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ABSTRACT

This report presents data on costs associated with providing telephone service at 14 campuses of the State University of New York (SUNY) for the period January 1, 1994 through December 31, 1995. It examines the factors that affect overall costs of telephone service, and what opportunities exist for reducing telephone costs. The report includes information on: (1) local service costs and revenues, comparing costs for services purchased from local carriers with private branch exchange (PBX) capital and operating costs or leases from public telephone companies; (2) long-distance service costs; and (3) costs of using a state-owned network system. The report concludes that a great many factors and decisions affect telephone service costs. It makes no system-wide recommendations, but raises a series of questions. Appended is the reply of SUNY officials regarding these questions concerning system administration, and the situation at specific campuses. (CH)

State of New York
Office of the State Comptroller
Division of Management Audit

STATE UNIVERSITY OF NEW YORK

STUDY OF THE COST OF TELEPHONE SERVICES AT SELECTED CAMPUSES

REPORT 95-D-44

H. Carl McCall

Comptroller

State of New York
Office of the State Comptroller

Division of Management Audit

Report 95-D-44

Dr. John W. Ryan
Interim Chancellor
State University of New York
State University Plaza
Albany, NY 12246

Dear Dr. Ryan:

The following is our report on our study of the costs associated with providing telephone service at selected campuses.

This study was performed pursuant to the State Comptroller's authority as set forth in Section 1, Article V of the State Constitution and Section 8, Article 2 of the State Finance Law.

Major contributors to this report are listed in Appendix A.

Office of the State Comptroller
Division of Management Audit

March 26, 1997

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Executive Summary

State University Of New York Study Of The Cost Of Telephone Services At Selected Campuses

Scope of Study

The State University of New York (SUNY) has 29 State-operated campuses, as well as contract colleges and community colleges, and is administered by SUNY System Administration in Albany. Officials at individual SUNY campuses and System Administration have the flexibility to determine their mode of telephone service delivery, and to negotiate their long distance rates with the carrier of their choice.

SUNY campuses and System Administration may own their telephone system, called a Private Branch Exchange (PBX), or may lease comparable system services from local carriers such as Centrex from NYNEX. A PBX is essentially a switch that connects a campus telephone network to the worldwide telephone network. We studied telephone costs at System Administration and at 14 selected campuses. Of the 15 locations we visited, 11 own their PBXs, and 3 campuses and System Administration purchase Centrex service. For long distance telephone services, SUNY locations can choose from among numerous carriers, including national carriers and smaller private and public companies.

SUNY System Administration reports that SUNY's total telephone-related costs for fiscal year 1994-95 exceeded $32 million. During the same period, telephone costs for System Administration operations and for the 14 campuses we visited totaled $20.4 million. Our study compiled and compared the costs associated with providing telephone services at these SUNY locations for the period January 1, 1994 through December 31, 1995, and addressed the following questions:

- What are the factors that affect the overall costs of telephone services at SUNY locations?
- What decisions, practices and policies appear to represent opportunities to reduce telephone costs for SUNY and for individual campuses and, therefore, warrant further consideration?

Study Observations and Conclusions

Our study finds that a number of factors and decisions affect telephone service costs. These decisions and factors include whether telephone services are to be purchased or leased, PBXs are to be replaced or upgraded, telephone services are to be provided directly to students or are to be provided by contract, telephone services can be coordinated amongst campuses or must be delivered independently by each campus, an aggressive negotiating stance is to be pursued with long distance carriers, there is sufficient calling volume to obtain reduced rates from carriers, and whether there is a direct line between the campus and its long distance carrier. In examining these decisions and factors, our study raises a number of questions which need to be further considered and answered by SUNY in order to ensure that the lowest cost telephone services are delivered while maintaining adequate quality of service. Following are some of our observations.

Our study found that the majority of SUNY campuses owned PBXs and these require large capital expenditures. PBX costs at the campuses we visited ranged from $375,000 at Morrisville to over $20 million at Stony Brook. However, we noted no arrangements had been made for sharing PBXs to achieve economy of scale for those campuses which may be proximate enough to enable such resource sharing to occur. Examples of such campuses include Morrisville and Utica. Both campuses service a similar number of phones; 686 at Morrisville and 875 at Utica. However, presently there is a wide variation in capital costs per phone between the two campuses. The College at Utica has capital costs per phone of $17.93 while the College at Morrisville has costs of $5.96 per phone. We question whether shared resources could result in lower costs for both. We also noted that whether a campus pursues an upgrade to an existing PBX or pursues a replacement PBX has major cost implications. The University of Albany's decision to replace its PBX equates to a capital cost per phone of $12.80. This is in contrast to the University at Binghamton's decision to upgrade its PBX to yield a capital cost per phone of $.57. Given the significant differences in cost we question whether further evaluation of desirability of replacement and upgrade decisions is needed. (See pp. 3-8)

Our study also showed a wide variation in the costs SUNY locations incurred for long distance services. We found that campuses appear to obtain lower costs as a result of factors such as good negotiating skills, the use of dedicated lines (direct lines between the PBX and the long distance carrier that avoid using the local carrier) and the demonstration of large volume of calls. Our study raises the question of whether campuses located in the same geographic area may be able to obtain lower costs by combining calling volumes and sharing services. Further, we question whether individual campuses may realize savings if SUNY establishes collective agreements with long distance carriers. (See pp. 11-13)

Our study also raises the issue of whether a number of campuses, especially smaller ones, could save money by using the OGS system for long distance calls. (See pp. 15-17)

Comments of SUNY Officials

SUNY officials from the campuses and from System Administration indicate that many of the questions raised by our study are under consideration or already have been addressed. Officials at several campuses question the comparability and meaningfulness of cost data presented in the report.

Contents

Introduction

Background

The State University of New York (SUNY) has 29 State-operated campuses, as well as contract colleges and community colleges, and is administered by SUNY System Administration in Albany. Each SUNY campus and System Administration selects its own telephone systems and negotiates its own long distance rates.

When making system selections, SUNY campuses and System Administration may purchase a telephone system or may lease a system from a public telephone company. A purchased system is referred to as a Private Branch Exchange (PBX). Essentially, a PBX is an equipment configuration (switch) that connects the campus telephone network to the worldwide telephone network. Campuses with their own PBXs must arrange to house and maintain the PBX switch. Twenty-two of the 29 SUNY campuses own their own PBXs; the remaining seven campuses and System Administration lease their systems.

An example of a leased system from a public telephone company is the Centrek System from NYNEX. The Centrek is located at a NYNEX-owned facility and is operated by NYNEX personnel.

For long distance telephone service, SUNY campuses traditionally have used their local carrier's long distance affiliate. For example, New York Telephone's (now NYNEX) long distance affiliate was AT&T. However, deregulation of the telephone industry has produced numerous competitors for long distance services, including national carriers and smaller private and public companies.

SUNY System Administration reports that SUNY's system wide telephone related costs for fiscal year 1994-95 exceeded $32 million. For the 1994-95 fiscal year, telephone costs for System Administration and for the 14 campuses we visited totaled $20.4 million.

Study Scope, Objectives and Methodology

We studied the comparative costs for telephone systems and services at 14 campuses and at SUNY System Administration for the period January 1, 1994 through December 31, 1995. The objectives of our study were to examine the factors that affect the overall cost of telephone services at these SUNY locations, and to identify those decisions, practices and policies that appear to represent opportunities to reduce telephone costs for SUNY and individual campuses and, therefore, warrant further consideration. This study is not intended to provide definite answers about the type of telephone service that should be used at each location, but rather to raise questions to be further considered by SUNY.

