



THE CONNECTICUT STATE UNIVERSITY

P.O. Box 2008 • New Britain, Connecticut 06050 • (203) 827-7700

RESOLUTION

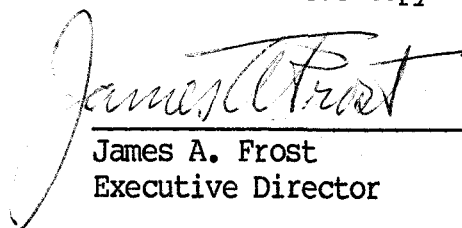
concerning

DEVELOPMENT OF A COMPUTERIZED DATA PROCESSING SYSTEM FOR THE CONNECTICUT STATE UNIVERSITY

October 7, 1983

- WHEREAS, In compliance with the provisions of Board Resolution #82-55, compatible data processing equipment for administrative purposes is now in place throughout the Connecticut State University system, and
- WHEREAS, The Board of Trustees desires that activity be continued to attain the goals set forth in the July 15, 1982 Five-year Plan for Administrative Data Processing Equipment and Software, and
- WHEREAS, In the interest of efficiency and cost effectiveness, centralized policy administration is needed for the development of uniform administrative data processing systems; be it
- RESOLVED, That the process of developing, for administrative purposes, a comprehensive computerized data processing system for the Connecticut State University shall continue in order to attain the goals set forth in the July 15, 1982 Five-year Plan for Administrative Data Processing Equipment and Software, attached as an addendum to this resolution, and be it
- RESOLVED, That there shall be established in the Central Office of the Connecticut State University data processing staff with full responsibility for the administration of University-wide computerized data processing systems and for the acquisition and/or development of such programs as may meet the administrative needs of the University.

A Certified True Copy



James A. Frost
Executive Director

This presentation is divided into two parts. These are: purchase and installation of a uniform and standardized equipment base; selection, use and purchase of software and utilities and development of user defined application systems for use on this equipment by various administrative offices at each college.

I. A. Goals

The goal of this five year plan is fourfold; to implement Board policy on standardization of data processing equipment and software for administrative purposes; to provide state of the art administrative application software to all colleges and the Central office; to provide the Central Office with the ability to collect data essential to its internal and external reporting needs; and to provide data essential to meet program and formula budgeting requirements. It is the belief of the Central Office that the above goals can only be accomplished by a complete revamping of all computer systems currently in operation in the State College system. It is felt that these goals can be accomplished in the following manner:

1. Provide standardized hardware for all colleges with sufficient capacity to handle all local administrative workloads;
2. Provide a standardized database management system with utilities such as: data entry screen generators, report generators, a non-procedural language for reporting;
3. Utilize systemwide design and joint development of the major administrative systems on each campus to provide updated standardized versions of these systems;
4. Establish a network between administrative systems on all campuses;
5. Utilize the network as a mechanism for collection of data on each campus community for all campus and system external reporting needs.

It is hoped that this plan will provide a basis for solution to the administrative computing requirements of the system and that the administrative computing needs of all parties will be met for the next eight to ten years.

B. EXCEPTIONS

This proposal does not address the question of computer systems for academic computing. In only three places (II.A.1, II.C.2 and II.E.1) are any proposals made that affect academic computing. These are the initial installation of equipment at ECSC on July 1, 1982, a temporary upgrade for SCSC on July 1, 1983, and an upgrade at ECSC on July 1, 1985. The net result of this proposal is that all four colleges will have separate academic and administrative systems. With the possible exception of Western, each academic computer will be tied to the UCONN datacenter.

This arrangement will probably not suffice to provide the academic computing services necessary for the system over the next five years, particularly at those colleges with a Computer Science program.

It is suggested that consideration of academic computer equipment be part of each college's budget presentation to the Central Office each fiscal year.

Since the academic computing field is constantly changing, the budget cycle will allow a continuing evaluation of academic computing needs on each campus. These needs can be judged on their merits for inclusion in the budget based on academic use at the time, student population in computer related courses and new trends in the computer science field. Each campus should be required to treat this item as a separate budget request each year, presented along with supporting information for decisions to be made on conclusions in the academic equipment budget each year.

In no way is this plan intended to restrict or impede the growth of any academic program in the Computer Science area, consequently it is essential that academic computing be treated as a separate topic.

