Approved [signature] 1/26/99
Date

MINUTES OF THE SELECT COMMITTEE ON INFORMATION MANAGEMENT

The meeting was called to order by Vice-Chair Mike Farmer at 3:35 p.m. on January 13, 1999, in Room 526-S of the Capitol.

All members were present except: Representative Jim Morrison - excused
Representative George Dean - excused
Representative John Faber - excused
Representative Dennis McKinney - excused

Committee Staff Present:
Julian Efird, Kansas Legislative Research Department
Audrey Nogle, Legislative Research Department
Norman Furse, Revisor of Statutes' Office
Gary Deeter, Committee Secretary

Conferees:
Don Heiman, Director, Division of Information System and Communication (DISC)
Andy Scharf, Deputy Director, Telecommunications, DISC

Others: See attached list.

Don Heiman, Director, Division of Information Systems and Communications (DISC), presented DISC's remediation plans addressing the Year 2000 (Y2K) problems and the Kansas Information Technology Office summary of agency IT management and budget plans. (Attachments 1-2) Answering questions, he said some smaller agencies did not submit plans, and agency projects under $250,000 did not require submission to DISC. He stated he would investigate why the Kansas Corporation Commission did not submit a report for FY 2000.

Andy Scharf, Deputy Director, Telecommunications, DISC, explained DISC's use of Integrated Services Digital Network (ISDN) phone lines for interactive video, video-conferencing, and high-speed graphic transmission. (Attachment 3) He said ISDN is available in most urban areas through the local phone company. Monthly charges for an individual ISDN line are $90.50, with intralata calls at no charge and interlata calls at 10 cents per minute. Addressing security issues, Mr. Scharf said DISC is currently upgrading the KANWIN network to utilize CiscoSecure security, which includes CRYPTOCard passwords comparable to those used by the Kansas Bureau of Investigation. He recommended using DISC's KANWIN backbone rather than the KBI system.

Chairman Farmer outlined the two primary purposes of the Committee: 1) Address security and privacy issues; and 2) Enhance legislator effectiveness by utilizing current information technology; doing so will provide a basis for informed recommendations to the legislature.

The next meeting is scheduled for Thursday, January 14, 1999.

SELECT COMMITTEE ON INFORMATION MANAGEMENT
GUEST LIST

DATE: JANUARY 13 1999

NAME	REPRESENTING
Kurt Galley	McGill, Gaches & Assoc
Sandy Gaskell	LRC - Administrative Svcs.
Ron Seaber	Dept. of Admin.
Don Arnheim	Dept of Admin.
Cindy Schaaf	DISC
Roy Bynum	K.D.H.R.

Contents

Attachment 1
SCIM 1-13-99

- Note:
  The Department of Administration, Division of Information Systems and Communications would like to thank and acknowledge the Department of Information Systems, State of Texas for their help in preparing the Kansas Guidebook 2000. Kansas Guidebook 2000 duplicates the key sections from the Texas Guidebook.

Section One:
Will the Year 2000 Bug Bite?

Yes! In unpredictable places, and with potentially serious effects. For instance, it could interrupt electrical power to schools, hospitals, and other public buildings; render emergency vehicles inoperable; make traffic lights go haywire; wreck calculations in payroll or billing systems; and even sabotage electronically controlled heating and air conditioning systems. Yes, the bug's bite can be painful. If you've considered the Year 2000 Problem – commonly called Y2K – as "only" a computer problem, you need to know the facts about one of the biggest hazards facing government today. Y2K could disrupt many aspects of our society, around the world, across the nation, and in your own office. Y2K ignores lines on maps, and it has no respect for size; without remedial action, small businesses, major corporations, and governments at all levels are equally at risk. To call Y2K a technology issue ignores its capacity for disruption. It is, in fact, a communications problem, a health care problem, a utilities problem, a logistical problem, a national and international business problem, and a governmental problem. It's your problem, and ours. Stephen Levy, in a May 8, 1998 *Newsweek* article, wryly noted that "most people refuse to believe that a dorky little software bug can wreak significant worldwide havoc." But he added an ominous warning: "We may have a trainwreck *[sic]* in the making." Yes, Y2K can bite. And if you don't take action -and soon -it could bite you, and the taxpayers you serve.

A Closer Look at the Y2K Bug

On the surface, the Year 2000 problem or "bug" appears deceptively simple. Its roots go back several decades, to the infancy of computer technology. To conserve limited computer memory, early system designers recorded and processed dates such as March 31, 1960 as 03/ 31/ 60, omitting the first two digits of each year. Computers processed each date by assuming it occurred in the twentieth century (19xx), with no accommodation for processing in the next century. Programmers weren't concerned by the practice, assuming that their hardware and software would be modified or replaced long before the new century. However, until very recently, the two-digit year convention continued as standard practice. Consequently, at midnight on January 1, 2000, many computer systems could assume it is January 1, 1900, if the Y2K problem has not been corrected. This would result in miscalculations, malfunctions, and even shutdowns across America and the world. Compounding the date-change problem is the fact that the year 2000 is a leap year, while 1900 was not. For this reason, many computers will not accurately determine dates past February 28, 2000 or make calculations based on that information. Moreover, certain systems involving time projections (such as those involved in actuarial tables or mortgage calculations, for example) may begin to experience malfunctions well before January 1, 2000, as they attempt to compute post-millennium dates. These disruptions will affect both **information technology** and **embedded systems**. **Information technology (IT) systems** include computer hardware and software, from the mainframe computers that support large government agencies to the personal computer (PC) on your desk. Common examples of IT systems include your

organization's payroll system, accounting and receivable systems, inventory systems, and local or wide area networks. **Embedded systems** are microprocessors (computer chips) found in a vast array of devices, such as biomedical equipment used at health care facilities, electrical monitoring and distribution devices used by utility companies, communication systems, building security and fire systems, elevators, traffic control and street light systems, automated heating and cooling systems, and even basic office equipment.

Why Should You Care about Y2K?

Embedded systems are the primary reason why Y2K is not "merely" a computer problem. In the last twenty years, these devices have become essential to our society; millions of us rely on embedded systems every day, often without recognizing that a computer is involved. Computers or computer chips are at work when we ride an elevator, mail a letter, call 911 with an emergency, use an ATM card, pump gas, or turn on a microwave oven. Embedded systems support electrical power stations, telecommunications systems, wastewater treatment plants, and hospital equipment. The failure of these "invisible computers" could have a, range of effects, from minor annoyances to *disaster* .

Computerized traffic light systems, for instance, could assume it is the weekend, instead of a weekday, creating severe traffic problems in populous areas. Hospitals could find themselves without electric lights at critical moments. Important criminal, financial, and governmental records could be deleted when records with dates that do not match computerized date calculations are automatically purged. Thousands of electrical and mechanical devices that are necessary to normal day-to-day business are controlled by embedded microprocessors and *all of these systems are at risk.*

Take Action Now

No one knows precisely what will happen as December 31, 1999 approaches. What is clear, however, is that the risk associated with inaction is unacceptable. Unless timely corrective action is taken, the safety, productivity, health and general welfare of the citizens you serve may be placed in jeopardy. Your organization cannot afford to delay its response. The good news, however, is that you can take action to avoid or mitigate the effects of Y2K. *Kansas Guidebook 2000* provides practical, effective solutions you can apply *right now* to begin to protect your organization and the citizens who depend on it. Well-planned, prompt, and prudent action of the kind recommended here is your most effective insurance against the impending crisis. *Kansas Guidebook 2000* is intended to provide you with an overview of the issue, help you identify potential Y2K problems, and outline steps you can take to evaluate, manage, and avoid potential risks. *Kansas Guidebook 2000* also features a self-assessment questionnaire you can use to determine if you have a Y2K problem. When completed, it should provide an overview of the challenge you face. Once you have a better understanding of the issues involved, the guidebook supplies information to help you identify and test your own potential problems and resolve them. We recognize that *Kansas Guidebook 2000* does not and cannot provide a completely comprehensive analysis of every area that should be reviewed for Y2K problems in Kansas' local governments. Nonetheless, we hope you will find this guidebook useful as you begin planning for your own Y2K project. The State of Kansas is actively working to minimize disruptions to the services under its jurisdiction, and is ready to help you meet your own challenges. Your organization also must take an active approach and share in the responsibility for ensuring that your community continues to receive vital services in the Year 2000 and beyond.

Resources Available

A variety of resources are available to assist not only state agencies, but local units of government with Year 2000 issues. The following is a list of the resources available:

Resource	*Availability intended for State Government*	*Local Units of Government*
• Y2K Awareness Center	X	X
-Helpdesk Hotline*	X	X
-Helpdesk	X	X
-Hourglass Newsletter	X	X
-Web-Site**	X	X
• Y2K Mainframe Testing Center	X	
• Time Machine Test Center	X	
• CTA Consulting Services	X	X
• Outreach to Local Units		X
• Y2K Steering Committee	X	X
• Federal/Local Interface Desk	X	X
• Business Continuity Planning Services	X	X
• Y2K Audit Confirmation Services	X	X

*Toll-free number is 1-877-405-5349; local number in Topeka is 1-785-368-8300 (Monday thru Friday 8am-5pm, except holidays)
**Web-Site URL: http://y2k.state.ks.us

To obtain additional information about any of the above mentioned resources please call the Y2K Awareness Center.

Section Two:
Assessing Your Y2K Readiness

After reading about the state's Year 2000 concerns and efforts, you may be wondering:
- How can I determine if I have a Y2K problem?
- How do other entities affect my organization?
- How do we affect other organizations?
- If I do have a problem, what should I do?

Kansas Guidebook 2000 can help you answer these questions. Obviously, factors unique to each organization, such as budget, staffing, facilities, computing environment, and interactions with other agencies or suppliers, will dictate the specifics of your Y2K approach. Even so, Y2K experts recommend several important actions for all organizations seeking to avoid Year 2000 disruptions.

A Y2K Self-Assessment

The first important action is to conduct a Y2K self-assessment. How prepared is your organization for the Year 2000? A quick self-assessment can reveal your current level of preparedness and pinpoint specific areas of concern, while laying the groundwork for your response to the problem. The "decision table" (Table 2) contains **eight key questions** for your organization. As you consider them, draw upon the table's
"**Examples**" and "**Areas of Impact**" to arrive at your answers. Weigh the importance of these possible impacts – could they affect public safety, physical and emotional health, or revenue? If you answer "yes" to any of these questions, you probably have a Y2K problem. The table will point you to specific areas of the guidebook that can help you address your problems. Focus on these areas first: they will be critical to your organization's ability to weather the Year 2000 event. After completing this self-assessment, you should have an initial understanding of your Y2K readiness. With this knowledge, you can begin to target priorities, form teams, and address high-risk areas to ensure the smoothest possible transition into the next century. A "yes" answer to any of the questions means that your organization probably has a Y2K problem and should address it immediately. To do so, Y2K experts recommend that you take three further steps right away:

1) Assign an **individual to coordinate** all Year 2000 activities in your organization;
2) Develop a **project plan** that addresses your risks and minimizes your organization's exposure to Y2K hazards; and

Make **contingency plans** to ensure that, if your organization is affected by the Y2K problem, you can continue to provide the critical services your customers expect.

