

Approved April 9, 1991
Date

MINUTES OF THE House COMMITTEE ON Computers, Communications & Technology

The meeting was called to order by George Dean
Chairperson

7:30 a.m. on April 3, 1991 in room 529-S of the Capitol

All members were present except:

- Rep. Roper
- Rep. Rock

Committee staff present:

- Norman Furse, Revisor of Statutes
- Julian Efird, Research
- Diane Duffy, Research
- Mary Valdivia, Committee Secretary

Conferees appearing before the committee:

- Steven Davies, Secretary Kansas Department of Corrections
- Jim Kent, Director of Data and Communications, Dept. of Corrections

Meeting called to order by Chairman Dean at 7:30 AM.

The Chair recognized Mr. Steven Davies, Secretary Kansas Department of Corrections.

At this time two packets were handed out to the Committee, entitled Computer and Communication Technology Committee dated April 2, 1991 (Attmt. #1) and Kansas Departments of Corrections dated March 27, 1991 (Attmt. #2).

Mr. Davies gave background information as to what had been done in his department as it relates to computerization since he took over the department. He introduced Jim Kent, Director of Data and Communications. Discussion followed on Attmt. #1.

Q. Mr. Kent what is the basis for your projection of 12,000 hours, what experience do you have in designing a large complex software system?

A. The 12,000 hours estimate was based on my experience in designing systems and implementing them. I spent eleven years working in the State of Missouri. I designed and implemented thirteen major computer systems for the State of Missouri. In the State of Kansas I worked for the Department of Commerce where I designed eight or nine systems.

Q. Was a second opinion acquired on the 12,000 hour estimate?

A. We spoke to DISC about three months ago and asked for their review and they said they no longer did this. Went to an outside consultant, Data Systems International, and had them come in to review and they concurred. The committee will be provided with something in writing from Data Systems.

Q. Does the Department of Corrections have the capability to write software?

A. Yes, they do.

CONTINUATION SHEET

MINUTES OF THE _____ House COMMITTEE ON Computers, Communications & Technology,
room 529-S, Statehouse, at 7:30 a.m./~~p.m.~~ on April 3, 1991

Mr. Kent discussed Pages 15 and 16 of Attachment #2.

Q. Mr. Kent, you have two computer programmers that you feel confident can do all this computer programming and we won't need to go outside for any of this?

A. There will be some outside work done, not because we cannot do it, but because of the time period involved. We have analysts and programmers that can cover this entire project.

Q. If this does not work, for whatever reason, would it be fair to say you would be held accountable?

A. I am sure I would be held accountable.

Mr. Kent stated that when they go to acquire equipment they will submit a request to DISC.

Chairman Dean asked that the committee be provided with a copy of the following: the 1989 Berm Analysis, time job plan that has been put together, and breakdown of phase plan that would be set up.

Committee meeting time was moved to 7:00 AM, for Thursday, April 5, 1991. A revised agenda needs to be sent out advising all of this time change.

Meeting adjourned at 8:10 AM. Next meeting scheduled for 7:00 AM, Thursday, April 4, 1991, Room 529-S.

COMPUTER AND COMMUNICATION TECHNOLOGY COMMITTEE

APRIL 2, 1991

Presented to Steven J. Davies, Ph.D., Secretary
Kansas Department of Corrections

Prepared By: Jim Kent, Director of Data & Communications

*CCT
4-3-91
attmt #1*

The Department of Corrections currently maintains the second largest data base in the State. The agency maintains 831,745 records in 14 main files, 4 applications for add/update purposes, and 637 applications to disseminate information.

The current system provides communications with all seventeen facility locations and the six regional parole offices for data entry and record keeping purposes. The system provides localized printing and access to DISC for KIPPS, STARS & PROFS.

The agency has identified five basic information resource needs, that once overcome, will establish the information processing foundation for the Department. The agency approached overcoming these needs with the philosophy that automation should not be implemented as a replacement for personnel, but rather as a tool for staff and management to use to provide a mechanism to manage large amounts of data in a timely fashion, to increase productivity, to relieve cumbersome manual processes, to standardize the collection of information throughout the Department and to increase the availability of information to line and management staff.