To accomplish our objectives, we interviewed administrative and telecommunications staff and reviewed telephone expenditures and contracts with telephone carriers at each site. In addition, we held meetings with telephone personnel from the Office of General Services (OGS) to obtain an understanding of the circumstances under which State agencies can avail themselves of OGS' services. We also compared the costs campuses paid to long distance carriers to the costs that would have resulted through OGS.

Our study focused only on telephone voice communications, and did not consider such communication services as data transmission, cable television and distance learning, that may be available on SUNY campuses. Further, there were no indications of significant differences in the quality of telephone services for which we obtained cost data for comparative purposes. We did not audit the data we received.

Response of SUNY Officials to Study

A draft copy of this report was provided to SUNY officials for their review and comment. Their comments have been considered in preparing this report and are included as Appendix B.

Comparing Non Long Distance Service Costs and Revenues

SUNY System Administration allows SUNY campuses to independently choose the kinds of telephone systems and services they want. In making these choices, each campus must analyze available options. A campus must decide whether it will purchase service through the local carrier or purchase a PBX. If the campus chooses to purchase its own PBX, it must then decide on how to deliver telephone services to students and other third parties. The options include selling telephone service directly to students and other third parties, or contracting with a carrier to deliver the service.

The following is a brief comparison of the kinds of costs (capital, maintenance, etc.), revenues and other considerations typically associated with these decisions.

1. Purchase service from local carrier

- High Monthly Fixed Costs
- Low Capital Outlay
- Low/Moderate Maintenance Cost
- Little or No Revenue From Reselling Service to Students
- Little or No Cost For Periodic Service Upgrades

2. Purchase PBX

a. Do not Sell Services to Students
- High Capital Outlay (Depending on size of PBX)
- Low Monthly Fixed Costs
- High Maintenance Cost
- High Costs of Upgrades Required as Technology Changes
- Little or No Revenue/Commissions

b. Sell Service to Students
- High Capital Outlay
- High Operating Costs for Billing/Collecting
- Low Monthly Fixed Costs
- High Maintenance Cost
- High Costs of Upgrades Required as Technology Changes
- Revenue

We selected six campuses that own PBXs and resell service to students, five campuses that own PBXs but do not resell services and three campuses plus System Administration that purchase service from their local carrier. For each of the selected campuses and for System Administration for the 1994-95 fiscal year we computed the overall costs of telephone systems and services (not long distance service). Next, we determined the operating, fixed and capital components of these costs and we designed the following chart to show these component costs on a per telephone, per month basis.

LOCATION	FIXED (1)	OPERATING (2)	CAPITAL (3)	COST
OWN PBX AND RESELL SERVICE TO STUDENTS				
Syracuse	$9.24	$13.33	$8.29	$30.86
Canton	$4.37	$8.37	$10.19	$22.93
Plattsburgh	$8.38	$10.30	$10.00	$28.68
Binghamton	$3.28	$18.30	$0.57	$22.15
New Paltz	$7.25	$7.77	$8.56	$23.58
Purchase	$6.89	$12.42	$9.92	$29.23
OWN PBX AND CONTRACT FOR STUDENT SERVICE				
Utica	$9.38	$11.42	$17.93	$38.73
Morrisville	$7.32	$1.80	$5.96	$15.08
Albany	$0.22	$3.71	$12.80	$16.73
Stony Brook	$6.70	$4.00	$11.54	$22.24
Potsdam	$3.75	$4.29	$0.45	$8.49
PURCHASE CENTREX SERVICE				
Fredonia	$31.60	$0.00	$0.00	$31.60
Buffalo College	$20.50	$1.48	$0.36	$22.34
Buffalo University	$17.63	$11.06	$0.21	$28.90
System Administration	$19.33	$4.94	$1.08	$25.35

Footnotes:
1. Costs incurred regardless of the volume of calls.
2. Costs to operate the campus telephone system.
3. Costs to purchase or upgrade the telephone systems.

We do not believe it is appropriate to compare cost information between the three system and service categories presented in the chart because the information does not take into account the extent of revenues and costs resulting from resale of services to students. However, we do believe it is valid to compare costs within each of the three system and service delivery categories. While we do not address all of the reasons for variances, we have isolated some of the more significant factors. These are discussed in the following subsections.

Officials at several campuses question the validity and meaningfulness of our cost comparisons. They point out that each campus environment is unique and that there may be variances of opinion as to what should be included or excluded from cost components. During our review we noted many similarities among the various telephone systems used by the campuses and we followed a consistent approach for allocating costs at each of the campuses that we visited. For example, our operating costs included personal service expenditures and related fringe benefits needed to operate and to maintain the telephone system as well as non-personal service costs such as supplies and equipment repair. Capital costs included expenditures to purchase or to renovate a system, while fixed costs included expenditures not affected by caling volume, such as basic service. We believe that our approach is a reasonable one for the comparative purposes of the study. However, the expenditure data we obtained from the campuses was not audited.

PBX Capital and Operating Costs

The majority of SUNY campuses own PBXs and these require large capital outlays. PBX costs at the campuses we visited ranged from $375,000 at Morrisville to over $20 million at Stony Brook. Some of these costs, which are incorporated in the preceding chart merit mentioning.

The most expensive monthly capital costs that we found were those per phone at the College of Technology at Utica ($17.93 per phone), while capital costs per phone at the College of Technology at Morrisville were significantly less ($5.96 per phone). Both campuses purchased PBXs at about the same time and both PBXs service a similar number of phones; 686 at Morrisville and 875 at Utica. We questioned why Utica's PBX cost per phone was so much more costly than that of Morrisville. In response, SUNY officials explained that Utica had to install a new cable plant to support its PBX whereas Morrisville already had one in place. In addition, officials explained Utica provided both voice and data communication as part of its telephone service while Utica provided only voice communication. Furthermore, Utica had to relocate certain systems from a rental facility when it implemented its PBX. We did not determine whether these factors fully justified the significant difference in capital costs per phone for these campuses. However, since the two campuses are relatively proximate, we questioned whether a shared PBX would be a more cost effective capital cost alternative. A telephone expert informed us that it is possible to have one PBX service multiple locations. However, we were also informed that the overall cost effectiveness of such an alternative diminished as the distance between locations increased. Addressing this issue has system wide importance since there are other campuses that are relatively proximate and, therefore, might benefit from shared resources. For example, we note that the College at Buffalo and the University Center at Buffalo are relatively proximate.

In responding to our study, SUNY System Administration officials state that campuses should, and do, explore potential savings as a matter of course. However, during our review we did not find support that any of the campuses we studied were exploring the feasibility of sharing equipment services.

According to OGS telephone experts, PBXs have an average useful life of about ten years. Therefore, campuses that own their PBXs must plan to either replace their PBX systems, or upgrade existing PBXs in order to maintain adequate telephone service. We found that the University at Albany, the University at Binghamton and the College at Potsdam have pursued different replacement approaches with different costs.

Recently, the University at Albany replaced a Northern Telecom PBX—which it had finished paying for in 1995—with a new PBX. Albany officials refer to the arrangement as a "no cost" contract because, according to Albany officials, the contractor (ACC) provided all of the initial capital. Over the ten years of the contract, Albany will pay ACC Credit Company $15.7 million. Albany officials stated that their replacement was comprehensive as it included a new PBX with the latest release of software, new wiring for cable television, data links and telephones throughout the campus, including dormitories, a voice mail system and an emergency (911) system. Albany officials told us that some of the contract costs cannot be separated for these various components. However, we believe the capital cost of the contract associated with telephone service will be in excess of $13 million. This equates to a cost of $12.80 per phone per month.