Getting Started-Project Planning Basics

So how should you get started? Awareness is one of the first Y2K strategies you should pursue. Create Y2K awareness throughout your organization. Everyone-from building maintenance and secretarial workers to departmental heads, city and county managers and administrators, and elected officials-should be informed about the Y2K issue and its
potential effects. Conduct staff briefings to outline the problem, set expectations for your employees, tap their problem-solving skills, and dispel Y2K myths and rumors. Your objective should be to prompt the members of your organization to ask themselves: "How can the Year 2000 bug affect my day-to-day activities, and how can I help?" The input of the front line employees who know your processes best will be an enormous help to you as you begin to identify your vulnerable systems and determine possible Y2K affects.

Appoint a Year 2000 coordinator within your organization and, at the same time, assign responsibility for addressing the problem to each-and-every department head and manager.

Responsibility and "ownership" belongs with everyone, not just the Year 2000 coordinator or the IT manager.

Planning for Y2K will involve a dizzying amount of detail, and it will be all too easy to become bogged down in the many processes and procedures you will be examining. To ensure that your Y2K effort remains on track, your ornanization must retain a clear, high-level view of the entire project to manage competing priorities, ensure the timely completion of projects, and demonstrate your progress to senior managers and regulating agencies. To do so, you should create a checklist to track the identification, testing and resolution of risks to all affected systems. Areas that should be tracked on your checklist are included in Table 1.

Project Planning Checklist

Areas of Impact	Examples	Actions
Application Software	Utility billing, financial, office products, tax collection, process control, etc.	Analyze, fix, and test mainframe, distributed, and end-user applications.
IT Infrastructure	Mainframes, minicomputers, PC's, local area networks, telecommunication systems, etc.	Analyze, upgrade or replace, and test the organization's computer infrastructure, including hardware platforms, operating systems, and networks.
Interface Management	Electronic data interchange, automatic funds transfer, etc.	Analyze, fix, and test electronic interfaces among internal projects and with external organizations.
Document Control	Contracts, compliance letters, vendor responses, test results, etc.	Collect and maintain careful documentation on your project to ensure proper coordination and establish records of your effort that could be vital in case of litigation.
External Contact	Federal and state government, utilities, etc.	Maintain information on the Y2K status of customers, suppliers, and partners.
Embedded Technology Compliance	Hospital equipment, utility control systems, emergency medical equipment, etc.	Analyze, fix or replace, and test all non-IT equipment at risk of Y2K failure, including telephone equipment, security systems, and other embedded technology systems.

Table 1

Decision Table

Question	Examples	Areas of Impact	Critical (Y/N)	If yes, go to
1. Do you provide services that rely on electronic equipment?	911 System EMS Law Enforcement Dispatch Traffic Lights Power Water	Communications systems (PBX, voice mail, switching, answering machines, mobile telephones, satellites) Variable message signs Traffic monitoring devices Power grid systems Power plants/stations CAS Systems Robots		Section 3-Embedded Systems
2. Does your organization own or contract for water or power facilities?	Power Generation Plant Power Distribution Plant Water and Wastewater Treatment Plant	Switching Systems Water and sewage treatment systems Water pumps Energy control systems Power grid systems Power plants/stations CAD systems Robots		Section 3-Embedded Systems
3. Do you own or lease any buildings?	Courthouse City Hall Police Department Fire Department Jail Public Library Hospital Tax Office	Lighting Systems (including backup lighting) Backup generators Heating, air conditioning ventilating systems Climate monitoring systems Elevators, escalators, lifts Building management systems Refrigeration systems Sprinkler/fountain systems Fire control systems (alarms, Sprinkler systems) Fax machines Communications systems (PBX, voice mail, switching, answering machines, mobile telephones, satellites) VCRs Time clocks Copiers Still and video cameras Automated teller systems Credit card systems		Section 3-Embedded Systems
4. Do any of your owned or leased buildings have security devices or equipment?	Courthouse City Hall Police Department Fire Department Jail Public Library Hospital	Security systems (burglar Alarms) Safes and vaults Door locks Exit alarms Access systems Video surveillance equipment		Section 3-Embedded Systems

Input of the front line employees who know your processes best will be an enormous help to you as you begin to identify your vulnerable systems and determine possible Y2K affects.

Table 2

Decision Table (cont.)

Question	Examples	Areas of Impact	Critical (Y/N)	If yes, Go to
5. Do you own or contract for medical services?	Hospital Minor Emergency Clinic	Monitoring devices Automatic medication Dispensing equipment X-ray equipment Electrocardiograph Enteral pump Electroencephalograph MRI scanner Defibrillator		Section 3- Embedded Systems
6. Do you own or lease anything that affects transportation or parking?	Fire Trucks Police Cars Ambulances Helicopters Airplanes Boats Maintenance Vehicles	Vehicle preventative maintenance chips Vehicle diagnostic equipment Gate systems Variable Message signs Traffic lights Traffic monitoring devices Air traffic control systems Signaling systems Radar systems Parking systems and other meters Ticketing systems/ Machine		Section 3- Embedded Systems
7. Do you own or lease computers?	PC Systems Minicomputer Systems Mainframe Computer Systems Local Area Network Telecomm System	Custom-developed applications (e.g., billing, payroll, revenue collection) Desktop applications (e.g., word processing, Internet, access, electronic mail) Operating software (e.g., DOS, Windows) Personal computers Laptop computers Printers Scanners		Section 4- IT Systems
8. Do you depend on any outside suppliers, state or federal government, or have other external trading partners?	Communication Services Power Services Mail Delivery Financial Services	Telephones Pagers Cellular phones Facsimile transmission Communications satellites Electricity Water and wastewater treatment Delivery services Electronic funds Transfers Funds availability Check clearing ATMs		Section 5- Contingency Planning

Weigh the importance of these possible impacts – could they affect public safety, physical and emotional health, or revenue?

Table 2 (cont.)

What is 'mission critical'?

When you mention 'mission critical' to IT personnel, in the context of Year 2000, you can get some varying definitions of the term. It is important, at this point in Kansas Guidebook 2000, to state the meaning of the term. For this study we have chosen to share three views:

1) Failure of the asset will result in negative consequences for the state in general public safety, health, welfare or economic issues. Failure could also have serious liability consequences for the state. There is no known viable 'work around'.
2) Failure will result in a serious inability to perform normal government operations. However, a 'work around' is achievable for a limited period of time.
3) Failure will have a limited impact on the public or on government operations. A Viable 'work around' is achievable for a sustained period of time.

Section Three:
Embedded Systems

To remedy the Y2K problems of embedded systems, you must first identify them; assess the effects the Year 2000 may have on them; fix or replace the equipment involved; and test for full Y2K compliance.

If you contract for services that could be affected by the failure of embedded systems, it is the contractor's responsibility to ensure that the problems are identified and corrected. You can and should hold your contractor accountable for Y2K readiness.

One of the most important actions you can take is to make people accountable. Assign specific responsibility and "ownership" for the various tasks involved in Year 2000 readiness. Use a Y2K Sign-Off Form to ensure that all departments are ready for the Year 2000.

Identify Embedded Systems

Identifying embedded systems can be a difficult task, since many of them are "hidden" inside mechanical devices and are not easily recognized. A site survey is the easiest way to gather and record essential information about your organization's embedded systems. Begin by surveying employees in your maintenance and engineering departments, who generally will be the most familiar with equipment and facilities that use embedded systems. At a minimum, the survey should gather information about the following:

- The quantity and location of embedded systems.
- Their manufacturers or vendors
- Model or serial numbers.
- **Persons within your organization knowledgeable about the systems**

The survey, of course, is simply a data collection tool. How can you actually identify embedded systems? The following guidelines could help you. First, become familiar with common examples of embedded systems as shown in Table 3. You can also use a simple series of questions to identify embedded systems. The June 1998 issue of The Year/2000 Journal ("Embedded Chips – Dispelling Some *Myths," by Dave Bettinger) included questions to answer when trying to identify* embedded chips. These are:

- Does the device operate with electricity? If yes, look further. If no, the device poses no risk.
- Does it have a battery or power supply? If yes, look further. If no, the device is low risk.
- Does the device use a calendar or timer to schedule events? If yes, you may have a Year 2000 problem. If no, it's low risk.

Assess the Impact

After completing your inventory of embedded systems, you should attempt to determine the potential impact of Year 2000-related disruptions of these devices on your organization. Steps in this assessment process should include the following:

- Send an internal "awareness" letter to the managers or workers within your organization who are responsible for equipment that may use embedded systems. Ask them to propose alternative courses of action and contingency plans for coping with failures or interruptions. Hold work sessions with these employees to develop consistent strategies for dealing with Y2K.
- Contact your embedded systems vendors to determine the Year 2000 readiness of their products. The best approach is to contact them in writing and request written confirmation of their Year 2000 compliance status, their plans for supporting their products if they are not compliant, and the cost of any upgrades or retrofits that may be needed to achieve Y2K compliance. Your letter should specify a deadline for the vendor's response. You can also consult information on your vendor's Internet website or call the vendor and speak with someone in the manufacturing area.
- Review any lease agreements your organization has as well, because your facilities could be affected by the millennium bug.
- Finally, prioritize your project activities. Keep in mind that you may only have time to address your most critical embedded systems
- A recent article in Datamation("Panic in the Year 2000," by John Kador, Dec. 1997/Jan. 1998) provided a useful acronym for setting Y2K priorities. To prioritize your efforts, the article suggests that you remember the word ANGST:
- A Absolutely must have
- N Need to have
- G Good to have
- S Small-time
- T Throw-away

Common Uses of Embedded Systems

Areas of Impact	Examples
Manufacturing and Process Control	Manufacturing plants Water and sewage treatment plants Power Stations Power grid systems Bottling plants Automated factories Test equipment for control systems development, maintenance, and testing Oil refineries and related storage facilities
Construction	Surveying and locational equipment Construction plant
Transportation	Airplanes, trains, automobiles, buses, marine craft Fuel services Air traffic control systems Signaling systems Radar systems Traffic lights Ticketing systems/machines Car parking and other meters
Building and Facilities	Electrical supply Backup lighting and generators Fire control systems Heating and ventilating systems Lifts, elevators, escalators Parking garage access Security systems Safes and vaults Door locks
Communication	Telephone exchange Cable systems Telephone switches Satellites and Global Positioning Systems (GPS) Data switching equipment
Office Systems and Mobile Equipment	Telephone systems Faxes Copiers Time recording systems Mobile telephones Still and video cameras
Banking, Finance, and Commerce	Automated teller systems Credit card systems Point of sale systems
Medical, Diagnostic, Monitoring, and Life Support	Heart defibrillators Pacemaker monitors Patient information and monitoring systems Pharmaceutical control and dispensing systems X-ray equipment Electrocardiograph (ECG) and electroencephalograph (EEG) equipment

Source: *California Year 2000 Embedded Systems Program Guide*

Table 3

Begin by surveying employees in your maintenance and engineering departments, who generally will be the most familiar with equipment and facilities that use embedded systems.

Upgrade or Replace

Remediation strategies for embedded systems differ from those for IT systems in that embedded systems cannot be reprogrammed. Due to their specialized nature, your most practical option generally is to upgrade or replace the equipment. You may choose to upgrade if your vendor can supply a Y2K-compliant version or retrofit for your system. If you do upgrade, check your existing lease, purchase, or maintenance agreements for any legal obligations on the vendor's part. If your vendor cannot supply a suitable Y2K-compliant product, you may be able to replace it with a functionally equivalent compliant system from a different vendor. Beyond an upgrade or replacement, your options for embedded systems are limited. Sometimes, doing nothing is an appropriate response, but only if the device or system is not essential to your organization. In other cases, you may be able to develop a "work-around" solution that keeps the equipment functioning until a permanent Year 2000 solution can be developed. Whatever your strategy for your existing systems, it is extremely important to include Year 2000 compliance criteria, including leap year considerations, in all new embedded systems contracts and purchase orders, including construction contracts and leases, to make it absolutely clear who bears the risk in the event of failures.