Managing Information Needs:

Expanding the kinds of information the agency maintains on each inmate in the computer system would enable staff to better evaluate inmate needs both at the time of entry into the system and during incarceration.

This would alleviate paperwork transfers in the movement of inmates because the information would be available on the computer system and not manually transported with the inmate. We currently maintain approximately 386,500 inmate movement records, nearly 51,000 movements occurring each year. The agency would realize time savings with regards to producing, tracking and distributing the inmates paper file during a transfer. Time savings would also be realized during the intake process at the new facility. I estimate the agency would save an hour per movement, which translates into 51,000 hours saved each year.

Storing additional employment history would allow the agency to better match inmate skills to agency work programs. This information could be used in an automated job bank application to identify inmates with appropriate skills, custody level and risk assessment level.

This would allow the agency to address issues such as Senate Bill 211 which refers to notification of victims prior to a parole hearing. Victim information could be collected during the intake process, stored on the system and retrieved for automated mailings prior to a parole hearing. I estimate 7,601 hours per year to manually search the inmates files to identify victim names & addresses and type the victim notification letter & envelope. Fully automating this process would allow the agency to produce both the letter & envelope electronically with no investment of Department hours.

Fully automating inmate program agreements, participation and completions will assure that inmates are not "lost" in the system at the time of a parole hearing. There are 6,081 parole hearings held each year, approximately 35% of those are continued or passed due to program participation or program completion.

Productivity Gains Need To Occur in the Following Areas:

Updating the current applications using modern programming methods would allow the agency to fully utilize system functions to access, manipulate and disseminate information. Implementing an interactive environment for users would allow reports and/or data requests to process immediately rather than as batch jobs printing later in the day or as night jobs printing the next day. This would allow the agency to respond to informational requests from both inside and outside the department in a timely fashion. Providing direct access to line staff and management will allow more timely dissemination of information within the agency. Currently, line staff and management must request printouts of data that are processed as batch jobs, not displayed on screen or printed immediately as interactive jobs. Some requests are processed as night jobs printing a report the following day. The current system supports 32 local devices and 113 remote devices. System access needs to be expanded to 120 local devices and 413 remote devices.

Manual Processes That Need Automating:

Providing an automated canteen system would eliminate the need for the 21 canteens within the agency to complete a form on each inmate purchase, and then funnel the paper to data entry staff to be keyed into the system taking 24,266 hours per year. I estimate that 24,000 hours could be saved each year if inmate purchases were electronically tracked and integrated with both the existing inmate banking system and a new inventory system.

Providing an automated inventory system would aid in the tracking and usage of a variety of items. The basic coding could be used for multiple systems, such as food inventory, computer equipment inventory, canteen inventory or other individual applications.

Inmate drop sheets are forms completed by unit team managers in each cell or dorm as inmates are moved in or out. These drop sheets are collected and keyed at the end of each day. Providing direct system access would allow this information to be entered as it occurs throughout the day providing more accurate data tracking of inmate locations and counts.

Implementing an automated work/program matching system would allow the agency to compare work assignments with inmate skills as well as agency programs with inmate program needs. These two automated matching applications would increase the agency's ability to plan operations and more fully utilize existing resources.

Standardization:

The agency has established standard mechanisms for performing similar tasks, in the past, facilities have automated some tasks independently and uniquely from other facilities or central office. This has resulted in multiple software tools being used to perform essentially the same functions which is both inefficient and costly. The potential cost avoidance within the data processing area would be equal to 1% of \$390,489 per year. One percent represents the amount of staff time that would be saved in solving problems and errors due to supporting multiple software platforms. Applying the percentage of data processing staff to total agency staff, it would equate to 4/10 of 1 percent of \$160 million dollars or approximately \$640,000.

Reviewing the options available to address these basic needs also included the ability of the agency to utilize existing equipment, to utilize existing programming, and the need to satisfy both decentralized and centralized uses of the data.

D.I.S.C.