Connecticut State Colleges
Five Year Plan
for
Administrative Data Processing
Equipment and Software

July 15, 1982

This presentation is divided into two parts. These are: purchase and installation of a uniform and standardized equipment base; selection, use and purchase of software and utilities and development of user defined application systems for use on this equipment by various administrative offices at each college.

I. A. Goals

The goal of this five year plan is fourfold; to implement Board policy on standardization of data processing equipment and software for administrative purposes; to provide state of the art administrative application software to all colleges and the Central office; to provide the Central Office with the ability to collect data essential to its internal and external reporting needs; and to provide data essential to meet program and formula budgeting requirements. It is the belief of the Central Office that the above goals can only be accomplished by a complete revamping of all computer systems currently in operation in the State College system. It is felt that these goals can be accomplished in the following manner:

1. Provide standardized hardware for all colleges with sufficient capacity to handle all local administrative workloads;
2. Provide a standardized database management system with utilities such as: data entry screen generators, report generators, a non-procedural language for reporting;
3. Utilize systemwide design and joint development of the major administrative systems on each campus to provide updated standardized versions of these systems;
4. Establish a network between administrative systems on all campuses;
5. Utilize the network as a mechanism for collection of data on each campus community for all campus and system external reporting needs.

It is hoped that this plan will provide a basis for solution to the administrative computing requirements of the system and that the administrative computing needs of all parties will be met for the next eight to ten years.

B. EXCEPTIONS

This proposal does not address the question of computer systems for academic computing. In only three places (II.A.1, II.C.2 and II.E.1) are any proposals made that affect academic computing. These are the initial installation of equipment at ECSC on July 1, 1982, a temporary upgrade for SCSC on July 1, 1983, and an upgrade at ECSC on July 1, 1985. The net result of this proposal is that all four colleges will have separate academic and administrative systems. With the possible exception of Western, each academic computer will be tied to the UCONN datacenter.

This arrangement will probably not suffice to provide the academic computing services necessary for the system over the next five years, particularly at those colleges with a Computer Science program.

It is suggested that consideration of academic computer equipment be part of each college's budget presentation to the Central Office each fiscal year.

Since the academic computing field is constantly changing, the budget cycle will allow a continuing evaluation of academic computing needs on each campus. These needs can be judged on their merits for inclusion in the budget based on academic use at the time, student population in computer related courses and new trends in the computer science field. Each campus should be required to treat this item as a separate budget request each year, presented along with supporting information for decisions to be made on conclusions in the academic equipment budget each year.

In no way is this plan intended to restrict or impede the growth of any academic program in the Computer Science area, consequently it is essential that academic computing be treated as a separate topic.

II. Hardware Development

The list of proposed hardware changes presented below is ordered chronologically.

A. July 1, 1982

1. Eastern Connecticut State College Equipment Change

The DEC PDP 11/70 recently de-installed as an academic system at Central Connecticut State College should be moved and re-installed at Eastern Connecticut State College.

a. System Capabilities, Cost and Configuration

The system as currently configured would provide a combination administrative/academic computer system capable of supporting 32 concurrent users. This system would be connected to UCONN for some academic and administrative tasks, provide word processing to all users, and handle academic and administrative workloads for the next three years at ECSC.

<u>Description</u>	<u>One Time Purchase Cost</u>	<u>Monthly Lease 3 Yr/5 Yr</u>	<u>Monthly Maint.</u>
DEC PDP 11/70 CPU with:	40,000	3,000	296
704K words of memory			158
RWPO6-AA 176 MB disk drive			289
TWE16-AB 800/1600 bpi tape drive			194
LA36 System Console			25
2-DH11-AD 16 Port multiplexors (total 32 terminal ports)			162
H960-DH Cabinet			21
RSTS/E Operating System with RMS 11/K			0
FORTRAN-IV, SORT, PASCAL, BASIC-PLUS-TYCHO/HASP			0
CR11-600 CPM card reader		292.50	90
DUP11 Synchronous interface	1,575		14
KG11 CRC Com Option	1,350		9

Dataprinter 1210-96 700 lpm Printer and Controller	700	604	300
Installation	2,613		
COBOL-81	6,540		49
WORD-11	4,250		9
Electrical Wiring	1,500		9
UCONN modems and line		200	60
Shipping	200		
Dialup line and modem	300	25	18
Card Punch		327	184
	-----	-----	-----
	59,028	4448.50	1877/mo.