Test Your Systems

Some embedded systems can be tested to verify vendor claims of Y2K compliance and to establish compliance for systems developed in-house. The object of such tests is to observe system performance subsequent to the Year 2000 through the use of simulated dates. It should be noted that you cannot set or reset the date for many devices with embedded computer processors. In these cases, embedded systems testing can be difficult if not impossible. Be cautious and backup all systems before testing. Backup and recovery procedures are a must; sometimes the testing process itself can result in system failures.

Due to their variety and range of function, there are no standard test plans or scripts for embedded systems. The tests performed must be specific to the technology involved. This guidebook cannot provide specific test information for the millions of embedded systems involved in modern technology; such information is available from your vendors or your service/maintenance contractor. Any tests your organization conducts, however, should involve the following general activities:

1. **Start planning test activities as soon as possible**. Develop a comprehensive and well documented test plan and designate responsible individuals for all the systems to be tested. Personnel involved in testing could include your lead engineer, facility manager, technical support contractors, and vendor representatives. Obviously, you also should obtain the assistance of the individuals who work with the systems on a daily basis, such as operation and maintenance employees. Thorough planning will help ensure that your test provides the most realistic and valid scenario of the 01/01/2000 event.
2. **Identify the level of testing your embedded systems need**.Testing may entail significant expense and effort, and the level of testing you employ should depend on the complexity of the system and the level of risk involved. Systems that are complex, cross organizational boundaries, and pose significant risks to your critical functions call for extensive testing. Testing levels you may choose to employ include:

- Component testing– a test of the component alone, such as a remote sensor feeding data into a larger system.

- System testing– a test that stays within system boundaries, ensuring that the system handles time correctly, and without incorrect actions.
- Facility testing– a test of multiple systems across internal and external system boundaries. This test ensures that multiple systems supplying, relaying, or receiving information involving dates and time are interacting correctly. This level of testing may be difficult to perform and in practice may require division into manageable segments.

3. **Develop individual** test plans. Each system to be tested should have an individual test plan, including test specifications, routines, procedures, and test schedules. As already noted, you should contact vendors or manufacturers for available system test procedures, operator manuals, and other assistance. If you perform on-site testing, make sure your testing personnel are able to operate and service the equipment and can make any necessary field corrections to ensure that your normal operations are not affected.

4. Conduct the test. Use testing instructions provided by your vendor or test scripts Designed by personnel from your organization who use and understand the embedded system. If possible and applicable, make sure you create backups of related software systems before you run your tests.

5. Retain documentation. Make sure all test plans, names of responsible parties and test results are fully documented and retained. Users must sign-off on test results before a system is considered compliant. In addition, retain all letters sent to venders about Y2K compliant software releases. A file should be built that can be used to document, from a legal perspective, that your organization has done everything reasonably possible to achieve Y2K compliancy.

Contingency Planning

Because of the difficulties involved in setting and resetting the date for many embedded computer processors, you probably won't be able to perform a Year 2000 test on all of your critical items. Even major equipment manufacturers are struggling with the challenge of testing these products. Industry predictions indicate that about 5 percent of all embedded processors will fail as the Year 2000 transition occurs. The problem is no one knows which 5 percent will fail. In view of this uncertainty, the best thing you can do to address the Year 2000 problem for embedded systems is to develop contingency plans so that you can keep your critical functions intact even if vital equipment does fail.

Section Four:
Information Technology Systems

If your self-assessment indicates that you need to focus your Y2K efforts on information technology (IT), the following information can help you get started. Because your IT systems are an integral part of your organization, you must do everything possible to ensure that critical services are not disrupted by an IT failure.

One of the most important actions you can take is to make people accountable, both for IT and embedded systems. Assign specific responsibility and "ownership" for the various tasks involved in Year 2000 readiness

An IT system can include many different components, such as software, hardware, and interfaces. To ensure that you identify and assess every system for possible Y2K impacts, you need to know what to look for. Consult Table 4 for a brief look at the different types of IT systems you may have, examples and descriptions of each, and the persons you should look to for help with the identification process.

Steps to Y2K Remediation

Y2K remediation efforts for your IT systems should involve six major steps: containment, inventory, assessment, prioritization, remediation or replacement, and testing. Consider using contracted maintenance personnel to assist you throughout this effort if you lack the necessary in-house expertise. You also may choose to use third-party specialists in Y2K readiness. You should seek consulting organizations who:

- Are certified by the Information Technology Association of America (ITAA) in the use of their structured methodologies. Ask to see their certification.
- Are experienced in Y2K assessments and remediation projects.
- Have verifiable references for Y2K projects similar to your needs.
- Are recommended by your peers, oversight entities, or government experts.

With the appropriate help on board, you can begin the six-step process.

1. Containment includes the actions you should take to prevent future Y2K problems with your current purchases and leases. You should start by "containing" any potential Y2K problems in your existing inventory of IT systems. Doing this first will help you avoid additional problems down the road. To effectively contain potential Y2K problems, your organization should:

- Involve your legal and purchasing staff in your Y2K effort. They work with contracts on a regular basis and can help identify existing and potential problems concerning liability and other issues. Have them review your current contracts as well as any proposed contracts you may have on hand.
- For new purchase or lease contracts, include a Year 2000 warranty clause. The clause should require the contractor (or vendor) to warrant that all hardware and software product delivered will accurately process all date-related data.
- For existing contracts, use your current service agreement to prompt the contractor to assist you with Y2K work. Under your current agreement you are already paying for a level of support – add Y2K to this support. Use a contract amendment to obtain any additional service you need, or determine the contract termination date and ensure that your next contract has a Year 2000 warranty clause.

2. Examining your IT contracts will help you begin identifying your IT systems. A complete inventory of IT systems is crucial to the success of your Year 2000 efforts – every system must be evaluated for possible Y2K risks. You should complete this inventory as soon as possible to fully define the scope of your effort. Address the following steps:

- Think of your business functions. It may be helpful to begin by developing a list of your business functions (Payroll, Human Resources, Tax Collection, etc.) before you catalogue your IT systems.
- Refer to the IT Components Table (Table 4). After you have identified all your business functions, use the table's IT examples to build your inventory. Make sure you have considered all types (custom-developed software, vendor software, etc.).
- Gather the appropriate information for the particular system type
- Record and store the information as you collect it. This information will prove fundamental to your assessment and testing efforts. Moreover, should you use a third-party vendor for your remediation effort, an electronic version of your data will help them get started faster.

3. Now that you have identified your systems, you must conduct an assessment of the Y2K impact on your organization. Your assessment effort should include the following elements:

- Send out third-party confirmation letters for your packaged software. These letters are intended to assess each vendor's level of Y2K knowledge and definition of "compliance," and obtain the vendor's opinion of the Y2K compliance level of their system. Make sure to:
- Compare your current system version number to the vendor's Y2K certification.
- Obtain vendor signoff for Y2K compliance for your organization, if possible.
- File a copy of the letter to help indicate "due diligence" in case of litigation.
  Note: Some vendors may not give "black and white" answers on compliance. If there is any doubt, the component should be tested. Also note that if you delay contacting vendors, they may not be able to address your specific situation.
- Seek published Y2K information about your software and hardware on the Internet or through telephone calls. For each system in your inventory, visit the vendor's website or search the World Wide Web for any available information on its Y2K readiness. If you do not have Internet capabilities, call the vendor and request Y2K information. Remember to document what you find to support your due diligence efforts.
- Use software tools or utilities whenever possible. If using third-party specialists, make sure they plan to use automated tools and utilities as part of the project; it will help speed up the process. If you are planning to use tools yourself, investigate their purpose, cost, and ease of use. Free software and commercial products are available for assessing the Y2K compliance levels of certain software (such as spreadsheets and databases) and hardware (such as PC Basic Input/Output System).
- If you are unsure whether a system is compliant, use a "time machine" or date simulator. This software tool passes a future date such as 02/29/2000 to your system so that, in effect, it "thinks" it is in the future. This allows you to assess the Y2K effects of future date transactions. In order for a "time

machine" to be effective, you must also adjust your data so that the dates in the test data are appropriate to the future testing processes. Using a "time machine," in conjunction with test data that has been "aged" to the Year 2000 time period, is known as "time dimensional" testing. Again, if using third-party specialists, have them use time dimensional testing as part of the assessment and testing process. If you decide to use this process yourself to conduct "future date" testing, you could do so in several ways:

- Use a spare computer or buy a computer to set up a test lab. Advance the date on the computer and use it only for assessments and tests.
- Rent computer time for testing purposes from an outside organization (college, business, disaster recovery company, etc.).
- Convert some of your production data to the testing period by performing a careful date analysis and adjusting the appropriate test dates forward in time.
- Test "date-advanced" transactions during of hours such as holidays or weekends.

4. After assessing your impact, you should prioritize your systems. Given the limited time until 01/01/ 2000, you may not be able to accomplish complete Y2K readiness. Now is the time to prioritize and determine what your most critical systems are – they're the ones on which you need to focus your attention. Remember that you cannot conduct this prioritization until you've completed your assessment activities; without knowing the potential Y2K impacts, you can't begin to rank systems in terms of importance. Your goal should be to protect your high priority systems as completely as possible and develop contingency plans for the rest.

- As with embedded systems, use a "triage" approach to help you prioritize. Address the critical systems that have the best chance of survival first.
- As you prioritize your systems, consider the business impact that a failed system would have on your ability to deliver critical services.
- Would any serious public safety or health issues result if this system fails?
- How much revenue would be lost per day if this system fails?
- What would be the legal consequences for my municipality or county if this system fails?
- Could federal and state fines result if this system fails?
- How would the failure of this system affect my business partners (suppliers, citizens, other governmental entities, etc.)?
- Consider the technical impact of system failures as well. Ask yourself these questions:
- What is the system's expected date of failure?
- How many programs are affected by the Y2K problem?
- How many interfaces are affected?
- How difficult and costly would it be to replace or fix this system?
- Can I fix the system in time?
- Develop contingency plans for the functions or processes that depend on the IT systems. You may not be able to fix or even test all your systems before 01/01/2000. Your best safeguard is to develop contingency plans to ensure the uninterrupted delivery of services in the event of system failures. Using non-compliant software, even in a contingency situation, will increase the likelihood that critical services could be disrupted.

5. Next, decide if you can remediate or replace your IT systems.

- For custom-developed application software, the best approach for

remediation is to look for mathematical calculations and comparisons employing two-digit date values and use program logic, known as "windowing," to determine the four-digit century. This approach does not expand the stored date (year) to four-digits, but instead uses "windowing" logic to determine the date. Essentially, commands are added to the software to interpret each date according to its two-digit value. For example, if a two-digit year is greater than 30, your system could be programmed to assume the century to be "19," as in 1955. If the year number is less than 30, the system would assume the century is "20," as in 2010. As with all solutions, windowing logic will not work in all situations, such as, when the dates being processed span greater than 100 years or the date is used to determine the order in which the data is read into the program.