In contrast, the PBX at Binghamton is also a Northern Telecom model. It was purchased in 1983. Binghamton officials told us that Northern Telecom has an "evergreen policy," which means that the company will make upgrades available as technology changes. The intent of the evergreen policy is to extend the useful life of Northern Telecom equipment so owners can avoid expensive replacement costs. Binghamton did make a major upgrade to its telephone system in 1992 at a cost of about $357,000. Binghamton officials believe that they now can provide state-of-the-art telephone service (similar to what is available at Albany) to their campus and expect to continue to use their present equipment. Albany officials state that they considered the evergreen concept but determined when evaluating bids for their new system that this approach was not optimal. However, based on the significant difference in cost, the question of whether campuses should explore the feasibility of upgrading before purchasing new systems is something that needs to be considered.

In responding to our study, University at Albany officials state that they are pleased with the new services available from their system. The officials dispute the comparability of their telecommunications procurement with the upgrade at the University at Binghamton. Officials at Albany now report that their procurement includes unique costs such as $2,620,800 for asbestos removal and $2,990,900 in infrastructure communications services that must be separately accounted for to present a truly valid comparison with the University at Binghamton.

Our comparison of costs already had been adjusted to take into account the cost of asbestos removal. To the extent that other costs are valid and are distinguishable from the cost of purchasing telephone services at the Albany campus, the cost of the Albany procurement of telephone services would be reduced accordingly.

The College at Potsdam, like Albany, also has a "no cost" contract for its PBX. Potsdam's contractor, AT&T, provided the campus with a new PBX and an upgraded system. The capital costs for Potsdam are $.45 per phone per month compared to Albany's costs of $12.80 per phone per month. At the end of the seven-year contract, Potsdam can purchase the PBX for $1. From our review of 1994-95 telephone bills, we determined that Potsdam is paying AT&T much higher than average rates for its long distance telephone calls. We estimate that the excess long distance charges will cost the campus an extra $300,000 in the next seven years, or an additional cost of $1.49 per phone per month. However, even if we consider the extra long distance charges to be part of the true cost of the PBX, Potsdam's "no cost" PBX still costs much less than Albany's "no cost" PBX. In fact, Potsdam's capital costs are among the least expensive of the campuses we visited.

It is understandable that campuses that own PBXs generally have higher operating costs than campuses that do not. However, for campuses with PBXs we found surprisingly large operating cost variances both among campuses that sell telephone service to students and other third parties and among campuses that contract for this service delivery. For example, Binghamton, which sells service, has one of the highest operating costs at $18.30 per telephone. In contrast, New Paltz, which also sells service, has operating costs of $7.77 per phone. Binghamton officials state that their telecommunications department provides comprehensive services such as accounting, billing, plant facilities and maintenance, and many other services which may not be provided at other campuses. Among campuses that contract for third party service delivery, Utica has operating costs of $11.42 per phone while the other campuses in this category have operating costs of about $2 to $4 per phone.

Campuses that purchase Centrex services, as might be expected, generally have very low operating costs. However, our study showed that operating costs at one such campus, Buffalo University, are $11.06 per phone, or more than twice the average operating costs of other locations that use Centrex. We question whether these differences in services justify the variances in operating costs that exist within the categories of telephone system delivery. We direct this question to SUNY's attention for further consideration.

In responding to our study, University at Buffalo officials indicate that their operating costs reflect certain capital costs and other transactions that should have been excluded. By removing these charges, officials state that operating costs are $6.71 per line which puts the sum of fixed and operating costs in line with other campuses at $23.71 per line.

Telephone Revenue

As noted earlier, campuses with PBXs can either resell telephone services directly to students and other third parties or can have a contractor deliver the services. SUNY policy prohibits campuses from charging students more than the students would pay if they purchased the service themselves from the telephone company. Therefore, most of the campuses we visited provide student phone service and bill students for long distance calls based on approved tariff rates. These rates are higher than the rates the campuses pay to long distance carriers. However, there are costs other than the long distance rates associated with providing service to the students such as fixed and operating costs. Further, most campuses include a fee in the room rent to help recover the capital cost of installing the telephone system in the dormitories. The campuses use revenues in excess of the actual cost to offset the overhead to operate the telephone system.

However, campuses that decide not to sell service to students may receive revenue (commissions) from the telephone company or the contractor that sells the service. These commissions are generally based on the number of minutes of long distance calls made by the students or the volume of operated-assisted calls made through the system. Long distance carriers may also pay commissions to campuses based on the volume of incoming calls. We found that some campuses receive substantial commissions from long distance carriers while others receive no commissions. For example, Stony Brook receives over $300,000 in commissions annually, while Utica and Potsdam get no commissions. Whether or not a campus gets a commission may be a result of how well they have negotiated with the long distance company. We question why each campus that contracts for student telephone service is not receiving a commission based upon long distance usage by students.

In responding to our study, officials of the College at Potsdam reported that in exchange for commissions on student phone usage, the College is to receive new equipment, voice mail, low cost provision of administrative and student long distance services and other considerations.

Questions

1. Should campuses explore the potential savings of jointly purchasing a PBX and sharing equipment resources?

2. Should campuses investigate the economies that may result from updating, rather than replacing, aging PBX equipment?

3. Why are there such significant differences in operating costs at campuses which are using similar systems and shouldn't all campuses that contract for student phone services obtain a commission on student calls?

Comparing Long Distance Service Costs

We summarized direct dial long distance costs, excluding international calling costs at the 14 campuses and System Administration for 1994-95 fiscal year.

We identified rate variations from carrier to carrier and among campuses using the same carrier. Campus telecommunications personnel offered a number of reasons for the variations, including the following:

- the campus negotiating stance with the long distance carrier;
- the use of NYNEX or dedicated (trunk) lines;
- access to "no cost" dedicated line service;
- the campus volume of long distance calls;
- the impact of other factors on rates such as the carrier's purchase of new PBX equipment for the campus.

The telephone companies pursue SUNY campuses for their business and as a result are willing to negotiate in order to become the campus long distance carrier. The aggressiveness with which the campuses pursue the carriers for discounts was often mentioned as a factor in obtaining lower rates. The campus personnel that we spoke with seemed to agree that passively accepting the rates quoted by the companies would ultimately result in paying higher than necessary costs.

For example, during 1994-95, Fredonia purchased all telephone service through its local carrier, including long distance service. The local carrier is a locally owned, independent telephone company. The situation at Fredonia is similar to the College of Technology at Morrisville. However, Morrisville negotiated directly with a long distance carrier and was able to get a much lower intrastate rate. If Fredonia had obtained Morrisville's rate in 1994-95 they would have realized a savings of over $10,000. It should be noted that Fredonia recently entered into an agreement with MCI for long distance service and should experience some reduction in overall long distance costs.

Our study also found that not purchasing sufficient dedicated service capacity can be costly, as is demonstrated by the rate paid by Binghamton. In 1994-95, Binghamton used an AT&T dedicated line for long distance service. However, overflow traffic (calls in excess of the calling volume capacity of the dedicated line) typically used NYNEX lines to link calls. Consequently, the campus paid NYNEX an additional charge for these calls above the charge for AT&T dedicated service.

Binghamton believes it can purchase additional AT&T dedicated service capacity and will, therefore, lower costs. SUNY System Administration officials point out that it may not always be advantageous to purchase additional dedicated service capacity because the cost associated with overflow traffic may be less than the cost of additional dedicated capacity.