The agency requested DISC assistance in FY89 to review the agency computer system for consideration of implementing a mainframe environment. Roberta Giovannini, John Oliver, Dale Johnson and others participated in a discussion concerning moving the Department's applications to the mainframe in DISC. The response from DISC at that time involved two issues;

- 1) DISC did not have the resources available for the Department's programs
- 2) DISC would need a five year time frame to implement such a move

Since that time, DISC has committed all of its resources to the KFIS project, in order for the Department's applications to be moved onto the mainframe, we would need to either use our own staff to design and program the applications or take advantage of the state programming contract.

I estimate 11,924 hours to design and convert the current system, plus an additional 24,000 hours to design and convert the over 600 report programs. Programming costs average \$50 per hour, which calculates out to \$596,200 to design & convert the current system, and \$1,200,000 to design and convert the report programs.

Other costs would include additional drop charges and monthly service charges to accommodate 413 devices totalling \$240,000 per year. Modem charges would jump to \$99,000 per year. Twenty additional controllers would need to be purchased at \$3,500 each and \$72,360 in additional peripheral equipment.

Five days worth of training for six staff costing \$1,500 each would be necessary to administer the system on a mainframe.

DISC CPU processing charges at \$14.74/hour would cost the agency, based on our calculations, \$210,840 per year.

Hardware & software costs to implement this option is \$2,497,400.

I rejected this option because of three items:

1. Recurring annual costs would increase to \$549,840.
2. DISC would require a five-year implementation time-frame.
3. This solution would not satisfy the need for decentralized uses of the data. The facilities would still be totally dependent on the central system in that they would suffer a loss of data processing capabilities in the event of a system failure.

KDOC reviewed using a Unisys mainframe, this option would require nearly the same outlay of capital as moving the applications to the DISC mainframe.

Central Office Expansion Only

The existing system would need to be expanded to an AS/400 model 70 in order to support 413 users accessing just the existing programs. The cost for the upgrade is approximately \$650,000. Other costs would include additional drop charges and monthly service charges to accommodate 413 devices totalling \$240,000 per year. Modem charges would jump to \$99,000 per year. Twenty additional controllers would need to be purchased at \$3,500 each and \$72,360 in additional peripheral equipment. Hardware & software costs total \$1,131,360.

I rejected this option for two reasons:

1. Recurring annual costs would increase to \$363,000.
2. This solution would not satisfy the need for decentralized uses of the data. The facilities would still be totally dependent on the central system in that they would suffer a loss of data processing capabilities in the event of a system failure.

LAN Networks

The equivalent configuration to support 413 additional remote devices would require 10 file servers, a token ring bridge kit, additional controllers and other peripheral equipment totalling \$600,000 per facility. The cost to accommodate the four larger facilities exceeds \$2,400,000. Additional costs in terms of communications, modems and line charges would exceed \$240,000. One additional staff person for each of the four facilities would be required to administer the LAN network.

I rejected this option for two reasons:

1. Implementation costs would exceed \$3,000,000.
2. KDOC would need to employ 4 additional staff to administer the network

KDOT has a number of AS/400 Model 10s in the field which serve as communications controllers within the offices and with the DISC mainframe. AS/400 Model 10s would not support the Department's applications.

The Department of Revenue does not have any midsize equipment in the field, however, each of the counties has a System 36 minicomputer used for VIPS and reappraisal. The existing software in use by KDOC would not be compatible with the System 36's and would require rewriting the system. The agency has already determined that it's applications are too large to run in a System 36 environment.

SRS runs its applications on a dedicated IBM 3090-400E located in the DISC data center. The SRS mainframe was purchased with federal funds and if it were used for other programs, the feds would reduce their federal financial participation. The current KDOC software is not compatible with the SRS mainframe and would require substantial funding to rewrite.

Distributed Data System

The solution that I feel meets all the agency needs is the implementation of a distributed data network. Placing midrange AS/400s in the larger facilities, Lansing - Hutchinson - Ellsworth - Topeka Central, and moving the existing AS/400 model 20 to Norton.

Implementation costs would be \$1,996,138.

This allows the agency to utilize all existing hardware.

This will allow the agency to duplicate existing applications without major conversion efforts.

This will allow the agency to expand user access without incurring large additional communications costs.

Communication equipment displaced with the AS/400 equipment can be utilized in other locations.

The larger facilities can remain operational in the event of a central system failure.