- For vendor-supplied software, if you determine the software is not compliant and a Year 2000-compliant upgrade is available, you should purchase and install the upgrade. If a compliant version is not available, you should ask the vendor if and when a version will be available. If the vendor has no plans for a compliant version, you must find a substitute, either by purchasing a competing product or by writing your own custom software.
- For your computers, servers, and equipment, follow the same procedures as for your vendor software. Contact your vendors, identify compliant versions, and replace or upgrade your hardware as necessary.
- For interfaces, you should coordinate with the organizations with which you do business (for example, other cities, counties, state entities, and related departments). Make sure that all of the entities that share the data are aware of the format that will be used and are prepared to process the data in the agreed upon format. If possible, a compliant date format should be used. If you don't have time to make sure all your interfaces are compliant, consider a common "bridging" technique as an alternative to complete remediation. A "bridge" is software that reformats a date value from two to four digits, through windowing logic, to correctly manipulate incoming and outgoing data.

Finally, you need to thoroughly test your IT systems. Should you have difficulty with conducting your own testing, seek assistance. Consider the following:

- Use third-party vendors with experience in Y2K compliance testing, especially if you do not have employees who can be devoted to this task or have experience in software testing.
- Take advantage of the expertise of end users. Your Y2K efforts should involve the people within your business areas who have intimate knowledge of how your systems operate. These people are your subject-matter experts. They know what the day-to-day system results should be and can validate test results after Y2K changes are made. For example, the people who process tax returns in a tax office best understand the tax revenue system and can validate tax calculations, date-related letter generations, and other system activities. Develop "test plans" that can be used by the IT staff or vendors to properly test the application.
- Test for current dates (to ensure that normal processing has not been changed by the remediation process), future dates (past Year 2000), boundary dates (end of fiscal year), and leap year dates (February 29, 2000).

- If you do conduct your own testing, BE CAREFUL! Backup the system and consult any manufacturers or vendors associated with the creation or support of the system. Make sure you can recover from the test. If you are not sure you can recover, consult with an expert before conducting any tests.

7. Again, document everything and make sure all test results are on file. Users should sign-off that their systems are Y2K tested and compliant. These disciplines are important to building a strong legal case for the reasonableness of the work you have done.

Change Management

Once a system is determined to by Y2K compliant, care must be taken to make sure the system STAYS compliant. If you are doing routine maintenance on a system, adding enhancements or changing key modules in a program, make sure the changes are compliant. Test the changes and file documentation of test results for future reference of your compliance efforts.

Compliance Language

The State of Kansas, by policy, uses the following Y2K language for compliance:

- Contractor warrants fault-free performance in the processing of date and date-related date (including, but not limited to, calculating, comparing and sequencing) by contractor provided hardware and software. Fault-free performance includes, but is not limited to, the manipulation of data with dates prior to, through and beyond January 1, 2000 and shall be transparent to the user.
- Hardware and software products, individually and in combination, shall successfully transition into the year 2000 with the correct date and correction calculations, which utilize or refer to the date data, without human intervention, including leap year calculations. Hardware and software products, individually and in combination, shall also provide correct results when moving forward and backward across the year 2000.
- No provision will be given effect which attempts to exclude, modify, disclaim or otherwise attempt to limit implied warranties of merchantability and fitness for a particular purpose.

Legal Review

This language must appear on all contracts and related procurement documents. Agencies should also perform a legal review of their IT contracts to make sure vendors are responsible for software and hardware operating correctly after December 31, 1998. The review should include:

1. Within the contract-related written materials, has the state "waived the warranty of merchantability?" Is there any specific language waiving merchantability? Or, is there any implicit language waiving merchantability?
2. Within the contract-related written materials, has the state "waived the warranty of use for a specific purpose?" Is there any specific language waiving use for a particular purpose? Or, is there any implicit language waiving use for a specific purpose?
3. After a determination of the two preceding questions has been made, a further determination should be made to determine if the state has provided the vendor with any post-contract, contractual language attempting to modify

the waivers? Or, has the state made any communicative attempts to notify the vendor that the state intends for the vendor to warrant their systems, etc. before, during and after year 2000? If not, this should be done, and recordation should be made of each such attempt.

4. Finally, another review should be made to again attempt to determine if the vendor is now Year 2000 compliant. This would necessitate either the vendor providing evidence that the goods or services contracted for have been tested, or the state may need to initiate a testing procedure to verify compliance.
5. After each service or good if verified Year 2000 compliant, documentation of each compliance should be accumulated.

Interfaces

State systems interrelate with other state systems, federal systems and local units of government computer systems. State agencies are required to identify all interfaces by name of interface. While repairs underway, bridges may be needed to allow a repaired system to 'talk' to an un-repaired system. When all systems are repaired and tested the bridges may be removed.

IT Components Table

Type	Examples	Description	Who Can Help
Software			
Custom developed application software	Procurement, reporting, tracking, and data entry systems	Software developed specifically for your organization that automates your business functions; for example, a tax revenue collection system.	IT staff or your vendors
Vendor-supplied utility and application software	Utilities and applications running on AS/400, HP/UX and VAX, etc.	Software purchased from outside suppliers that your organization uses to automate business processes and provide miscellaneous support functions.	Vendors
Ersonal computer applications and operating software	Microsoft Windows, OS/2, Microsoft Word, WordPerfect, Lotus Notes, Virus Scan	Software that supports the operations of individual workstations.	Vendors
Work products created through use of personal computer applications	Spreadsheets created through Lotus or Excel, DBASE programs	Work group software to assist in financial analysis, etc.	IT staff, knowledgeable users
Network operating software	Novell, NT, OS/400	Software that allows the components of a network to communicate.	Vendors and maintenance contractors
Hardware			
Minicomputers and mainframes	IBM, HP, DEC, Unisys, Amdahl	Computers that support business operations for mid-size to large organizations.	IT staff, vendors, and maintenance contractors
Personal computers	IBM, IBM-compatible	Computers that support office workstation functions, either individually or as part of a network	IT staff, vendors, and maintenance contractors
Network file servers	Database servers, application servers, print servers	Storage and communication devices for databases and applications that will be accessed as part of a network.	IT staff, vendors, and maintenance contractors
Network equipment	Hubs, routers, gateways, switches	Hardware that connects network components and directs communication through them.	IT staff, vendors, and maintenance contractors.
Interfaces			
Internal	Shared databases and files	Data accessed by multiple business areas within the organization. For example, personnel data may need to be sued by payroll and insurance units.	Business units and departments within your organization
External	Tapes, floppy disks, forms, file transfer protocol (FTP)	Data received or released by your organization from or to an outside entity, such as a payroll tape created by your organization and sent to a bank for processing	Trading partners, peers, regulating entities such as state and federal government

Table 4

Your Y2K efforts should involve the people within your business areas who have intimate knowledge of how your systems operate.

Summary

Again, remember to use the IT Components Table as a guide to the entire process.

- As you conduct containment activities, refer to the table to identify when vendors should be involved and what types of IT systems could have a contract in place.
- Use the table's examples to help you build your inventory.
- As you assess the impacts, refer to the table to identify who can help you determine risks and dependencies between the various components of your IT systems.
- Use the examples and descriptions, as well as the people involved with the system to help you set your priorities.
- Seek the assistance of the people who work with your systems on a daily basis as you remediate or replace them.
- Finally, use the table to assist with your testing strategies, to determine dependencies, and identify the types of people that should be involved.

Section Five:
Contingency Planning

By now, we've seen that the Year 2000 problem poses substantial risks – risks to business operations and revenues, the threat of litigation, and, most importantly, risks to public safety. The questions your organization must answer are straightforward: what are your risks, and how will you deal with them?
Risk management focuses on maintaining your critical government operations and minimizing your exposure for consequences. The way to manage risks is to first identify them, evaluate their potential consequences, and, if possible, find a way to avoid them. Ultimately, that's all that risk management is: problem identification followed by problem solving.
At this point, with the Year 2000 deadline looming on the horizon, the best approach to managing your risk is contingency planning.

Why You Need Contingency Plans

As we've already noted, even the best project plan cannot eliminate all risks to your organization. This is particularly true in the case of the Year 2000 problem, which simply involves too many unknowns for anyone to feel secure. Despite your best efforts, you may not have enough time or resources to guarantee Y2K compliance in time. Even if you have prepared thoroughly, you may experience sudden disruptions due to circumstances entirely beyond your control.
In the limited time remaining until January 2000, your Y2K efforts should be focused on ensuring that your most critical services remain operable into the new century. For this reason, contingency planning must be an important part of your project – to prepare your organization for potential service interruptions and guide you toward a permanent solution at the earliest possible moment.
Essentially, contingency plans set your course if and when critical systems fail by providing "backup" plans to address unforeseen problems resulting from Y2K. Your organization should have a contingency plan in place for each of its most important functions, systems, and equipment to ensure that your basic business functions can continue without disruption. Your contingency planning effort should consider your organization's hardware, software, and equipment as well as the systems and infrastructure of external organizations that affect your operations. .

How to Prepare Contingency Plans

At its most basic level, contingency planning guides an organization through four distinct steps:

- Identification of business processes that need contingency plans, and the collection of data that can be used to evaluate your options.
- Plan creaion and the establishment of criteria under which the plans will be used.
- Implementation of the contingency plan when prompted by a problem or disruption in service.
- Reinstatement of normal operations by moving from contingency operations to a permanent solution as soon as possible.

These four steps will help to safeguard your organization's ability to provide critical operations into the new century.

Step 1: Identification

The primary objective of this step is to identify and prioritize business processes that are candidates for contingency planning. Begin by consulting your Y2K Project Plan and the inventory/assessment information that you have collected for your equipment with embedded computer processors and your computer systems. This should help identify your critical processes, systems, and equipment. If you are preparing a project plan simultaneously with your contingency plans, simply identify your critical operations for both efforts. It's important to consult your front line employees when determining critical operations; they're the ones who know best.

Make sure you consider all of the underlying hardware, software, and equipment that support each critical function. All of the components required to support the critical function must be considered in a contingency plan if your organization is to fully cope with a disruption. Be sure to consider critical vendors and suppliers as well.

After identifying your critical processes and their support systems, decide which ones need a contingency plan. Begin with those that could have the greatest negative impact on your organization's critical services and functions. With limited resources available to address the Y2K problem, it is important to consider the financial costs and the difficulty involved in developing service delivery alternatives. In some cases, limited resources may force you to advise your constituents that important services may not be available or may be delayed because of the Year 2000 problem. This, of course, is not a desirable alternative.

Step 2: Plan Creation

In this step, you will weigh your options and develop the detailed contingency plans needed to ensure your continued operation in the event of Y2K-related disruption. A good starting point for contingency planning could be your organization's emergency management or disaster recovery plans.

Remember to consider all of your options. Some contingency plans may be as simple as identifying a vendor who can quickly replace a critical piece of equipment. Others may involve outlining a series of manual steps to perform certain activities that normally are automated. You also may identify a resource, such as a private contractor, that can perform your critical business functions for you on a temporary basis. Your plans may involve a technical solution (involving hardware, software, or equipment), a business solution (such as manual procedures for your employees to follow), a quick fix (such as using generators for emergency electricity), or combinations of all three. In any case, your plans should identify dependencies and impacts, the number of days needed to implement each contingency solution, and the estimated dollars, staffing, and equipment needed to support your solutions.

Don't forget to identify the conditions that would cause you to set your plans in motion. Clear instructions on when and how to use a contingency plan will help make its implementation smoother. At a minimum, your plan should include three important steps:

- Make sure all personnel know how to reset any device or system they use, or take whatever other action is dictated by your contingency plan.
- Make sure all personnel can recognize the need to do so.
- Make sure all personnel are ready to do so.

Step 3: Implementation/Operation

Obviously, this step is put into action only to prevent a service disruption. Its objective is to manage the operation of the contingency plans you've chosen smoothly and efficiently. You may never have to implement your plans, but if you do, you will need clearly defined guidelines for operating each critical activity under its contingency plan.