Our study found that the four university centers (Albany, Binghamton, Buffalo and Stony Brook) have for the most part, been able to negotiate favorable long distance rates. This group has the largest volume of calling minutes and is in the best position to negotiate the lowest rates. However, even within this group there are significant variations. Albany, Binghamton and Stony Brook use ACC as an interstate carrier. Binghamton pays significantly less per minute than Albany and Stony Brook.

When we looked for reasons for this rate variance, we found that the most notable difference in the three campuses is this: Binghamton's long distance calling volume takes into account student traffic, whereas Albany and Stony Brook's respective calling volumes do not, even though student traffic flows through these campuses' telephone lines. Stony Brook is able to receive lower rates for calls to Nassau county and NYC by including student traffic flow through its system. In responding to our study, Stony Brook officials state that they receive a $300,000 commission in lieu of reduced rates. However, we question why Albany does not include student usage in their overall calling volumes, when it appears that including this traffic may result in a lower long distance rate from the carrier. SUNY System Administration officials further point out that when a campus contracts with a service vendor for dormitory service, the calling volumes belong to the vendor and the campus typically receives a commission on this student traffic. Therefore, when a campus looks for a long distance vendor for administrative traffic, student traffic cannot be included.

We also believe that campuses may be able to pay less for long distance services through collective rate negotiations. When campuses negotiate rates separately, they are not aware of the rates paid by other campuses. For example, in comparing the rates per minute paid by Albany, Binghamton and Stony Brook to ACC, we found that Binghamton pays less per minute for all interstate calls of comparable distance than either of the other two campuses. This may also indicate that campuses could save on telephone costs if SUNY were to establish collective rate agreements with long distance carriers.

In 1994-95, the 14 campuses and System Administration had in aggregate over 26 million minutes of intrastate traffic costing $1.8 million and 13 million minutes of interstate traffic costing about $1 million. If these locations had negotiated common rates and obtained the lowest rate in each category, we calculated that the annual potential savings would be over $650,000. We realize that obtaining the lowest rate is not likely, especially since OGS has been unable to negotiate such low rates on behalf of its users. However, given the wide variation in long distance rates paid at these locations, a significant cost savings might be possible by negotiating common rates. The greatest savings might accrue to the smallest campuses, since they are in the poorest negotiating position.

SUNY officials point out that OGS has recently awarded a statewide long distance contract that takes into account the calling volume of all New York State agencies. SUNY officials indicate that campuses will take advantage of the contract if rates are lower than what the campuses are now paying.

Questions

4. Should campuses increase the capacity of their dedicated lines to reduce the additional costs associated with overflow traffic?

5. Could campuses obtain lower long distance rates if their carriers included student traffic in their respective calling volumes?

6. Should campuses in the same geographic location investigate the possibility of sharing calling volumes to negotiate more favorable long distance rates?

7. Should SUNY negotiate a common long distance rate for all campuses?

OGS Calling Costs

The State-owned Long Range Intercity Network Communications System (LINCS) connects State agencies. LINCS is supported by the Office of General Services (OGS). The network allows agencies to make calls anywhere in the continental United States and provides for reduced costs for calls made between State agencies. LINCS carries approximately eight million minutes of traffic every month and continues to provide low cost long distance service to State agencies. SUNY does not, but could use LINCS.

In order for a campus to connect to any LINCS system calling service, it needs either a PBX or equivalent service from a local carrier. The next requirement would be for OGS to do an analysis of the campus's telephone traffic volume. This analysis would determine if the campus qualified for dedicated service rates or remote access rates. Remote access rates cost slightly more per minute than dedicated rates.

The chart on the following page shows the possible savings the campuses could realize assuming the campuses were using OGS LINCS dedicated services. OGS officials told us that campuses can select any or all of OGS telephone services. However, the higher the calling volume, the greater likelihood that the campus would qualify for the lower cost dedicated service rates. We used the campuses' 1994-95 usage costs to calculate the potential savings (or additional costs) shown in the chart.

This data suggests that 14 of the 15 locations in our study could save money on intrastate calls if they connected to the LINCS system though dedicated service lines. The data also suggests that 4 of the 15 locations would have possible interstate savings though dedicated service links. In responding to our study, SUNY System Administration officials questioned whether our analysis includes the cost of dedicated circuits. Our analysis did take into consideration that OGS included the cost of a dedicated line in the determination of needs.

POTENTIAL SAVINGS (ADDITIONAL COSTS) USING OGS DEDICATED SERVICE		
SUNY CAMPUS	INTRASTATE CALLS	INTERSTATE CALLS
Syracuse	$17,296	($14,518)
Morrisville	16,115	1,228
Binghamton	6,862	(92,828)
New Paltz	58,563	(18,702)
Purchase	6,626	(27,212)
Utica	7,486	1,264
Potsdam	41,980	6,670
Canton	7,031	(207)
Plattsburgh	16,813	(11,530)
Albany	(12,699)	(8,487)
Fredonia	20,878	16,428
Buffalo College	6,324	(766)
Buffalo University	18,624	(133,979)
Stony Brook	18,126	(49,973)
System Administration	13,022	(1,764)
Totals	$243,049	($334,376)

We also determined that only 6 (Morrisville, Utica, Potsdam, Fredonia, Buffalo College, and Stony Brook) of the 15 locations we studied would have possible intrastate savings using LINCS if remote access (as opposed to dedicated service) was required. To illustrate, Canton would save $7,031 annually if it qualified for dedicated service, but would have to incur additional costs if remote access was required. Some campuses, such as Buffalo College, would save money using LINCS for intrastate calls, regardless of whether dedicated or remote service was required. As concerns to interstate calls, we determined that only 3 (Morrisville, Potsdam and Fredonia) of the 15 locations could realize savings if remote access was required.

OGS is currently working on new rates for directory assistance, credit cards and 800 service numbers. OGS expects to sign a contract with a directory assistance provider at a rate of 52 cents per call. By using the OGS directory assistance service, campuses could possibly realize savings of more than $28,000 per year.

In summary, when we consider all campuses visited in aggregate, OGS' dedicated intrastate LINCS service would produce potential savings overall. However, intrastate LINCS remote access service and all interstate access would likely not produce any overall savings for these SUNY locations. We also noted from the campus data collected and compared to OGS rates, that Morrisville and Fredonia would realize a cost benefit even if they had to pay the higher remote access rates of the LINCS system for both intrastate and interstate calls. It also appears that OGS' new directory assistance rates could be a possible source of saving for the SUNY system.

Question

8. Should SUNY consider using OGS' LINCS system for intrastate and/or interstate calls, and OGS' directory assistance service at every campus?

Major Contributors to This Report

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January 3, 1997

Mr. Robert H. Attmore
Deputy Comptroller
Office of the State Comptroller
The State Office Building
Albany, New York 12236

Dear Bob:

In accordance with Section 170 of the Executive Law, enclosed are our comments regarding the Study of the Cost of Telephone Services at Selected Campuses, State University of New York (95-D-44).

Sincerely,

Brian

Brian T. Stenson
Vice Chancellor for
Finance and Business

Enc.

Appendix B

State University of New York
Study of the Cost of Telephone Services
at Selective Campuses
95-D-44

System Administration Comments

Our comments regarding the specific recommendations are as follows:

(OSC) 1. Should campuses explore the potential savings of jointly purchasing a PBX and sharing equipment resources?

(SUNY) 1. Campuses should, and do, explore potential savings as a matter of course, as long as the means to attain those savings do not produce adverse effects. Some campuses have explored this possibility and found that it was not feasible. This might not always be the case. In any event, all costs should be examined, including, but not limited to possible higher local calling costs for the remote campus, trunking costs between the locations, and people costs associated with the administrative and technical complications associated with running a remote system.