KANSAS DEPARTMENT OF CORRECTIONS
March 27, 1991

INFORMATION RESOURCE MANAGER II

The Kansas Department of Corrections, recognizing the need to effectively manage its information and communication resources, established a Data & Communications Services Unit reporting to the Secretary of Corrections, led by Jim Kent, an Information Resource Manager II. Jim came to the agency from the Kansas Department of Commerce where he spent three years evolving the agency from manual processes to the use of automated systems. In the previous ten years, Jim was employed by the state of Missouri in a position supervising the development and implementation of automated systems between two large state agencies which were responsible for facilitating and coordinating the rapid economic growth the state was experiencing.

RESPONSIBILITIES

Jim was selected by the Department of Corrections to develop and implement a comprehensive information resource management plan encompassing not only administrative support at central office but also to support all agency facilities statewide. The focus of the agency's plan is the commitment to the standardization of all processes in order to provide cost effective and timely information availability statewide that responds to the dual nature of the agency's requirements for both decentralized and centralized uses of the data. Manual systems should be replaced by automated ones where efficiency gains warrant. Applications should be developed or revised in response to changing needs for information. Applications must be flexible and user oriented. Appropriate line staff and agency managers should have access to the agency's information systems. Structured programs for user training and support should be implemented. Equipment maintenance programs should be formalized. Application systems should be structured to maximize data integrity and security so that individual data records are not lost.

Information resource management should address both standards and guidelines in relation to hardware, software, telecommunications, and information processing. Only through the development of, and the adherence to, standards is it possible to design and implement agency information resource planning.

CURRENT SYSTEM STATUS

The agency had already submitted its FY92 Budget and Information Technology Plan when Jim began work in October 1990. The lack of comprehensive information resource planning created a situation whereby the agency was being forced to support multiple applications across multiple platforms. In the past central office computer hardware equipment had been upgraded without regard to enhancing the applications themselves to take advantage of the capabilities of the newer technology. This alone resulted in the applications becoming so burdened with the overhead necessary to simply keep them operational, that they became overly costly to maintain and were unresponsive to changing needs within the agency. These applications are highly structured leading to little opportunity for interaction with users, variations from standard reports must be programmed, and many reports are not even available except through a printed format. Limitations in the capacity of the central office system have restricted access locally to the ability to support only forty devices (terminals and printers) and has also confined statewide usage of this system to primarily the records and fiscal staff personnel responsible for data entry and report generation.

The inability to implement a plan managing the procurement of technology has resulted in a proliferation of personal computers throughout the agency statewide. This has resulted in multiple software tools being used to perform essentially the same function, data being recreated statewide in order to support these disparate software platforms, and worse, software being procured illegally through pirating or misused in violation of copyright laws.

Consistent with the lack of controls governing procurement, there was no structured organization or program in place for the training and support of users of both the central office computer applications and personal computer applications. While the effective use of technology can obviously result in increased productivity, the lack of training adversely impacts the ability of the users to fully exploit the technology the agency has procured to assist them.

Computer equipment maintenance was another area of potential exposure for the agency in that there were no formalized plans or procedures in place to deal with equipment malfunctions. This effectively created a costly situation for the agency due to the numerous locations either not having coverage at all or contracting with whomever they choose without any type of competitive analysis.

DIVISION OF INFORMATION SYSTEMS & COMMUNICATION

The agency has worked closely with the Division of Information Systems and Communications to develop automation solutions to information resource needs. In the past, the agency's Information Technology Plan has addressed the need for initiating a distributed data management system utilizing multiple AS/400 processing systems, located in each of the Department's major facilities, but funding for the proposal was not approved.

INDEPENDENT CONSULTANT

Data Systems International, an independent systems service provider, reviewed the Department's central AS/400 system with regard to the structure of the data files, the levels at which users function and machine performance. Their findings concur with the agency's appraisal of the current situation, in that the agency is unable to take full advantage of existing technology due to the application structure restricting the machine's operation which in turn limits user flexibility, and the current equipment configuration will not support the implementation of new initiatives in terms of applications, additional users or enhanced capabilities. The Department needs to restructure existing applications, to convert the central office computer to native 400 operation, and to upgrade the central office computer in order to support additional users, software, and initiatives.