Step 4: Reinstatement

This step leads your organization from its contingency operations to a stable, permanent solution. You may decide to make your contingency solution permanent, in which case your reinstatement activities are already complete. If your Y2K remediation efforts were under way but incomplete at the 01/01/2000 deadline, reinstatement would simply require you to complete your organization's transition to its newly converted systems.

Example Contingency Plan – Health Care Facility

The following steps were recently considered by a health care facility that is preparing a Year 2000 Contingency Plan:

- Activation of additional personnel.
- Use of emergency internal telephone system.
- Patient care "downtime packages" at each unit.
- Runner system for transporting orders and results.
- One-week supply of fuel maintained for emergency generators.
- Verification that fuel suppliers can manually pump fuel to their delivery trucks from bulk storage tanks.
- Additional "crash teams" maintained on-site for unanticipated problems.
- Analysis of impact involved in being the only area facility capable of sustaining power, warmth, food, and shelter.

Embedded Systems Contingency Plan

The following table provides a sample list of functions, services, critical elements, backup systems, and contingency plans.

Backup System/Contingency Plan Table

Services	Areas of Concern/Impact	Backup Systems/ Contingency Plans
Emergency Services		
"911"	Emergency response may be delayed or prevented	Alternate phone numbers, cell phones, radio
Weather Warning and tornado warning sirens	The system may not activate when needed or could produce false alarms.	Manual activation, if possible
Security		
Street Lights	Parking lot and street security: increased risk of crime and driving hazards	Manual activation, if possible. Secure additional security personnel available for escort service.
Lock-ups	Prison escapes	Perform lockdowns manually. Disable any computerized lockdown controls.
Automated door locks	Entrance/exit from offices, etc.	Distribute keys to responsible personnel. Develop plans for manual entrance/exit.
Video surveillance	Tape dating: wrong dates may be recorded.	Implement manual record maintenance by security personnel.
Alarm systems	Unnecessary false alarms	Disable all but the most critical systems. Issue memos to security personnel regarding potential problems and appropriate procedures.
Power		
Municipal and public utilities and the power grid	Loss of heating/air conditioning, lighting, communications, and numerous other amenities of daily life.	Secure standby generators.
Standby generators	Loss of power with the same results as above.	Manual standby generator activation. Top off fuel tanks in December 1999 and procure additional supplies as necessary.
Communication		
PBX	Loss of internal and external communication lines.	Use radio, pagers, cell phones, or couriers.
Radio	Loss of police patrol communication, increasing danger for police who cannot call for backup	Use cell phones if possible. Double up patrol assignments.
Pagers	Missed and erroneous pages	Use cell phones, if possible; otherwise, use periodic cal-ins or face-to-face communications.
Cell phones	Missed and erroneous calls	Use radios or face-to-face communication.
Written (copiers, fax machines)	These machines may stop working.	Postpone or use carbon copies if available.

Source: Keane, Inc.

Table 5

Backup System/Contingency Plan Table (cont.)

Services	Areas of Concern/Impact	Backup Systems/ Contingency Plans
Commerce		
EDI (electronic data Interchange)	Electronic supplier payments disrupted, resulting in shortages of goods and services.	Write checks manually or otherwise implement pre-electronic procedures.
Electronic payroll deposit	Employee payments made through direct deposit may be late or could fail entirely.	Write checks manually or pay in cash.
Welfare payments	Those on welfare may be unable to receive payments.	Write checks manually.
Credit card purchases	Purchase approval may be denied; cards could become unusable.	Use manual purchase orders. Institute blanket purchase orders with local merchants.
Transportation		
Traffic control	Traffic lights malfunction.	Use police overtime, or auxiliary police force if available, to manually direct traffic.
Freeway management systems	Highway congestion	Use police overtime, send letters to the public, or place newspaper ads stressing the need for greater safety consciousness.
Trains	Railroad crossing warnings fail (warnings are controlled by microcomputer).	Sent letters to the public or place newspaper articles alerting the public to the danger.
Airports	Air traffic control systems disrupted.	Increase traffic intervals; require use of visual flight rules.
Airports	Timed runway lighting systems disrupted.	Disable computer controls; activate manually if possible.
Elevators	Loss of access to offices; People may be trapped in elevators if a malfunction occurs.	Give the fire key to selected employees for use in an emergency.
Elevators-Disabled access	Loss of access for disabled persons who work on upper floors.	Relocate offices to first floor on a temporary basis.
Basic Necessities		
Water-Pumping	Pumps stop working and soon there is no water in the distribution pipes.	Prepare water trucks for emergency distribution. Encourage citizens to have bottled water handy.
Water-Cleaning	Sanitary systems quit.	Water trucks may be useful
Water-Well management	Not available when needed.	Alternate sources of supply (rivers, lakes).
Emergency food distribution	Supermarkets closed due to power outages, etc.	List locations for assistance. Pre-stock essential supplies
Health Care		
Medical devices and equipment, operating rooms	Pacemakers, lighting, etc.	Probably the best measure is to ensure that standby generators are ready. Medical triage rules should be applied.

Source: Keane, Inc.

Table 5 (cont.)

Despite your best efforts, you may not have enough time or resources to guarantee Y2K compliance in time. Even if you have prepared thoroughly, you may experience sudden disruptions due to circumstances entirely beyond your control.

Section Six:
State of Kansas IT Year 2000 Policies

Section six includes policies developed by the Kansas Information Resource Council (KIRC). These policies have been adopted by the Chief Information Technology Officers for all branches of Kansas state government. KIRC reporting is now under the auspices of the Information Technology Executive Council (ITEC). ITEC replaced KIRC by new legislation that went into effect July, 1998. The following pages contain the KIRC policies dealing with Y2K issues.

KANSAS INFORMATION RESOURCE COUNCIL
INFORMATION TECHNOLOGY POLICY #2410 REVISION #1

1.0 TITLE: Year 2000 Asset Readiness Reporting

1.1 EFFECTIVE DATE: January 28, 1997

2.07 PURPOSE: To establish a policy concerning the reporting of agency progress toward ensuring that all automated systems will handle the impending change of century without adversely effecting the continuity or quality of services.

3.0 ORGANIZATIONS AFFECTED: All divisions, departments, and agencies of state government that have not certified that their computing resources are year 2000 ready.

4.0 REFERENCES:

4.1 K.S.A. 75-4741 authorizes the Kansas Information Resource Council to approve policies for the management of the state's information resources.

5.0 DEFINITIONS/BACKGROUND:

5.1 Computing resources include:

- All systems software for general purpose computers, including operating system, utilities, and supporting programs (e.g., programming languages, database management systems).
- All application software for general purpose computers, including internally developed software, contract and public domain software, and commercial or vendor supplied packaged software.
- All external systems providing services in support of the agency mission.
- All computer and communications equipment (includes microcomputers).
- All equipment containing an embedded date sensitive processor.

5.2 Older computer software often used a 2 position year such as 85 to represent 1985. When dates are used in comparisons or calculations incorrect results may occur when the year becomes 2000 or later. The current standard uses a four position year as in 1986 or 2001 to distinguish the century, and properly functioning software will use the century in date calculations under most circumstances.

5.3 The onset of failure for software, hardware and firmware that can not accommodate the year 2000 depends upon the date calculations performed. Calculations for future periods may fail prior to the year 2000.

5.4 The owner of an asset is the agency sponsor or responsible custodian.

6.0 POLICY:

6.1 Agencies will review their assets that are subject to Year 2000 problems to determine if they are Year 2000 compliant. If appropriate, agencies will make a preliminary assessment of the programs that will be undertaken to mitigate these problems.

6.1.1 Assets may include:

Communication equipment including PBX's , routers, multiplexors, and switches.

Computer hardware.

System software, including compilers, interpreters, data base management software, teleprocessing monitors, security systems, tape management systems, operating systems, etc.

Commercial off the shelf (COTS) packages such as accounting and reporting systems, billing and client tracking systems, spread sheets, word processors, etc.

Custom applications developed in house or by outside vendors, and custom modified COTS packages.

Network software.

External systems such as those used for information access and retrieval and for remote record checks.

Embedded systems such as security systems, environmental control systems, and elevator control systems.

6.1.2 Assets must meet the following four criteria to be Year 2000 compliant:

General integrity: No value for current date will cause interruptions in the desired operation --- especially during the transition from 1999 to 2000.

Date integrity: All manipulations of time-related data (dates, duration, days of week, etc.) will produce desired results for all valid date values within the application domain.

Explicit century: Date elements in interfaces and data storage permit specifying century to eliminate ambiguity.

Implicit century: For any date element represented without century, the correct century is unambiguous for all manipulations involving that element.

6.1.3 Assessment includes assignment of risk or priority to assets and their corrective action programs. Assets may be:

Mission Critical - They are required for internal operation or in meeting the immediate needs of clients. These would be high-risk assets.

Supportable - Back-up procedures or work-arounds exist for asset functions that will permit ongoing operations to continue at an acceptable level of efficiency. These are moderate risk assets.

Low impact - No short-term impact on operations is likely. These are low risk assets.

6.1.4 Mitigation actions include the determination to:

Discard the asset

Replace the asset with a comparable or alternative asset

Repair the asset

6.2 Agencies, after completing their preliminary assessment, will submit to the Chief Information Architect's Office one of the following :

Documentation that mission critical assets are Year 2000 compliant. Documentation will include a completed facsimile of the attached MONTHLY YEAR 2000 ASSET REPORT indicating that all mission critical assets have been repaired or replaced or;
A letter stating that it has no assets which are critical to its operation (Mission Critical) that require repair or replacement or;

A letter stating that it has assets that are critical to its operation that require repair or replacement

6.2.1 For those agencies that have assets that are critical to their operation which require repair or replacement:

Appoint a Year 2000 coordinator who will report on all activity that directly or indirectly mitigates Year 2000 asset problems. Year 2000 Coordinators are responsible for the accuracy and completeness of the agency§s monthly reports, initial inventory and owner and/or user acceptance team sign off of each assets Year 2000 readiness.

Conduct an asset inventory, assess risks and develop mitigation plans for all affected assets. Submit inventory, assessment and mitigation plans for mission critical assets to the Chief Information Architect's Office.

Provide monthly updates of mission critical assets on a facsimile of the attached form on the 10th of each month until all assets are Year 2000 compliant.

When an asset mitigation project involving repair of a critical asset is completed, the agencys year 2000 Coordinator is to have in their

possession the asset owners (or user acceptance team) sign-off that the asset is Year 2000 compliant.

6.2.2 Those agencies that do not have professional information technology staff and may be unable to make a preliminary assessment of their Year 2000 problems should contact the DISC Year 2000 Awareness Center for assistance in obtaining contractor support.

6.3. Monthly reports are to be submitted for all Year 2000 activities regardless of cost.

6.4 The Chief Information Architect will provide summary Year 2000 status reports to the Governor and the KIRC each month.

YEAR 2000 PROJECT REPORTING REQUIREMENTS

	Submit Completed Critical Asset Inventory to CIA	No Further Action	Monthly Report	KIRC Policy 2400 Approval
Agency has not completed Asset Inventory	X			
Agency has a letter on file with the CIA stating that they are Year 2000 ready or that Year 2000 susceptible resources are not mission critical		X		
Agency has an active Year 2000 project with total cost under $1,000,000.00			X	
Agency§s Year 2000 project costs will exceed $1,000,000.00			X	X

7.0 PROCEDURES:

7.1 Monthly reports will be submitted on a facsimile of the attached Monthly Year 2000 Asset Readiness Progress Report on the 10th of each month. Agencies with more data to report that will fit on this form may create an equivalent electronic spreadsheet.