(OSC) 2. Should campuses investigate the economies that may result from updating, rather than replacing, aging PBX equipment?

(SUNY) 2. Campuses should investigate all viable alternatives before choosing a course of action. In some cases, updating or upgrading might be advantageous. In other cases, it is not. With regard to the campuses studied, SUNY Albany's existing PBX served such a small segment of the total array of services being sought that upgrading was not advantageous. The bidding process conducted at that campus specifically allowed proposals for either replacement or upgrading of the existing system. Even as a result of a bidding situation, upgrading was not judged to be advantageous.

(OSC) 3. Why are there such significant differences in operating costs at campuses which are using similar systems and shouldn't all campuses that contract for student phone services obtain a commission on student calls?

(SUNY) 3. The study does not offer information regarding the factors each campus submitted to be included in its operating costs. It is, therefore, not possible to respond to this question in a meaningful way. Operating costs can be affected by the size of the system (there are economies of scale); the services being provided; the type of maintenance (in–house, vendor–provided during business hours, vendor–provided 24 hours a day, etc.); whether the system was financed, over how many years, and at what interest rate; and countless other items.

All campuses should investigate the possibility of obtaining a commission on student calls. However, it is not certain that all will be successful in obtaining commission. Their success may be affected by the number of student phones, the typical traffic patterns of the students, the way (technically) in which student service is provided, and other items.

(OSC) 4. Should campuses increase the capacity of their dedicated lines to reduce the additional costs associated with overflow traffic?

(SUNY) 4. Not always. Dedicated lines are paid for at a fixed price per month. Overflow traffic is charged on a usage basis. If a campus is spending more on overflow usage than the cost of a dedicated line, the answer is yes. If the cost of a dedicated line is higher than what the campus is currently spending on overflow traffic, the answer is no. Campuses typically perform traffic studies periodically to determine whether their overflow traffic is too high.

It should also be noted that the cost of dedicated lines differs from campus to campus based on a campus' long distance vendor and the distance between the campus and the long distance vendor's facility. In addition, although some campuses do not pay for the dedicated lines to their long distance vendor (the vendor provides them free), the vendor would only be willing to provide a certain amount of trunking free. If the campus wished to increase beyond that point, the campus would have to incur the charge.

(OSC) 5. Could campuses obtain lower long distance rates if their carriers included student traffic in their respective calling volumes?

(SUNY) 5. Yes, but it's not always possible. Whether a campus owns a PBX or not, if the campus contracts with a service vendor for provision of dormitory service, billing and collection, the calling volume from the dormitories belongs to that vendor, not to the campus. (The campus typically receives commission on this student traffic.) In such a case, when the campus looks for a long distance vendor for its administrative traffic, student traffic cannot be included.

(OSC) 6. Should campuses in the same geographic location investigate the possibility of sharing calling volumes to negotiate more favorable long distance rates?

(OSC) 7. Should SUNY negotiate a common long distance rate for all campuses?

(SUNY) 6,7. OGS has recently awarded a statewide long distance contract that takes into consideration the calling volume of all New York State agencies. Although the prices are not yet available, because the contract is not yet in place, we understand that rates will be lower than even SUNY campuses are currently paying. If this is the case, campuses will take advantage of the contract.

(OSC) 8. Should SUNY consider using OGS' LINCS system for intrastate and/or interstate calls, and OGS' directory assistance service at every campus?

(SUNY) 8. SUNY campuses have been informed about the directory assistance contract that recently became available. If the combination of service and rates are advantageous, and they do not have a term commitment with another vendor, campuses will consider using this contract. The same is true for the recent 800 number contract and the cellular phone service contract put in place by OGS Services and Technology Group and, as mentioned above, will be true for the new long distance contract when it becomes available. SUNY System Administration's Office of Educational Technology keeps appropriate campus communities informed about all OGS technology contracts so that campuses can use them when it is to their advantage to do so.

It cannot be determined from the information provided whether the potential savings indicated through use of OGS Dedicated LINCS Service take into account the cost of the dedicated circuits required to connect to LINCS (similar to what is required to connect to any other long distance vendor's network). If not, the additional monthly cost for dedicated circuits would wipe out any potential savings reflected.

Even if the potential savings are real, there are factors to be considered before determining whether a campus should use LINCS. Among the most significant are:

a. Campuses that resell service to students must have long distance billing in electronic form, in specific format, and provided immediately at the end of each billing period. If LINCS could not guarantee such service, campuses would not consider it.

b. Campuses must provide telephone service to their students 24 hours a day, unlike a typical office environment. If LINCS could not provide and maintain such service at a level comparable to that of other long distance vendors, campuses would not consider it.

c. Campuses that would realize savings on intrastate calls, but additional costs on interstate calls would not always be able to split the traffic between vendors (LINCS and another one). Smaller campuses barely have enough traffic to support the cost of dedicated lines to one vendor. If they had to split the traffic between LINCS and another vendor, they would have the cost of dedicated lines to TWO vendors, rather than maximizing the use of lines to one vendor. This would offset the potential savings.

Lastly, as mentioned previously, the new long distance contract that will soon be available through OGS could eliminate some or all of the potential savings reflected in this study. It would be wise for campuses to wait for information about that contract before making any decisions about LINCS.

Specific Campus Responses

State University of New York at Albany

The University at Albany's telecommunications upgrade was a comprehensive upgrade which included not only voice, but a complete video network, data communications as well as voice mail, E911 and a fully integrated telemanagement system. The comparison presented in the study of Binghamton versus Albany neglects to correctly factor out the elements of each respective campus' unique telecommunications components, to develop a true comparative analysis. Further, there were fundamental differences between the two upgrades that suggest the two upgrades are not at all comparable without significant reconciliation of the differences, a reconciliation that appears not to have occurred.

The reference project at University at Albany included all elements of the upgrade, but the Binghamton project cost of $357,000 suggests that only the PBX upgrade was factored into their cost. It is our understanding that Binghamton's infrastructure was upgraded as a separate project and that that upgrade still does not result in a telephone-per-bed service as does the University at Albany's project. Further, the University at Albany's upgrade was a major expansion to extend our service to the students who were previously served by an outside vendor. Binghamton already provided service to their students. Some of the major cost elements unique to the Albany project include the cost of approximately $2,620,800 for asbestos removal, $2,990,900 in infrastructure to install new communications services of voice, data and video for all resident students (who had only a shared telephone prior to that date), as well as other unique costs that must be carefully reconciled against Binghamton's cost to develop a true comparison.

In light of the fact that the analysis was presented in summary fashion only, without detail, we can only assume these details have not been considered. We can only conclude that the analysis as presented is based on truly different sets of data.

Our students and faculty are very pleased with the increased services available. The video and data networks are the component of our installation which positions the institution to take advantage of so many opportunities that omitting them would have seriously compromised our mission. We are very confident that our decision to acquire the full range of communications was the correct one.

State University of New York at Binghamton

Recommendations:

1. Two campuses can potentially save and share equipment resources. If a PBX is installed on one campus, a means must exist to transport dial tone and related services to the other

proximate campus. One method is to lease lines from the local telephone company from one campus to the other. Costs associated with this method are high, being more than $50.00 per month per line, with an additional mileage charge assessed if used over the maximum allotted. If this method is further investigated, the distance between campuses may not allow full transmission of the digital signals necessary to operate some manufacturers' telephone sets.