Total one time cost: \$59,028

Total Yearly O.E. expense: \$75,906

In addition to this, Eastern may require installation of more terminals and modems. As a "guesstimate" if 10 video terminals were required in the next year, and 5 of these required modems, the cost would be:

DEC VT100 terminals @ 1500 each: \$15000 one time purchase

Monthly costs for modems, lines, and maintenance would be: \$430/per month

b. System Expansion

Over the course of three years the system could be expanded readily to 48 concurrent users with the addition of the following equipment:

	<u>One time Charge</u>	<u>Monthly Maint.</u>
-- RP06 disk drive	22,000	286/mo
-- 16 port multiplexor	7,500	81/mo
-- one half megabyte of memory	5,000	150/mo

Additional expansion is possible if more than 48 terminals are needed within a three year period.

B. January 1, 1982

1. Western Connecticut State College Equipment Change

The DEC PDP 11/70 currently installed at the Judicial Department should be moved to Western Connecticut State College.

a. System Configuration, Capabilities and Cost

The system would initially be configured to support 32 concurrent users. This system would be supporting only Westerns administrative needs. As configured here it could support WCSC's administrative workload for the next three years.

This machine is currently owned by the Department of Administrative Services. Actual lease rates would have to be negotiated with that department. Representative prices are listed below.

<u>Description</u>	<u>One Time Purchase Cost</u>	<u>Monthly Lease 3 Yr/5 Yr</u>	<u>Monthly Maint.</u>
DEC PDP 11/70			
1 megabyte of memory			
RP06-disk drive			
TE16 tape drive			
32 - terminal ports			

600 card per minute reader			
600 line per minute line- printer		\$ 5,000 est	\$1,500 est
UCONN connection			
DUP11 Synchronous Interface	1,575		14
KG11 CRC Comm. Option	1,350		9
Modems and lines		200	60
TYCHO/HASP	4,500		
Software			
COBOL - 81	6,540		49
WORD-11	4,250		9
Terminals			
15 - VT131's @ 1500	22,500		270
5 - LA120's @ 2300	11,500		160
Dialup line and modem	300	25	18
Modems and lines (20)		460	120
Shipping			
Re-installation	3,000		

Wiring (Electrical)	1,500		
Card Punch	-----	327	184
		-----	-----
	\$57,015.	\$6,012.	\$2,393.
Total one time cost:			\$ 57,015.00
Total yearly O.E. expense:			\$100,860.00

b. System Expansion

This system could be expanded to support 48 users in the same manner as Easterns computer. This would include addition of an RP06 disk drive 16 port multiplexor, and one half megabyte of memory. The costs would be the same.

c. July 1, 1983

1. Central Connecticut State College Equipment Change.

Currently, Central Connecticut State College's administrative computer system cannot support the workload being placed upon it. User complaints are significant, and may result in a shifting of work to other times and machines. A new system is needed immediately to gain approximately 50% in capacity. This new system should be a VAX 11/780, because of software compatability, as well as providing a duplicate processor. In addition, many CCSC owned system components can be moved from the PDP to the VAX with no loss in equity.

a. System Configuration, Capabilities and Cost.

The system would be initially configured to support 64 concurrent users, and would consist of:

<u>Description</u>	<u>One Time Purchase Cost</u>	<u>Monthly Lease 3 Yr/5 Yr</u>	<u>Monthly Maint.</u>
VAX 11/780 CPU with FPA	\$391,000		\$ 2,702
4 megabytes of memory			
125 ips tape			
2-RM05 disks (256mb)			
64 terminal ports			
Software Licenses			
COBOL	13,800		60
CDD/Datatrieve	17,000		100
FMS-11	5,180		50
TYCHO	4,500		69
WORD-11	4,750		9
Installation & Configuration			
CR11 (card reader)	868		90
Printer	500		250
UCONN connection	1,523		51
Wiring (Electrical)	3,000		
Cabling	4,500		

Terminals

5 - VT131's	7,500	120
	-----	-----
	\$454,121.	\$3,501.

This equipment would replace a PDP 11/70 computer currently at CCSC. The displaced cost would be \$1307/mo.

Total one time cost: \$454,121.

Total O.E. cost: \$ 26,328.

b. System Expansion

By addition of the following peripherals, the system could be expanded to support 80 concurrent users.