FIELD REVIEW

Jim Kent has traveled throughout the state, visiting each facility or regional parole office, in order to review information needs with line staff and agency managers. The needs identified involve increasing system access, expanding user flexibility, staff training and improving system response time.

Custom programming needs expressed included inmate drop sheets, canteen system, classification evaluation system, key inventory system, parole tracking system, work and/or program job matching system, and numerous smaller custom applications.

Enhancing user flexibility in terms of existing applications included most of the current systems such as standardizing menus and processing applications, more timely response to informational requests, and user ability to generate printed reports locally.

DISTRIBUTED DATA MANAGEMENT SYSTEM PLAN

The agency is currently redesigning the existing system files running on the AS/400 in central office in order to more fully utilize existing system capabilities. Existing applications were written on a System 34 nearly ten years ago, converted to a System 36, then to the AS/400. The code has been modified numerous times over the years, user access security was hard coded into the various programs, none of the files are externally described, data fields have been modified to multi-purpose fields dependant upon the particular application in use, all of which make the retrieval and dissemination of information sluggish and costly.

Completing the conversion from System 36 to native AS/400 operations in order to fully utilize system capabilities and to insure multi-system compatibility and integrity is critical to effective administration of multiple AS/400s in a distributed data management system.

Conversion of the existing data will encompass three steps, the first of which is to design and create new files, the second step involves creating a data conversion program to move the old data into the new files, and the third step would replace as many of the existing COBOL report programs with Query reports and then prioritize the remaining COBOL reports for conversion to RPG III and the new files.

The design and implementation of the new intake classification application is in process. Step one of the conversion and the design of the new intake program will take place concurrently. Some data is collected at points other than intake, but the new intake program reflects a major change in the process and will require close and careful attention to implement.

The central office AS/400 is the central data bank for the agency. The current model 40 has neither the memory, the power nor the number of available local device controllers that is necessary to begin implementation of a distributed data management system. The agency needs to upgrade the central system to a model 60 operating system. The objective of the agency is to fully integrate each facility by linking multiple AS/400 model 35 minicomputers, located at selected sites across the state, with the AS/400 in the central office. This networking would provide localized operation of custom programs as well as electronic sharing of documents, calendars, and messages between all facilities. Existing line drops would be utilized, all existing equipment would be utilized and distributed license agreements would be available for AS/400 software.

Providing spreadsheet, wordprocessing, custom data reporting and custom applications at the facility level would effectively increase the availability and accuracy of inmate demographics and other data. The ability of management to obtain accurate information in a timely fashion at both the local level and at central office directly affects the agency's planning processes, daily operations, and inmate security.

Standardizing personal computer software is another important aspect included in the agency's plan. The central office has been involved in just a single issue, standardizing the version of Wordperfect software used. Much larger issues exist involving standardizing the software the agency will support and authorize staff to use, training staff in the use of software, controlling the creation and use of customized software, and changing position descriptions to include expertise or training for the use of appropriate software.

We are currently exploring imaging technology. There are numerous imaging packages available, however, most of these tend to be paper replacement oriented rather than truly picture oriented. After all, if we electronically save a picture of an inmate, then we should be able to save pictures of identifying marks, such as scars & tatoos. We should be able to carry it one step further and maintain a picture file of approved visitors as well. Optical communication lines are also currently being explored. These optical lines would effectively lift the distance limits involved with twinax communications.

While both of these enhancements would be of benefit to the Department of Corrections, they are so new I'm unable to attribute cost or system requirements for their use. I'm concerned about the ability to share & retrieve this information in multiple locations within a facility, the administration and maintenance of these kinds of applications, the training of staff to collect and utilize the information, and the safe keeping or backup of this information. There is a possibility of using imaging on AS/400 equipment, this would resolve several of the above concerns, and more importantly utilize existing expertise and technology. Until this new technology is available for practical application, I cannot develop or design implementation plans for its use.

ASTRA NETWORK

The ASTRA committee has awarded Memorex/Telex the contract for equipment used to access the network, therefore in September of 1991, the agency will need to replace the current equipment its utilizing under a lease agreement by purchasing Memorex/Telex equipment located in six different facilities, one set on-line and one set for backup. My plan calls for seven sets on-line located at the facilities listed below, and four sets to be shared by the seven facilities for backup purposes.