The other method of sharing a common PBX between two campuses involves using Remote Premise Equipment (RPE). RPE resides on the far campus and connects to the host PBX via high-bandwidth connection. This, as in the model above, is a leased facility from a local telephone company or wireless provider at added cost. In addition, the RPE campus must maintain a full climate and power controlled location to house the RPE, similar to an existing switch room. A benefit of this model is combined traffic usage, which allows a greater negotiating stance with a long distance provider. Inherent difficulties are the separation and administration of billing services between campuses.

2. Yes.

3. As indicated in the study, some campus telecommunications departments provide comprehensive services. Accounting, billing (including payment office and full accounts receivable), plant facilities and maintenance, operator services, cellular, paging, campus fax, videoconferencing/distance learning, interactive voice response, cable television, information systems support, and other services are provided by some departments in addition to basic PBX services.

   Student call commissions should be received by all campuses that contract for student phone service. How the commissions are handled internally by the campus and the contractor should be determined by the individual campuses. One campus may take commission in the form of a monthly check; another may opt for the pay-down of principal on a contractor-provided PBX. Each case is different and what makes sense for one campus may not be feasible for another.

4. Each campus should investigate the feasibility of this recommendation. Through the use of traffic engineering, statistics, facilities cost, and toll rates, an accurate case can be made to increase dedicated access line or not.

5. The answer will differ based upon the category of telephone system type.

6. Long distance carriers customarily provide packages on an individual basis with respect to location. The term "dedicated access line" literally means a connection from the carrier's point of presence (POP) to a particular location, i.e., a campus building. If two campuses wish to share a common package, they would normally become "one" customer in the eyes of the carrier. This method would require overhead distribution between campuses.

7. It would seem a statewide package would offer the same, or better, type of service and rate

program for all State agencies, not just SUNY. By combining all state agencies, greater savings may be realized than could be from a SUNY specific package.

8. Each campus should identify the most favorable routing method for completion of its toll traffic. What makes sense for one campus may not be feasible for another.

State University of New York at Buffalo

At SUNY Buffalo, all of our telephone related income and expenditures are displayed in a 20 page General Ledger spread sheet which is a key component of our telephone accounting system. This was the general reference document for this OSC study. A copy of this was provided to the auditors for their use in this review. Included are the income and expenditures made by CIT for the purchase, installation, rearrangement, repair and management of the University's Intellipath system as well as ancillary services. It does not however include the expenditures for the purchase, installation, maintenance and administration of the many pbx's and electronic key telephone systems which many departments have installed over the past few years. These are accounted for by the individual departments.

With regard to the chart shown on page 4 of the report, the Buffalo University Operating Cost appears to be significantly out of line with respect to the other three institutions in the "Purchase Centrex Service" category. We don't believe that this is truly the case. This is probably due more to the variances as to what is (or should be) included in each category than to real differences in total costs. Footnote 1, which relates to the FIXED costs, infers that they are all "non-usage sensitive" costs. That was not our understanding during our early discussions with the auditors. Many of the costs included under "OPERATING COST" are also non-usage sensitive. For our campus the Operating Cost column contained all of our associated OTPS and PSR costs in addition to the traditional costs such as system overhead, moves, adds and changes as well as maintenance.

Leaving true usage costs out of the discussion, there are few, if any, of our costs that are truly "usage sensitive". We are sure that is the situation with the other campuses as well. That being the case, one could reasonably move all of our "operating costs" into the "fixed cost" column. Therefore, we feel it is the sum of the listed FIXED and OPERATING costs that should be compared and not the individual listings.

In reflection, there are a couple of reasons why the audited figure appears out of line. First, the 1994-95 spreadsheet contained costs associated with our now completed telephone upgrade program. These should have more properly been included under the "CAPITAL" column. Second, our operating costs reflect certain transactions relative to student usage and the DIFR account, which should not have been included.

By removing one time charges, to show our true operating expenses, the revised operating cost for 1994-95 turns out to be $6.71 per line as opposed to the published figure of $11.06. This brings the sum of the fixed and operating costs to $23.71 which is in the same range as the other campuses in our category.

In summary, we feel that a true comparison between campuses cannot be drawn from this study. In order to fairly present a true comparison between campuses, standardized accounting procedures would have to be established and a reporting format prepared so that the published figures reflect a more accurate financial picture for each campus.

State University of New York at Stony Brook

General Comments

While we believe that the questions posed in the Comptroller's draft raise legitimate issues that should be addressed by individual campuses, we question whether a system-wide answer to these questions is appropriate or consistent with the unique needs of individual campuses or with the current direction SUNY is moving with respect to the roles of the campuses and system administration. Stony Brook has consistently asked these very same questions of our own operations and has been extremely aggressive in pursuing cost reduction strategies with its carriers while maintaining a high level of service to the campus community. By ignoring the uniqueness of the individual campuses and their own ability to manage their affairs, we believe the report takes a simplistic view of some relatively complex issues.

Aside from these issues, we have a general concern about the methods used by the Comptroller's staff to collect and analyze the cost data contained in the draft report. Specifically, we are unable to determine how the Comptroller's staff derived the numbers contained in the report and used for cost comparisons. While we raised these issues in our response to the Comptroller's preliminary findings, it appears that they have not been addressed.

Comparing Non-Long Distance Service Costs and Revenues

We agree with the following comment made in the Comptroller's draft: "We do not believe it is appropriate to compare cost information between the three system and service categories presented in the chart because the information does not take into account the extent of revenues and costs resulting from the resale of services to students. " We disagree with the Comptroller's contention that it "is valid to compare costs within each of the three system and service delivery categories.". We question the comparability of the cost figures provided on page four for the following reasons:

- Some campuses, including Stony Brook, included wiring, fiber optic backbone, cable television and other expenses related to infrastructure in their original contract with their PBX vendor. These costs are incorporated into the "Capital Cost" column in the comparative table on page four of the Comptroller's draft, and thus distort the cost per telephone for the individual campuses and make meaningful comparison of questionable use.

- The comparison does not consider the timing of the individual campuses' PBX acquisition and financing and related effects on cost.

- The campuses contained in each category have entirely different structures, missions and needs. It may be entirely reasonable for there to be differences in costs.

Telephone Revenue/Comparing Long Distance Service Costs

We believe that the draft improperly separates the issues of commission revenue from student telephones from the question of negotiating the lowest rates for service. These are two methods used to lower the cost of telephone service and should be viewed as part of a single strategy. In the draft, Stony Brook's receipt of $300,000 in commission revenue from its student resale contractor leads to the Comptroller questioning why all campuses do not receive such revenue. In the next section the Comptroller questions why Stony Brook's student long distance volume is not leveraged to reduce overall long distance rates. As noted above, Stony Brook has aggressively pursued cost reductions utilizing both strategies and as a result receives substantial commission revenue on its student long distance volume as well as significantly discounted rates from its long distance carriers. The student volume has been used to obtain the commissions, while the balance of the University's volume has been used to negotiate rate discounts. We believe this strategy has served Stony Brook well and, we believe, represents prudent management of our telecommunications costs.

OGS Calling Costs

It is unclear whether the costs cited in the Comptroller's draft study include the cost of the dedicated access line to the service provider. These additional costs would erode the modest savings cited in the Comptroller's draft. If they do not include these costs, the savings figures are misleading because Stony Brook is paying its primary long distance carrier under two cents per minute, including the cost of T-1 access lines.

Stony Brook is pleased with the recent efforts on the part of the Office of General Services (OGS) to negotiate reduced rates for directory assistance and local calling charges. These, we believe, are the places where statewide effort can yield positive results for Stony Brook. We believe that improved communication from OGS concerning their current and future negotiations would be useful in helping all campuses to direct their negotiation efforts efficiently .