	<u>One Time Charge</u>	<u>Monthly Maint.</u>
-- RM05 disk drive (256 megabytes)	38,000	300/mo
-- 16 port multiplexor	4,350	67/mo
-- TU78 tape drive	27,000	250/mo
-- 2 megabytes of memory.	21,600	364/mo

2. Southern Connecticut State College Equipment Change

The installation of a VAX 11/780 at Central Connecticut State College will release a PDP 11/70 system. It is proposed that this system be placed at Southern Connecticut State College. This will allow separation of academic and administrative computing onto two separate processors. In addition, it will provide redundancy in case of breakdown of either system, and 100% increase in computing capability. By this date (July 1, 1983) Southern will face a problem as serious as CCSC is now facing. The installed system will no longer be capable of handling the workload requested of it. Since this machine is identical to the

one installed it can become immediately operational, and provide relief for the users of the single system at that time.

a. System Configuration, Capabilities and Cost.

Since this system is totally owned by CCSC, this machine can be sold outright to SCSC by CCSC.

This system would be a DEC PDP 11/70 that would support 48 academic users with:

<u>Description</u>	<u>One Time Purchase Cost</u>	<u>Monthly Lease 3 Yr/5 Yr</u>	<u>Monthly Maint.</u>
DEC PDP 11/70 CPU with			
1 megabyte of memory			
RP06 disk drive			
TE16 tape drive			
64 terminal ports			
LA36 console	\$100,000		\$1,307
Additional Equipment			
Line Printer	14,400		170
Card Reader	11,700		90
UCONN Connection	5,505		51
Dialup Line	300	25	18
10 - VT131 terminals	15,000		220

Software			
WORD-11	4,250		9
PASCAL	1,500		12
Installation	2,000		
Moving	200		
Wiring & Cabling	2,500		
	-----	-----	-----
	\$157,355.	25.	\$1,877.

Elimination of the HARRIS 1600 RJE Station will displace a cost of \$1300/month.

Total one time cost: \$157,355.

Total O.E. Cost: \$ 7,224.

b. System Expansion

This system should not be expanded beyond its initial configuration. Future changes would obviate this consideration.

3. Systemwide Equipment Change

At this point in time, all four colleges would have had similar equipment installed for a period of six months. It is recommended that a network be established between all four colleges. This network would be used for collection of data and systemwide software help to each other.

a. System Configuration, Capabilities and Cost.

This equipment should be paid for on a system basis with the costs being borne by the Central Office.

Each college would need equipment to become part of this network. The following equipment is recommended:

<u>Description</u>	<u>One Time Purchase Cost</u>	<u>Monthly Lease 3 Yr/5 Yr</u>	<u>Monthly Maint.</u>
6 - DMR11 network interface	\$ 26,400		\$ 276
3 - RSTS Decnet	8,900		100
1 - VAX Decnet	6,000		100
6 - 2400 Baud modems		\$ 150	
3 - leased lines	900	180	
	-----	-----	-----
	\$ 42,200	\$ 330	\$ 476

Total one time cost: \$42,200.

Total O.E. cost: \$ 9,672.

This arrangement would provide an initial network that connects ESCS, SCSC, and WCSC to CCSC. The line speeds recommended would allow reasonable transfer of files between colleges on a regular basis, to support operational systems.

D. July 1, 1984

1. Southern Connecticut State College Equipment Change.

Within a year, it is expected that SCSC's dual system will have outgrown its administrative capacity. To expand SCSC's system, as well as provide a future growth pattern for hardware and software systems it is proposed that a VAX 11/780 computer system be installed at Southern Connecticut State College to replace the PDP 11/70 administrative system. This system would initially support 64 concurrent users.

a. System Configuration, Capabilities and Cost

Based on current bid prices, the cost of this system would be:

July 15, 1982

Page 14

<u>Description</u>	<u>One Time Purchase Cost</u>	<u>Monthly Lease 3 Yr/5 Yr</u>	<u>Monthly Maint.</u>
VAX 11/780 CPU with FPA	\$361,000		\$ 2,702
4 megabytes of memory			
125 ips tape			
2 - RM05 disks (256mb)			
64 terminal ports			
Software Licenses			
COBOL	13,800		60
CDD/Datatrieve	17,000		100
FMS-11	5,180		50
TYCHO	4,500		69
WORD-11	4,750		9
Installation & Configuration			
CR11 (card reader)	868		90
Printer	500		250
UCONN connection	1,523		51
Wiring (electrical)	3,000		
Cabling	4,500		
Disk and Tape	3,600		483

Terminals

5 - VT131's	7,500	120
	-----	-----
	\$427,721	\$ 3,984

This equipment would replace a PDP 11/70 computer currently at SCSC. The displaced cost would be \$824/mo.