Central Office	1 Terminal	1 Printer
Backup	1 Terminal	1 Printer
Lansing	1 Terminal	1 Printer
Backup	1 Terminal	1 Printer
El Dorado	1 Terminal	1 Printer
Backup	1 Terminal	1 Printer
Ellsworth	1 Terminal	1 Printer
Backup	1 Terminal	1 Printer
Hutchinson	1 Terminal	1 Printer
Norton	1 Terminal	1 Printer
TCFC	1 Terminal	1 Printer

ASTRA Total \$ 32,560

CENTRAL OFFICE

The central office upgrade will allow all central office staff access to inmate tracking programs, wordprocessing, spreadsheet, food distribution, canteen, key inventory and system printing.

Upgrade to Model 60

80 mb memory
 5.0 gb dasdi
 high speed tape drive
 160 local devices
 Environmental
 Maintenance

Hardware total \$334,088

AS/400 Office
DSLO Software License
CALC 400 (spreadsheet)

Software total \$104,000

Premise Expansion

100 Baluns
100 Mod Taps
Patch Panel Expansion
Installation
8 Power Daisy Panels

Premise total \$ 10,513

Peripheral Acquisitions

43 Terminals
45 Sets 5250 Emulation
3 System Laser Printers

Peripheral total \$ 72,362

Personal Computer Software Standardization

20 Sets Wordperfect 5.1
5 Sets Lotus
10 Sets Harvard Graphics

PC Standardization total \$ 9,000

Training

AS/400 Native
AS/400 Office
Personal Computer

Training total \$ 20,000

Central Office Total \$ 549,963

LANSGING

The installation of an AS/400 model 35 will allow Lansing staff access to inmate tracking programs, wordprocessing, spreadsheet, food distribution, canteen, key inventory and system printing. Lansing staff will be able to exchange messages and documents via the computer system with central office staff and other facilities as well.

AS/400 Model 35

80 local devices
Environmental
Maintenance

Hardware total \$114,000

As/400 Office
DSLO Software
CALC 400 (spreadsheet)

Software total \$ 31,000

Cabling & Misc \$ 3,900

Peripheral Acquisitions

55 Terminals
25 Sets 5250 Emulation
2 System Laser Printers

Peripheral total \$ 61,000

Personal Computer Software Standardization

10 Sets Wordperfect 5.1
5 Sets Lotus
5 Sets Harvard Graphics

PC Standardization total \$ 5,100

Training

AS/400 Office
Personal Computer

Training total \$ 10,000

Lansing Total \$ 225,000

HUTCHINSON

The installation of an AS/400 model 35 will allow Hutchinson staff access to inmate tracking programs, wordprocessing, spreadsheet, food distribution, canteen, key inventory and system printing. Hutchinson staff will be able to exchange messages and documents via the computer system with central office staff and other facilities as well.

AS/400 Model 35

80 local devices
Environmental
Maintenance

Hardware total \$114,000

As/400 Office
DSLO Software
CALC 400 (spreadsheet)

Software total \$ 31,000

Cabling & Misc \$ 3,900

Peripheral Acquisitions

55 Terminals
25 Sets 5250 Emulation
2 System Laser Printers

Peripheral total \$ 61,000

Personal Computer Software Standardization

10 Sets Wordperfect 5.1
5 Sets Lotus
5 Sets Harvard Graphics

PC Standardization total \$ 5,100

Training

AS/400 Office
Personal Computer

Training total \$ 10,000

Hutchinson Total \$ 225,000

ELLSWORTH

The installation of an AS/400 model 35 will allow Ellsworth staff access to inmate tracking programs, wordprocessing, spreadsheet, food distribution, canteen, key inventory and system printing. Ellsworth staff will be able to exchange messages and documents via the computer system with central office staff and other facilities as well.