SUNY Health Science Center at Syracuse

The total cost per phone incurred by the HSC at Syracuse (HSCS) is not necessarily comparable to the other campuses listed for several reasons. Initially, the capital costs include Certificate of Participation Payments, and the costs related thereto. These costs will be completely paid off this year. Secondly, the HSCS is a 24 hour a day 7 day a week operation, and most campuses are not. This therefore results in higher maintenance and calling costs.

On the whole, the HSCS makes every effort to competitively bid contracts. As an example, the PBX system was competitively bid. HSCS also engages in OGS contracts where available and economically advantageous.

Recommendations:

1,2. HSCS will engage in any activities which will further reduce costs and address our needs.

3. In reference to question 3, the second paragraph addresses the differences in costs between HSCS and other SUNY campuses. Regarding the second half of the question HSCS campus does receive commissions on credit cards and pay phones. It also generates revenues from students through a resale program. In the future, student calls will be processed through MCI, and commissions will be earned on those calls.

4. HSCS constantly monitors activity to insure that overflow is kept to a minimum.

5. HSCS does include student traffic in its calling volumes.

6. OGS has aggregated all State and SUNY traffic, and HSCS will make all efforts to participate in the rate resulting from that aggregation.

8. HSCS already engages in OGS Directory Assistance, and will use the LINCS system should it prove efficient and economical.

State University of New York College at Brockport

We offer the following comments as they pertain to the above referenced report. It is not possible for us to provide a comparative analysis of SUNY College at Brockport's cost of telephone services without having the specific criteria used for this study.

1. We believe that the campus should continue to upgrade our current Nortel PBX as it is far more cost effective than PBX replacement. Our PBX is completely state-of-the-art, as a result of a series of hardware and software upgrades that have been performed. Nortel will continue to provide upgrade paths through its' Evergreen program as technology changes.

2. Recently OGS received bids for long distance and operator services. AT&T is being awarded this bid. Significantly lower rates are contained in this contract. We will be meeting soon to gain as much information as is available to determine what our savings would be under this contract. We are currently using ACC's dedicated T1 access between the campus and ACC's long distance network for long distance services. It is our high call volume, negotiation with carriers and student resale program that have allowed the campus to benefit from competitive rates.

3. SUNY College at Brockport students are charged A&T's discounted rates.

4. In addition to the reasons listed on page 9 of the report, long distance service costs vary according to the local exchange carrier charges the long distance providers incur when terminating long distance calls.

5. When we have investigated OGS LINCS services in the past, their costs have been higher for our volume of calls than the carriers.

State University of New York College at Buffalo

1. The draft report does not address the comments to the preliminary findings raised by SUNY System Administration regarding the LINCS system and dedicated vs remote access and the cost of running a dedicated circuit. It should be determined that the dedicated rate is available without additional cost of providing the dedicated circuit in order to attribute savings available through LINCS for intrastate calling services.

2. OSC issued Procurement and Disbursement Guidelines G-152 on October 12, 1995. Under the heading of Optional Telephone Plan services, OSC recommends that agencies use the State Calling Service for long distance which was negotiated by the Office of the General Services, Buffalo College has utilized the State Calling Service since September 1995. OSC should ascertain from OGS the circumstances under which the OGS/SCS plan is advantageous vs. the OGS/LINCS plan.

State University of New York College at Fredonia

Although Fredonia is not specifically referenced in the audit report, some of our costs are identified in the report. It is important to note that during Summer 1995, when this study was being conducted, we informed the auditors that we were in the process of changing our entire telephone system on campus for both administrative and residence hall telephones. As a result of those changes, we have significantly reduced the administrative costs of long distance calling and have also increased revenue derived from residence hall telephone services. This is partially in conjunction with the SUNY Card project as well as a new state-wide contact with MCI administrative long distance. Therefore, any information contained in this report for Fredonia is prior to the above changes and do not reflect our current telephone arrangements.

State University of New York College at New Paltz

1. Campuses have installed different PBX's over the years as a result of competitive bidding. There are switches from at least five major vendors at SUNY campuses, with different versions of hardware and software at each campus. Most campuses included favored nation pricing in their purchase contracts, which essentially means that the vendor must offer their most competitive rates for any upgrades or additional equipment purchases. Given the present equipment in place and the State purchasing process, it would be impossible to negotiate a viable SUNY-wide contact.

   Campuses located in proximity could explore the concept of sharing equipment resources. For example, New Paltz could serve as a hub for the surrounding community colleges provided they were all willing to change to an Ericsson PBX system. There are significant start up costs to expand the New Paltz switch and install remote switching equipment and T-1 circuits at the community colleges. Most of the community colleges do not have residential students so there is no potential for resale of services. If SUNY as an entity embraces concepts such as distance learning, however, there may be significant cost advantages to linking campuses because long distance calls may be eliminated.

2. Yes. SUNY at New Paltz installed an Ericsson MD110 PBX in November 1988 at a cost of $2,398,415. COPS financing at 6.54% increased the total cost to $2,890,709. We are the only college or university in the country of which we are aware that financed the switch over a five year period; most campuses have opted for seven, ten, or even fourteen year repayments.

   SUNY New Paltz upgraded the hardware and software in the PBX in 1992 at a minimal cost. We upgraded the system in 1996 at a cost of $66,000.

3. Differences in operating costs will exist because of the scope of services provided by each campus.

   Yes. All campuses that contract for student phone service should obtain a commission on student calls.

4. It depends on the cost of additional dedicated lines and whether there is sufficient calling traffic to justify the additional expense. SUNY at New Paltz does not allow overflow traffic; call attempts beyond the dedicated trunk capacity are blocked.

5. Yes. Rates are based upon aggregate call volume.

6. Yes.

7. It is a desirable goal. There are differences in pricing for dedicated access from each campus to a long distance carrier's point of presence. There are also specific campus information needs for rebilling calls. New Paltz, for example, requires all call detail on CD ROM for traffic analysis and rebilling credit card calls.

8. OGS would have to be able to provide detail to the campus for rebilling on a timely basis.

State University of New York College at Plattsburgh

1. Yes. It is good business practice to take advantage of any opportunities for potential savings.

2. Yes.

3. We cannot respond to the operating cost differences. We were not given an opportunity to review the methodology used to determine even our campus costs. As to the second part of the question on commission; yes, that would appear to be logical.

4. Yes, if it's cost-effective.

5. Volume should always drive cost down.

6. Certainly, if it's cost-effective and practical.

7. We believe this to be a complex issue and possibly should be addressed on a State-wide level.

8. We believe every campus should be aware and utilize whatever is most cost-effective for each.

State University of New York College at Potsdam

Recommendations:

1. Campuses can and should explore the potential savings of jointly purchasing a PBX and sharing equipment resources. It is our opinion, however, that there are far too many factors which would stand in the way. Distance seems to be a primary factor. The campuses would seem to have to be very close to one another even though technology probably exists where long distance remotes could work. Ownership, operating policies, control, maintenance and overall decision making all come to mind as major hurdles in the way of progress. Differences in how each campus does business heavily impacts the sharing of this kind of resource. Close campuses would also need to be at the same place on the decision making calendar, something that is not very likely. We don't think the savings potential would necessarily be worth the return of this investment of resources.

2. Every campus must analyze their own needs and decide what is important. What's important to one campus won't necessarily be important to another. We assume that if updating aging PBX equipment is cheaper and smarter overall to replacing, then it is the logical choice. It may not be a good choice, and in some cases, it may not be a choice at all. Before contracting with AT&T, Potsdam's PBX had become obsolete and saturated so that to make any improvements or expansions in capability, we needed to wait for another user somewhere in the country to mothball or discontinue use of similar systems. Technological improvements also warrant replacing over updating. Serviceability is another concern. Companies stop servicing some equipment making replacement necessary.