In addition, the PDP 11/70 could be sold to other state agencies or educational institutions for approximately \$62,000.

Total one time cost: \$427,721.

Total O.E. cost: \$ 37,920.

It is possible that ECSC or WCSC could make use of the multiplexors or memory released at this time.

b. System Expansion

The system could be expanded to 80 concurrent users by the addition of:

	<u>One Time Charge</u>	<u>Monthly Maint.</u>
-- 2 megabytes of memory	21,600	364/mo
-- RM05 disk drive	38,000	300/mo
-- 16 port multiplexor	4,350	67/mo

E. July 1, 1985

1. Eastern Connecticut State College Equipment Change.

By July 1, 1985, Eastern would have had the PDP 11/70 installed for three years. It is expected that its growth pattern would necessitate additional equipment at that time. Consequently, a VAX 11/750 should be installed

at Eastern Connecticut State College. The initial configuration for this system would support 48 concurrent users. This machine would be for ECSC administrative workload alone.

It is also recommended that the current PDP 11/70 system be retained as the primary machine in conjunction with UCONN for academic support. Since this system support 48 terminals, the potential growth for the entire college is 96 terminals.

a. System Configuration, Capabilities and Cost

<u>Description</u>	<u>One Time Purchase Cost</u>	<u>Monthly Lease 3 Yr/5 Yr</u>	<u>Monthly Maint.</u>
VAX 11/750 CPU with			
3 megabytes of memory			
2 - RM05 disk drives			
TW77 tape drive			
48 terminal ports			
660 line per minute printer			
600 card per minute reader			
	\$266,230		\$ 1,889
UCONN interface	5,505		51
UCONN modems & line	300	50	50
Dialup line & modem	300	50	18
Software			
WORD-11	4,750		9
TYCHO	4,500		67

COBOL	6,900		60
Datatrieve/CDD	8,500		100
FMS-11	2,640		50
Terminals			
10 - VT131's	15,000		180
10 modems & lines		250	60
Installation Costs			
Wiring	3,500		
Moving of DMR11	680		
	-----	-----	-----
	\$318,805	\$ 350	\$ 2,534
Total one time cost:			\$318,805.
Total O.E. Cost:			\$ 34,808.

b. System Expansion

The administrative system could be expanded to 64 terminals with the addition of the following equipment:

	<u>One Time Charge</u>	<u>Monthly Maint.</u>
-- 16 port multiplexor	4,350	67/mo
-- 1 megabyte of memory	10,800	182/mo

2. Western Connecticut State College Equipment Change

By July 1, 1985, Westerns's administrative system will need upgrading. Workload should expand by then to use up all available administrative resources. Consequently, it is recommended that a VAX 11/750 be installed as the main

administrative computer to replace the PDP 11/70 system. As initially configured the system could support 48 concurrent users.

a. System Configuration, Capabilites and Cost

<u>Description</u>	<u>One Time Purchase Cost</u>	<u>Monthly Lease 3 Yr/5 Yr</u>	<u>Monthly Maint.</u>
VAX 11/750 CPU with			
3 megabytes of memory			
2 - RM05 disk drives			
TU77 tape drive			
48 terminal ports			
660 line per minute printer			
600 card per minute reader			
	\$266,230		\$ 1,889
Software			
WORD-11	4,750		9
TYCHO	4,500		67
COBOL	6,900		60
Datatrieve	8,500		100
FMS-11	2,640		50
Terminals			
10 - VT131's	15,000		180
10 modems & lines		250	60

Installation Costs

Wiring	3,500		
Moving of DMR11	680		
	-----	-----	-----
	\$312,700	\$ 250	\$ 2,415

Re-Installation of:

UCONN Interface: \$1,523

Installation of this equipment will release a PDP 11/70 and the associated cost of \$6500/month.

Total one time cost: \$314,223.

