational composition, as well as the entire database for the service being reviewed. The "Data Center Benchmark Analysis" and "Wide Area Data Network Comparative Benchmark Analysis" was also conducted during FY95-96.

Real Decisions uses a metric, which they refer to as a "NOW Index," to determine the unit cost to deliver product to an organization's client base. The NOW Index is derived by evaluating the cost of operating the data center relative to the value of the customer product delivered. The value is based on the cost of an average client in the Real Decisions database to produce the workload of the SIPS customer.

Data Center Benchmark Analysis

SIPS' NOW Index for FY94-95 was 0.92 and 1.01 for FY95-96. What this means is that **for every \$1.00 of client workload produced, SIPS spent \$0.92 in FY94-95 and 1.01 in FY95-96.** The following chart lists the NOW Indexes for SIPS and its peer groups for FY94-95 and FY95-96.

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Mr. Campbell
 Response - Performance Audit of SIPS
 April 13, 1998

	NOW Index for FY94-95	Now Index for FY95-96
SIPS	0.92	1.01
Government Peer Group ¹	1.12	1.40
MIPS Peer Group ²	0.92	0.95
Best Standard of Efficiency Peer Group ³	0.62	0.54
Real Decisions Data Base	0.98	1.02

- ¹ Governmental data centers with operations similar to SIPS.
- ² Data centers, both public and private, with MIPS (Millions of Instructions Per Second) usage similar to SIPS.
- ³ Data centers, both public and private, performing general purpose processing whose cost efficiency rating places them among the top 10% performers in the Real Decisions Data Base.

It is important to note SIPS' CPU utilization is being compared to data centers that operate on a seven days a week, 24 hours a day (7 X 24) basis. If state agencies utilized SIPS on a 7 X 24 basis at "Best Standard of Efficiency" levels, SIPS would have a NOW Index of 0.68 during FY94-95. If, during FY95-96, CPU utilization was increased to the Real Decisions Data Base average, SIPS would have a NOW Index of 0.84.

The Real Decisions analyses also indicate that SIPS staffing levels in both Operations and Technical Services are significantly below peer groups. In the FY95-96 analysis, Real Decisions stated that the overall staffing for Operations function was 30% to 50 % below the peer groups. This was attributed to SIPS' investment in system automation. The overall staffing level for the Technical Services function was found to be 25% to 45% below peer groups. This was attributed to SIPS having an experienced staff.

Wide Area Data Network Comparative Benchmark Analysis

SIPS has three networks; the Wide Area Network (WAN) - the statewide multiprotocol network; the Encrypted Wide Area Network (E WAN) - the encrypted multiprotocol network; and System Network Architecture (SNA) - the statewide host-based network. Each of these networks was reviewed individually utilizing Real Decisions' standard methodology which also incorporates the NOW Index.

The following chart list the NOW Indexes for SIPS and its peer groups for FY94-95 and FY95-96.

	NOW Index for FY94-95	Now Index for FY95-96
SIPS - SNA	0.38	0.45
Peer Groups	0.69	0.66
Real Decisions Data Base	1.18	1.23
SIPS - WAN ¹	0.96	0.45
Peer Groups	0.89	0.39
Real Decisions Data Base	0.78	0.76
SIPS - E WAN ²	-	1.09
Peer Groups	-	0.94
Real Decisions Data Base	-	0.76

- ¹ During FY94-95, Real Decisions indicated that the SIPS - WAN network was in the early stages of deployment requiring extensive current investment and that traffic had not yet grown to expected levels.
- ² The Encrypted WAN was not in use in FY94-95. If considered part of the WAN for comparison purposes, it only moves the NOW index from 0.45 to 0.49. Again, Real Decisions reported that SIPS was operating its networks with fewer full time equivalent personnel than the peer networks.

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YEAR 2000 FUNDING

The funding for the Year 2000 conversion project continues to be a major concern. As of the writing of this response, the Year 2000 funding still has not been adequately addressed. It is my concern that, although major efforts were made by OSC in timely fashion to acquire the funding, the State of North Carolina is at high risk of not being able to successfully complete conversion efforts to make its systems Year 2000 compliant.

In May 1996, OSC reported to the Information Resource Management Commission (IRMC) the need to fund the Year 2000 conversion efforts and requested \$32 million be included in the Governor's expansion budget. Although the Governor's budget proposal did not include funding for the Year 2000, the General Assembly, in the 1996 Legislative short session, allowed \$7.7 million to be reserved from SIPS receipts for funding the Year 2000 conversions. In January 1997, OSC, with the approval of the IRMC, requested \$50 million be included in the Governor's expansion budget. The Governor's budget proposal included a request for \$5 million. OSC contracted an outside consultant to perform a statewide high-level system inventory for the Executive Branch and the University System. In March 1997, based upon the revised estimates submitted by state agencies and the universities, OSC recommended to Legislative leadership that consideration be given to establishing a reserve for FY97-98 and FY98-99. However, during the 1997 Legislative session, the General Assembly authorized the use of up to \$25 million of projected FY97-98 General Fund reversions to cover the cost of the Year 2000 conversion in General Fund agencies during FY97-98. Using its reserve funds, SIPS has set aside an additional \$15 million to be used for Year 2000 conversion during FY97-98, \$11 million more than budgeted in the 1997-98 SIPS Business Plan. The total funding made available to-date for Year 2000 conversion costs is \$47.7 million. Even though the risk for a timely completion is extremely high, with the latest estimated costs at \$132 million it is imperative that the Governor and General Assembly find the necessary funding to complete as much of this project as possible before the Year 2000.

CONCLUSION

The Governor decided in April, 1997 to transfer the technology arm of OSC to the Department of Commerce. Although I expressed disagreements and concerns with his proposal, I advised the Governor that I would support his desire to make the transfer. On April 14, 1997 the Governor signed Executive Order 111 transferring all technology functions from OSC to the Department of Commerce. Senate Bill 869 of the 1997 Session of the General Assembly codified this organizational change.

I am very proud of the accomplishments made by the SIPS management and staff while they were organizationally part of OSC. I believe the information contained in the Real Decisions analyses independently confirms the efficiencies and effectiveness of the SIPS organization. I hope that record can be maintained and improved upon. Thank you for the opportunity to address these two issues in this report.

Sincerely,

(original signed by Mr. Renfrow)

Edward Renfrow
State Controller

cc: Richard C. Webb

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Assistant Secretary for Information Technology
N.C. Department of Commerce

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April 15, 1998

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