3. Variances in operating costs at campuses are a factor of equipment manufacturers, services offered, long distance provider, geographic technological capability, student needs and administrative needs. All campuses that contract for student phone services, if done in a competitive environment, should obtain some value equating to the commission on student calls. At Potsdam, in exchange for commissions and termination revenues, AT&T College and University Solutions agreed to replace all equipment and provide student and administrative voice mail and act as low cost provider of administrative and student long distance services, maintenance free for the life of the contract as well as all T1 charges associated with the College and local call charges associated with the College.

4. If campuses with additional costs associated with overflow traffic could increase capacity of their dedicated lines thus reducing the more expensive overflow traffic and the cost of doing this made sense, then the answer is yes. Often there is more to it than that. Most telecom managers are constantly looking for these kinds of ways to save money.

5. Typically the decision to include student traffic in the respective calling volumes depends on the overall package agreement between the long distance carrier and the campus. Each campus must negotiate as much value as possible for the right to carry student traffic. It is usually the lion's share of the traffic. Whether or not a campus gets free maintenance or free equipment or lower rates in exchange for including student traffic seems irrelevant. Clearly, student traffic has the capability of enhancing deals and should be rewarded with some sort of revenue.

6,7. Whether or not in the same geographic location, two or more campuses could conceivably negotiate a better long distance rate by so-called sharing of calling volumes. This is even possible for the whole of State University. There certainly are a lot of minutes within the State University. We believe, however, that individual campuses do quite well negotiating by themselves. Because of the extreme high level of competition in this field and the rapidly changing technology also, rates are going to fluctuate regularly. Individual campuses probably are better off negotiating rates different times and places so as to take advantage of a least the current, most competitive low rate. This constant state of negotiation probably serves SUNY better than a single rate locked in at all campuses for a period of time. On the other hand, if a deal could be struck to always receive the lowest rate or one that would slide downward with improvements in technology, then it would seem to benefit SUNY. The major hurdle is that campuses are mostly engaged in contracts or agreements that expire at widely different times. It would be hard to coordinate this type of agreement. In any event, a single rate in SUNY should always have to stand up to individual campus renegotiations.

8. It would be prudent for campuses to consider using LINCS or any other system of low cost networked communications for long distance service when they are able. This means either when previous contracts or agreements are expiring or when campus telecommunications environments change. LINCS should be considered another competitive option in the array of choices campuses have. The probable disadvantage LINCS will have competing is the nature of competitive packages. For instance, at Potsdam the network traffic was part and parcel to a larger agreement which provided an all new PBX, voice mail station equipment, and video conferencing equipment for no cost. It is hard to review and analyze individual components of telecommunications contracts in isolation for this reason.

State University of New York College at Purchase

We have reviewed the content of the study and have the following comments.

Purchase College acquired the telecommunication system in 1988 and financed the acquisition through OGS Certificate of Participation (COPS). Four employees staff the office that includes a technician for repairs and three office personnel. A maintenance agreement for equipment and major software changes is in place for these administrative functions. Our rates are negotiated locally inclusive of administrative use and student traffic for local and long distance.

Purchase College does not utilize the OGS LINCS. The chart on page 13 of the draft report reflects that to do so, Purchase would increase cost by $27,212 above our current negotiated rates.

State University of New York Institute of Technology at Utica/Rome

Recommendations:

1. Yes, this is certainly an option when an upgrade or new PBX purchase is inevitable. The Utica/Rome PBX will be supported by the manufacturer until the year 2005 for software upgrades.

2. Yes, since the PBX has been administered by the Facilities Department all avenues for updating equipment have been explored. The manufacturer plans to support the PBX until the year 2005. Until then, the current PBX will successfully meet the voice needs of this campus.

3. The differences in operating costs are evident because of the obvious difference in the size of the campus that the PBX is supporting. Other factors may include the traffic supported by the PBX, the number of telephones supported by the system, the size of the campus community base, etc.

   Any contract for student phone services should include commission payments. Utica/Rome contracted with Frontier Communications and with MCI for student phone services and did receive commission payments from both. Currently, the campus is administering its own long-distance resale program for students.

4. Utica/ Rome currently has two separate T1.5 connections for voice traffic. The administrative and student traffic is routed separately. There are no overflow traffic concerns and therefore no additional costs associated with overflow traffic.

5. Utica/ Rome currently routs Administrative traffic to AT&T and student traffic to MCI. The AT&T long distance rates would decrease if student traffic were included, however there would be no cost savings if the Administrative traffic were routed to MCI.

6. Yes, this has been accomplished with the implementation of the SUNY CARD and the use of Campus MCI.

7. Yes, this has been accomplished with the new OGS contract.

8. Each campus should analyze the potential benefit to adopting these services. Utica/ Rome is currently in the process of reviewing each of these options .

State University College of Technology at Canton

We carefully reviewed the draft report. The SUNY College of Technology at Canton was pleased to be included in the study because it gave us an opportunity to demonstrate how well we managed our telephone service in our remote North Country location.

We commend the Office of the State Comptroller, Division of Management Audit for their thorough examination and we are grateful for their suggestions. We will analyze the questions which are raised at the end of each section of their report. Except where we have noted below, we generally concur with the findings made in the study and will work to implement those suggestions that applied to SUNY-Canton.

On page 2, paragraph 2 of the executive summary, under Study Observations and Conclusions, the study discusses the large capital investments and the potential for sharing PBX's. SUNY Canton has investigated these opportunities with a variety of scenarios. We have sought partnerships with local private colleges and universities, with the Local Board of Cooperative Educational Services, with the local schools system as well as with another SUNY school located a dozen miles away. None of those opportunities panned out for either financial or technical reasons. We will continue to explore alternatives which make sense for our campus.

In paragraph 3 of this same section, we are one of the campuses which has done very well at negotiating favorable long distance rates for our institution. We have also taken advantage of all opportunities to generate revenues from our telephone operations, including revenues from NYNEX and long distance carrier who terminate call at our PBX. We have investigated buying intrastate services from OGS, but we did not feel that it made sense for us because of the distance involved. We, as of recently, are using the OGS directory assistance service.

State University College of Agriculture and Technology at Morrisville

Recommendations:

1. Yes. This sounds like a good idea - but would probably not work with all campuses. Telephones are used in many different ways by the large and small campuses. For example: Morrisville does not use its telephone system for any data transmission.

2. Yes. Morrisville's original PBX system was purchased in 1985 for $375,000. Although this system was still working well with very low maintenance costs, we decided to upgrade in 1995 to a digital system with voice mail. By taking advantage of Northern Telecoms evergreen policy, this upgrade cost $62,400 and should be adequate for another ten years.

3. Morrisville does not resell student service but we do contract with a long distance carrier for student long distance service.

4. Yes. Morrisville is presently conducting a traffic study to determine whether to increase

dedicated lines by one or two. We presently have an overflow to AT&T (more expensive) of between $100 and $150 a month.

5. This question is not applicable to Morrisville, but the answer is definitely yes.

6. Yes. This may be more difficult than it first appears, but cost per call is dependent on volume and this would definitely increase volume and should lower overall cost.

7. Yes. Once again this may be much more difficult than it appears to be. Morrisville pays seven cents per minute for its administrative calls. We would be very interested if someone could negotiate a better rate.

8. Yes. However, Morrisville tried to join LINCS a few years ago and the cost was much more than we are currently paying. We now have a copy of the ACC contract for Directory Assistance, but have not taken advantage of it yet.