Total O.E. Cost: (-46,020.)

b. System Expansion

This system could be expanded to a 48 terminal system with the addition of the following equipment:

	<u>One Time Charge</u>	<u>Monthly Maint.</u>
-- 16 port multiplexor	4,350	67/mo
-- 1 megabyte of memory	10,800	182/mo

III. Software Development

A. July 1, 1982

1. Currently Operational Software

At the present time there are three systems that run on a systemwide basis.

a. Personnel

This is an online updating and reporting system on all full time employees in the State College system.

b. SAAAS--State Agency Appropriation Accounting System

This system is an online updating and reporting system for all expenditures and receipts in all funds.

c. Facilities Inventory

This system is an online updating and reporting system for all physical plant facilities in the State College system.

2. Software under Development

There are two systems under development. these are the Course file reporting system (faculty load), and the Budget generation system (utilizing SAS at UCONN, the Personnel System, and Digicalc). Both of these will be in operation by the end of the Fall 1982 semester.

B. January 1, 1983

1. Software under development

a. Purchase order front end to SAAAS.

This system will automate the purchasing function. It will allow online entry of purchase orders and encumbrances, tracking of all orders to all vendors and automatic posting to the SAAAS system. Expected operational date: April 1, 1983.

b. Inventory System

This system will allow an online tracking of a campus physical equipment inventory. Patterned after an existing system accepted by the auditors at the DEP, it will also allow reporting on all equipment with a variety of printed documents. Expected completion date: April 1, 1983.

c. Student file reporting system

This system will consist of data reporting to the Central Office on all students in the State College system. The file submitted by each college will contain data elements appropriate to complete all internal and external reports. The data elements to be collected and the definition for each will be determined in the

Fall of 1982. The Central Office will assist the various colleges in the preparation of this file where necessary.

- d. Since all colleges will have identical equipment, all operational software running at CCSC and SCSC will be made available to ECSC and WCSC. These systems will be investigated by ECSC and WCSC and adopted where applicable. The primary emphasis in this process will be elimination of duplication of effort by ECSC and WCSC. Software will be adopted unless each college can demonstrate peculiar circumstances that make it unworkable.
- e. The four working systems: Personnel, SAAAS, Budget, and Facilities will be distributed to ECSC and WCSC for running on their local PDP 11/70. This will relieve some of the processing burden placed on CCSC. Because of SCSC's equipment resource problem, these systems with the exception of Personnel will continue to run at CCSC.

2. Recommended software for systemwide purchase

- a. WORD-11 Word processing system.

The purchase of this system (\$4250 per copy, 800/year maintenance) makes reasonable cost word processing available on all computer terminals in the system. This would standardize word processing and make it available to faculty and students alike.

- b. DIGICALC spread sheet calculation program.

Applications of this software are numerous (budget reports, etc.) This program is the largest selling computer program ever written. The cost is \$2000 per copy.

3. Software Request for Proposal Process.

The State College System will participate in a Department of Administrative Services "Request for a Proposal" with the intention of selecting a data base management system for future use on State College equipment. These systems will be studied with a variety of requirements in mind which include:

- a. A database management system that can be integrated into all languages being used on the computer;

- b. Screen generating formatter for data entry work;
- c. Report generating program;
- d. Data element administration program;
- e. Documentation aids;
- f. High level, non language specific operating mode.

This evaluation should be completed by June 30, 1983. Estimated cost is \$25,000 per CPU, \$1200/year maintenance.

C. July 1, 1983

1. Recommended Software for systemwide purchase

In conjunction with establishment of a systemwide network, a network software package must be procured. The recommended package in this system would be DECNET or an acceptable substitute. This system would allow software connection of all computers in the system. The associated cost is listed under systemwide equipment costs in Part I.

2. Distribution of Software

The SAAAS, facilities and budget system previously distributed to ECSC and WCSC would be distributed to SCSC to run on the new administrative processor. This would relieve CCSC of this processing burden.

3. Collection of Data

With the establishment of the network, and the distribution of all system software (SAAAS, Personnel, Facilities, and Budget) all data can be transmitted thru the network to the Central location. Consequently, all reporting files for the Central Office can be established thru the network.

4. Software Development

Southern Connecticut State college would be connected via dialup lines to CCSC VAX 11/780 computer for purposes of software development. All their PDP 11/70 RSTS operation software must be converted to run on a VAX 11/780 VMS system. Estimated completion date is June 30, 1984. For purposes of conversion one or more SCSC staff members might have to be located at the Central Office for short period of time.

5. Data Systems update

All part-time personnel should be entered into the Personnel system. Estimated completion date: January 1, 1983. Various programs will be written by the Central Office for reporting on these employees.