7.2 Individual assets should be grouped for reporting purposes if they provide support for related business functions and will be treated as a single Year 2000 project for work order or repair.

7.3 The Year 2000 Consulting Services Contract administered by DISC provides for monthly status reporting on task orders for assets being repaired. This information should be included on the agency§s MONTHLY YEAR 2000 MISSION CRITICAL ASSET REPORT.

8.0 RESPONSIBILITIES:

8.1 Heads of agencies, boards and commissions, will establish procedures for their organization's compliance with the requirements of this policy.

8.2 The Chief Information Architect is responsible for the maintenance of this policy.

POLICY #2412 REVISION #1

KANSAS INFORMATION RESOURCE COUNCIL

INFORMATION TECHNOLOGY POLICY #2412 REVISION #1

1.0 TITLE: Year 2000 Date Data Interchange

1.1 EFFECTIVE DATE: March 1, 1997

2.0 PURPOSE: To establish a policy concerning the electronic interchange of date data between state agencies, boards and commissions.

3.0 ORGANIZATIONS AFFECTED: All branches, divisions, departments, and agencies of state government.

4.0 REFERENCES:

4.1 K.S.A. 75-4741 authorizes the Kansas Information Resource Council to approve policies for the management of the state§s information resources.

5.0 DEFINITIONS/BACKGROUND:

5.1 In the past, some computer software was created using a two digit year, such as 85 to represent 1985. This software assumed a century of 19 as in 1985. As we approach the year 2000, this software can fail to perform date calculations or worse, perform them and produce erroneous results. The failure can occur prior to the year 2000 when date calculations involve future periods.

6.0 POLICY:

6.1 Four-digit year elements will be used for the purpose of electronic data interchange in any recorded form among all branches, divisions, departments, and agencies of state government and the public. The year shall encompass a two digit century that precedes, and is contiguous with, a two digit year-of -century (e.g. 1998, 2007). Applications that require day and month information will be coded in the following format: CCYYMMDD. Additional representations for week, hour, minute and second, if required will comply with the international standard ISO 8601:1988, "Data elements and interchange formats - Information interchange - Representation of dates and times".

6.2 If two or more state agencies agree to exchange month and day information based on ordinal dates, the ISO standard format of CCYYDDD will be used.

6.3 The owner of a system is responsible to coordinate the mitigation and testing for that system with all stakeholders whose systems provide electronic input to, or utilize electronic output from, the system.

7.0 PROCEDURES:

7.1 Agencies are to review all electronic exchange data for dates and take suitable action to implement the appropriate date data exchange format defined elsewhere in this policy.

7.2 Whenever possible, conversion of date data exchange formats should be accomplished as systems are brought into year 2000 compliance.

8.0 RESPONSIBILITIES:

8.1 Heads of agencies, boards and commissions, will establish procedures for their organization's compliance with the requirements of this policy.

8.2 The Chief Information Architect is responsible for the maintenance of this policy.

POLICY #2414 REVISION #0

KANSAS INFORMATION RESOURCE COUNCIL

INFORMATION TECHNOLOGY POLICY #2414 REVISION #0

1.0 TITLE: Year 2000 Readiness Warranty

1.1 EFFECTIVE DATE: Upon Receipt

2.0 PURPOSE: To establish a policy concerning the year 2000 readiness of software, hardware, systems, services and any equipment containing date sensitive processors.

3.0 ORGANIZATIONS AFFECTED: All branches, divisions, departments, and agencies of state government.
2.0 REFERENCES:

4.1 K.S.A. 75-4741 authorizes the Kansas Information Resource Council to approve policies for the management of the state's information resources.

3.0 DEFINITIONS/BACKGROUND:

5.1 In the past, some computer software was created using a two digit year, such as 85 to represent 1985. This software assumed a century of 19 as in 1985. As we approach the year 2000, this software can fail to perform date calculations or worse, perform them and produce erroneous results. The failure can occur prior to the year 2000 when date calculations involve future periods.

5.2 Assets must meet the following four criteria to be year 2000 ready:

General integrity: No value for current date will cause interruptions in the desired operation --- especially from the 20th to the 21st centuries.

Date integrity: All manipulations of time-related data (dates, duration, days of week, etc.) will produce accurate and correct results for all valid date values within the application domain.

Explicit century: Date elements in interfaces and data storage require specifying century to eliminate ambiguity.

Implicit century: For any date element represented without century, the correct century is unambiguous for all manipulations involving that element.

4.0 POLICY:

6.1 Agencies are to include language in all contracts for software, hardware, systems, services and any equipment containing date sensitive processors that protects them from year 2000 date change problems.

6.2 For software, hardware, systems, services, and any equipment containing date sensitive processors not supported by agency personnel and not covered by 6.1 above, agencies should contact the original supplier or the current support provider to determine the asset's present readiness or services required for year 2000 readiness.

5.0 PROCEDURES:

7.1 Assets or services supported under contract:

The following language should be included in all solicitations and both new and existing contracts for software, hardware, systems, services and any equipment containing date sensitive processors.
The contractor warrants fault-free performance in the processing of date and date related data (including, but not limited to, calculating, comparing, and sequencing) by (identify the hardware, software, service or system). Fault free performance includes, but is not limited to the manipulation of data with dates prior to, through, and beyond January 1, 2000, and shall be transparent to the user.

Hardware and software products, individually and in combination, shall successfully transition into the year 2000 with the correct system date and correct calculations which utilize or refer to the date data, without human intervention, including leap year calculations. Hardware and software products, individually and in combination, shall also provide correct results when moving forward or backward across the year 2000.

7.2 Assets or services not supported by contract:
For assets or services determined not to be year 2000 ready agencies should make arrangements to test and take appropriate steps to correct, replace or de-activate the asset or service prior to the onset of any year 2000 associated problem.

6.0 RESPONSIBILITIES:

8.1 Heads of agencies, boards and commissions, will establish procedures for their organization's compliance with the requirements of this policy.

8.2 The Chief Information Architect is responsible for the maintenance of this policy.

Section Seven:
Y2K Auditing

The following section is from the State of Kansas task order for Y2K auditing. CTA Inc. has a contract with the state for assisting agencies with the assessment and repair of systems for Y2K compliance. The contract is available to local units of government. Recently the state issued a generic task order for auditing Y2K work performed by state staff. When an agency declares a system is Y2K compliant, the agency can sign a task order to confirm repair work was completed in accord with the principles in the Kansas Y2K planning workbook. CTA uses a variety of techniques to render an opinion on the agency's Y2K work. These techniques include test work and questionnaires. CTA will use the Federal Government Accounting Office (GAO) questionnaires for compliance. The Federal Government requires an audit similar to the CTA audit approach for all systems funded from Federal Services. The CTA Inc. methodology satisfies this requirement. Organizations interested in a task ordered audit should call Morey Sullivan, Department of Administration, DISC, at (785) 296-4285 to arrange for work.

Reference the audit guidelines in the following CTA Inc. Process Review Methodology and the accompanying checklists.

CTA Inc. Process Review Methodology

1) CTA is notified to perform a Y2K audit by either the State or Agency when the Agency feels confident to its state of readiness of compliance for Year 2000 changeover.

2) CTA schedules the audit date and requests copies of certain documents of the Agency to familiarize itself with the Agency's Y2K planning. These documents may include, but are not limited to:

- Y2K Policy Manual
- Y2K Process
- Y2K Organization Chart
- Y2K Inventory Reports
- Y2K Project Plans

3) CTA will supply the Agency with a copy of the Y2K Assessment Audit Checklist and the Y2K Test Audit Checklist. This is to allow the Agency to become aware of things the audit will focus on.

4) CTA creates an audit plan if necessary that includes the audit times, areas of the Agency to be audited and the name(s) of the auditors that will perform the audit.

5) CTA provides the audit plan to the Agency in order to prevent any personnel scheduling conflicts.

6) If the audit plan is not acceptable with the Agency, CTA will adjust the audit plan to eliminate scheduling problems if necessary and will send the Agency the update plan.

7) CTA performs the on-site audit during the schedule time frame. During the course of the audit, objective evidence compliance will be required as well as communication between the auditor(s) and Agency personnel. An opening meeting will be conducted by the Lead Auditor on the first day of the audit to set the ground rules, provide introductions and assign needed escort(s) with the auditor(s). A closing meeting will conducted daily with the management and the areas audited. An exit meeting will be conducted theladay of audit in place of the closing meeting.

8) All discrepancies encountered by auditor(s) will be discussed with the Lead Auditor prior to the closing meetings and the exit meeting. The audit team will classify the discrepancies as "Major", "Minor" or an "Observation.

9) Major and Minor findings will have a Corrective Action Request (CAR) issued. CARs will be written daily by the auditor(s) and will be signed by the Lead Auditor and the Agency's representative prior to the exit meeting.

10) The Lead Auditor will conduct the exit meeting at the end of the last audit day and give the original CARs a copy of the audit checklist(s) to the Agency. The lead Auditor will retain the original audit checklist(s) and copies of the CARs.

11) The Lead Auditor formalizes the audit report and makes copies of the audit report, audit checklist(s) and CARs for CTA files. The original audit report, audit checklist(s) and copies of CARs are sent to the State.

12) If the audit showed the Agency to be compliant for Year 2000, CTA closes the file. If the Agency proved not to be compliant, the file will be held waiting any additional follow-up required by the State.

GAO Assessment Checklist

Awareness	Yes	No	Evidence
Has the agency defined the documented the potential impact of the Year 2000 problem?			
Has the agency conducted a Year 2000 awareness campaign?			
Has the agency assessed the adequacy of its program management policies, capabilities, and practices, including configuration management, program and project management, and quality assurance?			
Has the agency developed and documented a Year 2000 strategy?			
Is the Year 2000 strategy supported by executive management?			
The agency has:			
Year 2000 policy directive			
Year 2000 program charter			
Has the agency established an executive management council or committee to guide the Year 2000 program?			
Has a program manager been appointed and a Year 2000 program office been established and staffed?			
Has the agency identified technical and management points of contacts in core business areas?			