AS/400 Model 35

80 local devices
Environmental
Maintenance

Hardware total \$114,000

AS/400 Office
DSLO Software
CALC 400 (spreadsheet)

Software total \$ 31,000

Cabling & Misc \$ 3,900

Peripheral Acquisitions

25 Terminals
15 Sets 5250 Emulation
2 System Laser Printers

Peripheral total \$ 36,350

Personal Computer Software Standardization

10 Sets Wordperfect 5.1
5 Sets Lotus
5 Sets Harvard Graphics

PC Standardization total \$ 5,100

Training

AS/400 Office
Personal Computer

Training total \$ 10,000

Ellsworth Total \$ 200,350

TOPEKA CORRECTIONAL FACILITY - Central

The installation of an AS/400 model 35 at TCFC will allow the agency to centralize the entire facility onto a single operating system rather than the current configuration which has part of the staff utilizing the AS/400 model 20, and part of the staff utilizing the central office computer. The AS/400 model 35 will provide TCFC staff access to inmate tracking programs, wordprocessing, spreadsheet, food distribution, canteen, key inventory and system printing. TCFC staff will be able to exchange messages and documents via the computer system with central office staff and other facilities as well.

AS/400 Model 35

80 local devices
Environmental
Maintenance

Hardware total \$114,000

As/400 Office
CALC 400 (spreadsheet)

Software total \$ 31,000

Cabling & Misc \$ 3,900

Peripheral Acquisitions

25 Terminals
15 Sets 5250 Emulation
2 System Laser Printers

Peripheral total \$ 36,350

Personal Computer Software Standardization

10 Sets Wordperfect 5.1
5 Sets Lotus
5 Sets Harvard Graphics

PC Standardization total \$ 5,100

Training

AS/400 Office
Personal Computer

Training total \$ 10,000

TCFC Total \$ 200,350

NORTON

Moving the AS/400 model 20 from TCFC to the Norton facility will allow staff access to inmate tracking programs, wordprocessing, spreadsheet, food distribution, canteen, key inventory and system printing. Norton staff will be able to exchange messages and documents via the computer system with central office staff and other facilities as well.

AS/400 Model 20

40 local devices
Environmental
Maintenance

Hardware total \$ 12,000

AS/400 Office
CALC 400 (spreadsheet)

Software total \$ 8,000

Cabling & Misc \$ 3,900

Peripheral Acquisitions

10 Terminals
10 Sets 5250 Emulation
2 System Laser Printers

Peripheral total \$ 24,340

Personal Computer Software Standardization

10 Sets Wordperfect 5.1
5 Sets Lotus
5 Sets Harvard Graphics

PC Standardization total \$ 5,100

Training

AS/400 Office
Personal Computer

Training total \$ 10,000

Norton Total \$ 63,340

PAROLE SERVICES

Each regional parole office is currently linked to the central office AS/4000 system using personal computers. This limits the use of these personal computers for other functions within the parole office. I intend to install terminals in place of these personal computers freeing them for other functions, and I plan to place additional personal computers and printers in the regional parole offices for under-equipped staff.

5 Terminals	\$ 3,000
5 Printers	\$ 3,000
5 Controllers	\$ 17,500
5 Personal Computers	\$ 10,000
5 Laser Printers	\$ 7,500
20 Sets Wordperfect 5.1	\$ 4,500
Parole Services Total	\$ 45,500

CUSTOM PROGRAMMING & CONTRACT SERVICES

In order for the agency to design and implement a distributed data management system in a timely fashion, temporary consultive and programming services will need to be acquired. There is a state contract in effect which provides the availability of junior programmers, senior programmers and consulting services at competitive fixed rates. The agency will need to take advantage of these services as follows:

Completing the conversion to Native 400	\$150,000
Design & code canteen system	\$100,000
Design & code inventory system	\$ 25,000
Facility program enhancements	\$ 50,000
Programming Total	\$ 325,000

MAINTENANCE

Maintenance costs for AS/400 system hardware are included in the acquisition costs previously. On-site maintenance costs for peripheral equipment are as follows:

Personal computers per year	\$	250
PC printers per year	\$	128
Letter quality printers per year	\$	345
PC laser printers per year	\$	300
System line printer per year	\$	565
System laser printers per year	\$	1,200

To provide on-site maintenance for all the peripheral equipment in the agency would cost well over \$100,000 per year. To contain maintenance costs, the agency will provide on-site maintenance for its system line printers and system laser printers. The remaining equipment will be maintained by the data services staff with major repair work being completed by an authorized service agent.