6. Software contracts

It will be requested that the Department of Administrative Services contract with an outside vendor to produce a payroll system for State College use.

The system would have the following requirements:

- a. interface with the controllers MSA payroll system;
- b. interface with local personnel files;
- c. operate in an online environment;
- d. automatically post to SAAAS.

Estimated completion date: June 30, 1984.

7. Software Development (Systemwide)

A systemwide group would be formed from staff members at each college to design operational systems for all administrative offices on all campuses. This group will use as a basis the database management system selected in the RFP process previously as the foundation for all files and shall design systems based on all packages purchased as part of the database management system.

D. July 1, 1984

1. Software development

Eastern Connecticut State College and Western Connecticut State College will be connected to Central and Southern respectively by telephone to begin the process of conversion from PDP 11/70 RSTS to VAX 11/750 VMS. This may necessitate staff members at each institution working at CCSC or SCSC for short periods of time.

Estimated date of completion is June 30, 1985.

2. Software Contracts

It will be requested that the Department of Administrative Services contract with an outside vendor to produce a time and attendance system that has the following requirements:

- a. interface with existing systems for personnel, payroll, SAAAS accounting;
- b. operate in an online environment;
- c. handle all bargaining units as well as management and part time personnel.

The estimated completion date is June 30, 1985.

E. July 1, 1985

1. Implementation of systems designed around the data base management system.

The initial implementation of these systems will begin at this time. It is estimated that the phase in period will be three to five years. It will be the responsibility of the committee established the previous year to determine the implementation schedule.

Connecticut State Colleges
Five Year Plan
for
Administrative Data Processing
Equipment and Software

	<u>July 1, 1982</u>	<u>July 1, 1983</u>	<u>July 1, 1984</u>	<u>July 1, 1985</u>	<u>July 1, 1986</u>
CCSC	CCSC conversion to VAX	New VAX 11/780 installed			
SCSC		PDP 11/70 moved from CCSC	SCSC conversion to VAX	New VAX 11/780 installed (PDP 11/70 released)	
WCSC	PDP 11/70 moved from Judicial			WCSC conversion to VAX	New VAX 11/750 installed PDP 11/70 released back to DAS
ECSC	PDP 11/70 moved from CCSC			ECSC conversion to VAX	New VAX 11/750 installed PDP kept for academic work
Software On-line	SAAAS Personnel Facilities Operational	Course file operational P.O. Front end to SAAAS Inventory CCSC, SCSC Administrative Systems available!	Student file operational Automated Budget Prep. (Digicalc & SAS)	Payroll operational (interfaced with MSA & Personnel file)	time & attendance operational
System-wide projects	Evaluate database packages on VAX/PDP	Network established for SAAAS, Personnel & Facilities, etc.	Joint redesign of all operational packages for DBMS systems		Initial implementation of system modules (3 yrs systemwide)

Estimated Cost of Improved
Data Processing System
(By Year)

<u>SCHOOL</u>	<u>1982-83</u>	<u>1983-84</u>	<u>1984-85</u>	<u>1985-86</u>
CENTRAL OFFICE				
Equipment - one time		26,400		
O.E. - one time		15,800		
O.E. - continuing inc.		9,672		
CENTRAL CONN. STATE COLLEGE				
Equipment - one time		398,500	38,000	90,950
O.E. - one time		55,621		
O.E. - continuing inc.		26,328	3,600	11,772
EASTERN CONN. STATE COLLEGE				
Equipment - one time	42,925	22,000	34,500	281,230
O.E. - one time	16,103			37,575
O.E. - continuing inc. (10 months)	63,255	3,432	6,204	34,608
SOUTHERN CONN. STATE COLLEGE				
Equipment - one time		141,100	368,500	38,000
O.E. - one time		16,255	59,221	
O.E. - continuing inc.		7,224	37,920	3,600
WESTERN CONN. STATE COLLEGE				
Equipment - one time	36,925	22,000	34,500	281,230
O.E. - one time	20,090			32,993
O.E. - continuing inc. (6 months)	50,430	3,432	6,204	(-46,020)
SYSTEM TOTALS				
Equipment - one time	79,850	610,000	475,500	691,410
O.E. - one time	36,193	87,676	59,221	70,568
O.E. - continuing inc.	113,685	50,088	53,928	3,960