GAO Assessment Checklist

Assessment	Yes	No	Evidence
Has the agency defined year 200 compliance?			
Has the agency assessed the severity of potential impact of Year 2000-included failures for core business areas and processes?			
Has the agency conducted a comprehensive enterprise-wide inventory of its information systems?			
The agency has:			
System inventory listing components and interfaces for each system			
Comprehensive plan to identify and eliminate obsolete code			
Has the agency developed a comprehensive automated system portfolio?			
The agency's portfolio identifies:			
Links to core business areas or processes			
Platforms, languages, and database management systems			
Operating system software and utilities			
Telecommunications			
Internal and external interfaces			
Owners			
The availability and adequacy of source code and associated documentation			
Has the agency analyzed its system portfolio and identified for each system?			
Non-repairable items (lack of source code or documentation)			
Conversion or replacement resources required for each platform, application,			
Database management system, archive, utility, or interface			
Has the agency prioritized its system conversion and replacement program?			
The agency's prioritization process includes:			
Ranking by business impact			
Ranking by anticipated failure date			
Identification of applications, databases, archives, and interfaces that			
Cannot be converted because of resource and time constraints			
Has the agency established Year 2000 project teams for business areas and major systems?			
Has the agency developed a Year 2000 program?			
The agency's program plan includes:			
Schedules for all tasks and phases			
Master conversion and replacement schedule			

GAO Assessment Checklist

	Yes	No	Evidence
Assessment and selection of outsourcing options			
Assignment of conversion or replacement projects to project teams			
Risk assessment			
Contingency plans for all systems			
Has the agency identified and mobilized required resources and capabilities?			
Has the agency developed validation strategies and testing plans for all converted or replaced systems and their components?			
Has the agency analyzed and identified requirements for a Year 2000 test facility?			
Has the agency identified and acquired Year 2000 tools?			
Has the agency considered implementation scheduling issues?			
The agency's program plan addresses:			
Where conversion will take place (data center or off-site location)			
Time needed to place converted systems into production			
Conversion of backup or archived data			
Has the agency addressed interface and data exchange issues?			
The agency has:			
Analyzed dependencies on data provided by other organizations			
Contacted all entities with whom it exchanges date			
Identified the need for data bridges or filters			
Made contingency plans if no data are received from external sources			
Made plans to determine that incoming data are valid			
Developed contingency plans to handle invalid data			
Has the agency initiated the development of contingency plans for critical systems?			
Does the impact assessment document identify Year 2000 vulnerable systems and processes outside the traditional information resource management area that may affect the agency's operations/			
The assessment document addresses the impact of potential Year 2000 induced failure of:			
Telecommunications systems, including telephone and data networks switching			
Equipment			
Building Infrastructure			

GAO Assessment Checklist

Renovation	Yes	No	Evidence
Is the agency meeting its budget and schedule in the conversion of targeted applications, platforms, databases, archives, or interfaces?			
Is the agency meeting its budget and schedule in developing bridges and filters to handle nonconforming data?			
Is the agency meeting its budget and schedule in the replacement or targeted applications and system components?			
Is the agency documenting all code and system modifications and using configuration management to control changes?			
Is the agency scheduling unit, integration, and system tests?			
Is the agency meeting its budget and schedule in eliminating targeted applications and system components?			
Is the agency communicating the changes to its information systems to all internal and external users?			
Is the agency tracking the conversion and replacement process and collecting and using project metrics to manage the conversion and replacement process?			
Is the agency sharing information among Year 2000 projects?			
The agency is disseminating:			
"Lessons learned"			
Best practices			

GAO Assessment Checklist

Validation	Yes	No	Evidence
Has the agency developed and documented test and validation plans for each converted or replaced application or system component?			
Has the agency developed and documented a strategy for testing contractor-converted or replaced applications or system components?			
Has the agency implemented a Year 2000 test facility?			
Has the agency implemented automated test tools and scripts?			
Has the agency performed unit, integration, and system tests on each converted or replaced component?			
The agency's testing procedures include the following types of tests:			
Regression			
Performance			
Stress			
Forward and backward time			
Is the agency tracking the testing and validation process and collecting and using test metrics to manage the testing activities?			
Has the agency initiated acceptance tests?			

GAO Assessment Checklist

Implementation	Yes	No	Evidence
Has the agency defined its transition environment and procedures?			
Has the agency developed and documented a schedule for the implementation or all converted or replaced applications and system components?			
Has the agency resolved data exchange issues and interagency concerns?			
Has the agency dealt with database and archive conversion?			
Has the agency completed acceptance testing?			
Has the agency implemented contingency plans?			
Has the agency updated or developed disaster recovery plans?			
Has the agency reintegrated the converted and replaced systems and related databases into the production environment?			

GAO Assessment Checklist

Program and Project Management	Yes	No	Evidence
Has the agency established a Year 2000 program management structure?			
The agency has:			
Appointed a Year 2000 program manager and established a Year 2000 program			
Identified technical and management representatives from each core business area			
Based on the assessment of its program management capabilities, has the agency developed and implemented policies, guidelines, and procedures to manage a major program?			
The agency's policies, guidelines, and procedures include:			
Configuration management			
Quality assurance			
Risk management			
Project scheduling and tracking			
Metrics			
Budgeting			
Is the agency monitoring the Year 2000 program to ensure that projects are following required policies and procedures for configuration management, project scheduling and tracking, and metrics?			

GAO Testing Checklist

Testing Infrastructure	Yes	No	Evidence
Has Year 2000 test management authority, responsibility, and accountability been assigned?			
Has it been assigned at both the program and project level?			
Has it been assigned for each level of testing (unit, integration, acceptance and end-to-end)?			
Has Year 2000 compliance criteria been defined?			
Is the compliance criteria documented?			
Has the compliance criteria been distributed?			
Is the compliance criteria the basis for test plans?			
Has an organizational Year 2000 TEMP been developed?			
Has the TEMP been distributed?			
Is there a process to update the TEMP?			
Does the TEMP describe test roles and responsibilities, system/project priorities, test resource needs, individual project test schedules and progress metrics.			
Has the organization defined the roles and responsibilities for the quality assurance or IV&V groups?			
Does this quality assurance group or the IV&V agent have a reporting chain to senior management?			
Has the organization estimated test budgets and allocated resources and funding for the test activities?			
Are shortfalls in funding assessed for impact and reported to management?			
Has the test environments been updated to allow Year 2000 tests?			
Have one or more test facilities been established that replicate the operating environment(s)?			
Have the facilities infrastructure and logistical capabilities been assessed and augmented?			
Has the organization developed and issued organizational Year 2000 test guidance?			
Does the guidance define the objectives of Year 2000 testing?			
Does the guidance define the types of testing expected?			
Does the guidance define the progress metrics that are to be reported?			
Has the organization established test management processes and information sources?			
Have configuration management processes been defined?			
Have quality assurance processes been defined?			
Has a change control process been defined?			

GAO Testing Checklist

	Yes	No	
Has a risk management process been defined?			
Has a central library of test information been established?			
Has the organization ensured that vendor-supported (COTS) products are compliant?			
Has an inventory of COTS products been established?			
Have vendor certifications of its COTS products compliance been obtained?			
Have steps been taken to validate vendors' claims?			
Has the organization defined the test metrics that will be reported?			
Has the report format been defined?			
Has the frequency or reporting been determined?			
Have measures of test progress and results been established?			
Has the organization established a library of support tools?			
Have test tools needs been defined?			
Has the adequacy of existing tools been assessed?			
Have new tools been selected?			
Have the tools' acquisition been coordinated across the organization?			

GAO Testing Checklist

Software Unit Testing	Yes	No	Evidence
Have unit test activities been planned and scheduled, and is the quality assurance group or IV&V agent involved in each phase of unit testing?			
Will peer reviews be used in lieu of unit tests?			
Have unit test procedures and data been generated?			
Do the test procedures address relevant date conditions?			
Have the exit criteria for unit tests been defined?			
Have unit test or peer reviews been conducted?			
Have unit test or peer review results been documented?			
Have defects identified during unit test or peer reviews been corrected?			
Have the unit test exit criteria been satisfied?			

GAO Testing Checklist

Software Integration Testing	Yes	No	Evidence
Have integration test activities been planned and scheduled, and is the quality assurance group or IV&V agent involved in each phase of integration testing?			
Have integration test procedures and data been generated?			
Do the test procedures address relevant date conditions?			
Have the exit criteria for integration tests been defined?			
Have integration test been conducted?			
Have integration test results been documented?			
Have defects identified during integration testing been corrected?			
Have the integration test exit criteria been satisfied?			

GAO Testing Checklist

System Acceptance Testing	Yes	No	Evidence
Have acceptance test activities been planned and scheduled, and is the quality assurance group or IV&V agent involved in each phase of system acceptance testing?			
Do acceptance tests include functional, performance, regression, stress, and security testing?			
Have acceptance test procedures and data been generated?			
Do the test procedures address relevant date conditions?			
Have the exit criteria for acceptance tests been defined?			
Have compliance vendor-supported systems (COTS) been acquired and installed?			
Have acceptance tests been conducted?			
Have acceptance test results been documented?			
Have defects identified during acceptance tests been corrected?			
Have the acceptance test exit criteria been satisfied?			

GAO Testing Checklist

End-to-End Testing	Yes	No	Evidence
Have the system boundaries for end-to-end testing been determined?			
Have mission-critical business functions been identified?			
Have systems (internal and external) supporting these mission-critical business functions and the systems interrelationships been identified?			
Have the probabilities of the systems in the chain suffering a Year 2000 induced failure been assessed?			
Have relevant data exchange partners committed to participating in end-to-end testing?			
Has an inter-organization end-to-end test team been established?			
Has the telecommunications infrastructure been confirmed as Year 2000 compliant?			
Has the end-to-end testing been planned and scheduled?			
Have end-to-end test procedures been generated?			
Have end-to-end test exit criteria been defined?			
Have end-to-end tests been conducted?			
Have end-to-end test results been documented?			
Have defects identified during end-to-end tests been corrected?			
Have the end-to-end test exit criteria been satisfied?			

GAO Testing Checklist

Management Oversight and Control	Yes	No	Evidence
Has the agency ensured that test activity and progress reporting requirements have been met?			
Are the projects reporting test progress and activity in accordance with defined requirements?			
Are reporting requirements being enforced?			
Are reports from quality assurance, IV&V, and users groups being used?			
Has the agency identified deviations from requirements?			
Has the agency taken appropriate action to address deviations, problems, and risks?			

Section Eight:
Kansas Y2K Program Logos
Web Site Report Format

This section presents examples of the logo used by Kansas agencies to stimulate Y2K awareness. The logos are based on the theme KS Y2K – I'm OK. Also, this section provides an example of the Kansas Web pages for Y2K reporting. State agencies will report Y2K project status by completing a form listing all mission critical applications. The agency will report the % completion for assessment planning, repair, testing and audit confirmation. The name of each mission critical application is the name of the Y2K party responsible for the repair. Agencies will report budgeted hours, actual hours spent, and the phone number for those responsible for the repair. In addition, the Web page will show the status of all federal and local units of government interfaces to state systems. Finally, the Web site will include a 'point' system to track the status of repair work. The rating is based on the following scoring scale:

Number of Points	*task to be done*
1	assessment
1	plan
1	repair
1	test
2	audit

6 possible points can be achieved

The following is an example of a 'Score Card' using the point system:

Agency Name

Application Name	Assessment	Plan	Repair	Test	Audit	Agency Report Schedule	CITO Points
App W			85%			B	1
Contact Name							
Contact Telephone							
App X			50%			C	1
Contact Name							
Contact Telephone							
App Y					100%	B	4
Contact Name							
Contact Telephone							
App Z						A	6
Contact Name							
Contact Telephone							


KANSAS
Y2K
Be OK!


KANSAS
Y2K
I'm OK!

What's New! (updated Dec. 1, 1998)
Recent changes and additions to this site.

Basic Explanation of the Year 2000 Problem
A brief inroduction, and why you should be interested

What Kansas State Government is Doing About the Problem
A history of our effort, along with how it is organized

Other Government Information

Local Units of Kansas Government
(cities, counties, etc.)
An invitation to local units of government to submit information on the status of their Year 2000 efforts.

Federal Government Interfaces
(updated Dec. 1, 1998)
Explanation of "interfaces" between the federal government and the State of Kansas - along with a current status report.

Business Contingency Planning
Help with planning to insure your critical business functions can continue in the event of Year 2000 problems

Other Resources

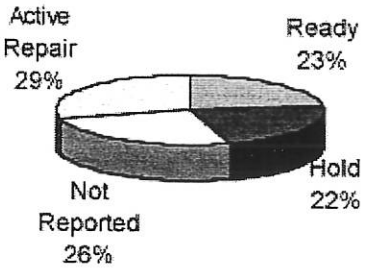
Links to Other Year 2000 Web Sites
Web sites covering how to assess your own personal computer, information for small businesses, embedded systems, and more...