System line printer maintenance per year	\$	8,475
System laser printer maintenance per year	\$	15,600
Authorized service agent repair work	\$	25,000
Vehicle (Van) for data services	\$	12,500
Tools & equipment for maintenance	\$	2,500
Travel expenses	\$	5,000

Maintenance Total \$ 69,075

TRAINING

Training costs are included in the AS/400 acquisition costs listed previously for each facility. These combined costs total \$70,000. Training costs for staff located in facilities not previously included total \$60,000. Training is calculated at the rate of \$100 per person per day. This allows \$1,000 for each regional parole office, and \$5,000 for each facility.

Training Total \$ 60,000

TOTAL ACQUISITION/IMPLEMENTATION \$1,996,138

TOTAL PACKAGE

**** SYSTEM ****

	Operating	Hardware	Software
Astra		\$ 32,560	
C/O Model 60		334,088	\$104,000
C/O Premise		10,513	
C/O Peripherals		72,362	
C/O Training	\$ 20,000		
LCF Model 35		114,000	31,000
LCF Cabling		3,900	
LCF Peripherals		61,000	
HCF Model 35		114,000	31,000
HCF Cabling		3,900	
HCF Peripherals		61,000	
ECF Model 35		114,000	31,000
ECF Cabling		3,900	
ECF Peripherals		36,350	
TCF Model 35		114,000	31,000
TCF Cabling		3,900	
TCF Peripherals		36,350	
NCF Model 20		12,000	8,000
NCF Cabling		3,900	
NCF Peripherals		24,340	
Parole Services		6,000	
Custom Program.	325,000		
Maintenance	69,075		
Training	110,000		
 System Totals	 \$524,075	 \$1,162,063	 \$236,000

**** PERSONAL COMPUTERS ****

	Operating	Hardware	Software
C/O PC			\$ 9,000
LCF PC			5,100
HCF PC			5,100
ECF PC			5,100
TCF PC			5,100
NCF PC			5,100
Parole Services		\$35,000	4,500
 PC Totals		 \$35,000	 \$ 39,000

TOTAL PACKAGE COST = \$1,996,138

ESTIMATE of Schedule of Repayment for Total Package

Term	Finance Amount	FY92 Payment	FY93 Payment	FY94 Payment	FY95 Payment	FY96 Payment
3 year	74,000	27,827	27,827	27,827		
5 year	1,398,063	336,171	336,171	336,171	336,171	336,171
Total	1,472,063	363,998	363,998	363,998	336,171	336,171

1,472,063 Financed through K DFA
 524,075 FY92 Operating Costs From Agency Resources
 =====
 \$1,996,138

TIMEFRAME - TOTAL PACKAGE

FY92

Complete the Central Office upgrade	\$ 529,963
Complete file & system conversion	\$ 150,000
Provide staff training for Central Office	\$ 20,000
Provide system training to current users	\$ 40,000
Design/implement canteen system	\$ 100,000
Design/implement key inventory system	\$ 25,000
Acquire maintenance van, tools & equip	\$ 15,000
Provide on-site maintenance (system)	\$ 24,075
Travel expenses as needed	\$ 5,000
Authorized service repairs as needed	\$ 25,000
Provide system training to current users	\$ 20,000
Complete the ASTRA network upgrade	\$ 32,560
Complete Parole Services Installation	\$ 45,500
Complete the Lansing installation	\$ 215,000
Provide staff training for Lansing	\$ 10,000
Complete the Hutchinson installation	\$ 215,000
Provide staff training for Hutchinson	\$ 10,000
Complete the TCFC installation	\$ 190,350
Provide staff training for TCFC	\$ 10,000
Complete the Norton installation	\$ 53,340
Provide staff training for Norton	\$ 10,000
Complete the Ellsworth installation	\$ 190,350
Provide staff training for Ellsworth	\$ 10,000
Provide Facility program enhancements	\$ 50,000

TOTAL ACQUISITION/IMPLEMENTATION \$1,996,138