Year 2000 Terminology
A guide to commonly used terms related to the Year 2000 problem

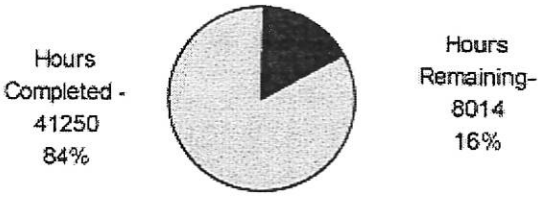
Status of State Agency Year 2000 Projects as of December 1, 1998

Charts include only mission-critical (priority level 1) applications built to agency specifications ("custom-built")

Mission Critical Custom Applications Status



Mission Critical Custom Applications - 49264 hour repair estimate



Publications

Hourglass 2000 (October 1998)
The State's Year 2000 Awareness Newsletter, issued monthly

Contact the Awareness Center

How to Contact Us
For your questions about the Year 2000 problem in Kansas State Government

Please read our disclaimer
We welcome your comments **about this site**
Page location: http://y2k.state.ks.us
This page last modified on: December 2, 1998

Table of Contents

Attachment 2
SCIM 1-13-99

Purpose of Annual Report

The purpose of this annual report is to present information about information technology in Kansas State government. Information technology plays an important role in the quality of services delivered by government and the manner in which citizens and businesses can interact with their government. The presence of technology, particularly communications services, is an important factor in the economic vitality of a State and the quality of life of its citizens. Technology is also causing profound changes upon people, society, business and government.

The information highway is more than a complex network of systems and services. It is a place that has limited relationships with the concepts of locality, as we currently understand it. You can obtain information on Kansas laws, property and business data, obtain maps with information about the state and contact state agencies electronically. We can combine data and change the locations of the data easily without disrupting service.

Agency Information Technology (IT) Management and Budget Plans assist in coordinating the systems and activities of State government organizations. This annual report encapsulates each agency's mission, IT accomplishments and objectives, and the overall agency budget.

A comprehensive, well-prepared IT plan will provide many benefits to agencies, such as:

- Clear linkage between agency mission/objectives and proposed IT investments.
- Coordination mechanism, so all IT players within and outside the agency understand the agency's business programs, technology programs, priorities, expected demands for central services and IT projects of mutual interest.
- Opportunity for agencies to discover and share the benefits of common experience in system development, data repositories, customer services and the acquisition and deployment of technology.
- Mutual support among agencies working on high-risk projects and recommending steps to mitigate risks.
- Accurate representation of the agency's plan and priorities to the legislature.

The 1998 Kansas Legislature adopted Senate Bill 5, which changed the governance of information technology. The bill created an Information Technology Executive Council, a Chief Information Technology Architect, and a Chief Information Technology Officer for each branch of Government.

Senate Bill 5 charges the Chief Information Technology Architect (CITA) with the responsibility of proposing a project management methodology and information technology architecture to the Information Technology Executive Council (ITEC). Upon their adoption by the Council, all state agencies will be required to adhere to the methodology and the architecture. The CITA will propose a project management methodology to the ITEC during the first quarter of 1999 followed closely by an architecture before the end of the second quarter.

Project Management

Since the enactment of Senate Bill 5, several steps have been taken to implement measures designed to improve the management of state IT projects. A Project Management Methodology, which was originally developed for the state of California, was selected for transfer to Kansas and has been modified to fit the Kansas oversight structure for IT projects in this state.

The methodology, which requires the application of generally accepted project management processes to all state IT projects, will provide a standard approach to the management of IT projects by state agencies in the years to come. The methodology places a heavy emphasis on planning in the early stages of a project and provides well documented procedures for implementation of the required management processes while recognizing that smaller projects may not require the same degree of management effort as large projects.

The methodology also employs a standard Risk Assessment Model to help determine the degree of risk associated with a proposed IT project. The Risk Assessment Model is available to agencies on-line and produces a report that is part of the documentation required for approval of a new project.

IT project managers have a critical role in the successful implementation of projects. To ensure that the project management methodology is applied by managers with a specified set of skills in project management and information technology, the state is developing a project manager training and certification program. The goal is to have all IT projects managed by certified project managers.

Architecture Statement

With the passage and signing of Senate Bill 5, the State became committed to the development and use of an architecture for information technology. Information technology architecture, in the language of the bill, includes telecommunications systems, networks and equipment that covers all state agencies. The Bill created the position of Chief Information Technology Architect within the Department of Administration with the responsibility, among others, for developing the architecture and presenting it to the Information Technology Executive Council for approval. New projects are reviewed for compliance with the architecture as they are proposed, and the project proposal documentation includes an architecture statement.

The purpose of the architecture is to guide the development of the information systems infrastructure. It establishes consistency by helping to:

- Provide a mechanism so that the various groups of IT professionals have a consistent view of the information systems infrastructure and the ways in which they work to develop and deliver information systems services based on it.

- Provide managers and staff in the lines of business and support services with an understanding of the information systems infrastructure they are using.

- Ensure that the various development projects being run on behalf of the state and its agencies do not attempt to make incompatible changes to the infrastructure.

The overall IT architecture for the state is based on a series of subarchitectures, statewide architecture standards and guidelines as a series of sub-architectures. The first subarchitecture covers the statewide telecom network. Other subarchitectures will then follow for platforms, applications, data and information, security, Intranet, and middleware. Work is proceeding on an aggressive schedule with all components to be completed by early summer 1999.

Year 2000 Computer Data Processing Mitigation Program

As most people know, there is a significant problem created by the computer technology of previous years wherein the year was represented by two digits rather than four, e.g. 97 for 1997. Two digits were originally used to represent years because in the early days of computer technology, storage and memory were among the highest costs associated with using the emerging technology. Computer chips and software using this design will fail or give unpredictable results when the dates for the year (20)00 are used. Gartner Group, a well-known research and consulting firm, estimated the worldwide cost of this problem would be between $300 billion and $600 billion. The problem extends beyond large computers and software and includes building control systems; water flow control systems, laboratory equipment, and other equipment that has a computer chip in it that uses dates in the performance of its function.

To insure state government agencies are prepared for year 2000, each agency was sent two Year 2000 readiness surveys requesting detail information about the status of their Year 2000 susceptible assets. These surveys requested information on eight asset categories: custom software, off the shelf software, system software, network software,

computer hardware, communications equipment, external systems and embedded processors. The provided information allows the Kansas Information Technology Office to track the repair status of all of the Y2K assets. In order to assess and address the complex issue of interfaces between the state, federal and local agencies, DISC has named Larry Kettelwell as interface coordinator.

Y2K Web Site

DISC has created and is maintaining a Y2K web site to keep both the public and government agencies informed of our progress toward Y2K mitigation (**Y2K.STATE.KS.US**). The web site contains high level information such as the percentage of assets in each asset category that are in various stages of repair. A grading scale, provided below, is used to provide an assessment of where the repair efforts for a specific application stands.

KANSAS MISSION CRITICAL APPLICATIONS/INTERFACES

Grade	Assessment	Plan to Repair	Implement Repairs	Testing	Audit Confirmation
A	Complete	Complete	12/31/98	3/31/99	4/30/99
B	Complete	Complete	3/31/99	6/30/99	7/31/99
C	Complete	Complete	6/30/99	9/30/99	10/30/99
D	Complete	9/30/98	9/30/99	11/31/99	12/15/99
F	Not Complete	--	--	--	--

Local Outreach

The DISC Awareness Center has developed a formal outreach program to local units of government. The plan is to present formal summits on Assessment, Repair/Implementation, Testing and Acceptance, and Business Contingency Planning. Summits will be held in Hays, Wichita, and Topeka.

Y2K Audits

DISC initiated an audit/confirmation program for state agencies who report they are fully compliant. This program is available through CTA and DISC.

The Digital State

A unique opportunity exists for a new paradigm for interaction between Government and citizen. Not only is this new paradigm being developed, it is being reviewed and evaluated as we do so. The Progress and Freedom Foundation evaluated state government's use of technology in providing information and services to its citizens. Kansas ranked 10th (up from 11th last year) overall out of the 50 states. This is a tribute to the Information Network of Kansas and state agencies. The complete report, available from the foundation, is worthy of review to examine the categories, the criteria used and the examples of best practices. The following are the rankings for several specific categories:

Kansas Ratings

Category	National Ranking 1997	1998
Digital Democracy	3	1
Higher Education	20	2
K-12 Education	39	39
Business Regulations	1	9
Revenue/Taxes	2	26
Health and Social Services	29	30
Law Enforcement/Courts	17	6
Other Initiatives	29	1
KANSAS' OVERALL RANKING OF THE 50 STATES	**11**	**10**

2-5

Projects of General Interest

Kansas is committed to developing an IT infrastructure that will propel the State into a leadership role in the information age. The projects listed below are a few examples of how IT will affect services provided by the state. These new technologies will improve customer service and business practices, as well as provide improved communication tools to law enforcement agencies, county offices and citizens of the State of Kansas.

Criminal Justice Information System

CJIS was developed to create and maintain an accessible, and appropriately secured, criminal justice infrastructure with accurate, complete and timely data on individuals and events for criminal justice and non-criminal justice users. The system was designed to support effective administration of the criminal justice system, public and officer safety, and public policy management in a cost-effective manner by providing on-line, real time access to criminal justice information to users. The project has been created as an open system, allowing state and local agencies to purchase equipment and software off the shelf or from existing state contracts. BSE is creating free software for the local law enforcement agencies to allow them to submit electronic Kansas Incident Based Reporting System (KIBRS) data to the KBI, as well as creating free software for the courts and prosecutors to submit electronic Kansas Disposition Reports (KDR) to the KBI. CJIS will share electronic data using the KANWIN or Internet to allow local law enforcement agencies, the courts and the prosecutors to obtain low cost telecommunications access to the CJIS databases, and avoid having to utilize expensive dedicated phone circuits. Email will be used to receive and pass private criminal justice information. The new KBI repository will allow criminal justice agencies to access data from a criminal justice web server and for the general public to access public criminal history data from a public web server. The CJIS project has installed a new Automated Fingerprint Identification System (AFIS) at the KBI. Livescan fingerprint devices have been purchased and will be installed at twelve using agencies allowing them to submit electronic fingerprint and arrest data to the KBI. Paradigm4 is re-engineering the KBI's central repository for adult and juvenile criminal history data. The CJIS project will create a statewide criminal history training facility and CJIS computer backup site at the KHP Salina facility.

Statewide 800 MHz Radio System

In November of 1992, the Federal Communications Commission issued PR Docket No. 92-235 that contained a comprehensive set of proposals that required changes to existing radio systems. These changes adversely affected the existing KDOT and KHP radio system; therefore, it became necessary to replace existing radio equipment and develop a new statewide radio system. The project plan was initially developed with a 14-year implementation schedule. The Legislature requested the acceleration of the program to a 10-year schedule. This multi-year system is in the implementation phase. As part of the overall plan, implementation is by district over 10 years and includes purchasing right of way, erecting towers and purchasing and installing equipment. This system will provide the highest quality radio communication system that will support the Kansas Department of Transportation and Kansas Highway Patrol. With the installation of this system through the state, there will be improved safety and efficiency, providing clear, reliable radio communications for KDOT, Emergency medical Services, and the Kansas Highway Patrol.

Project Tax 2000

Beginning in 1995, Project 2000 has been transforming tax administration by addressing all aspects of the business operations. Specifically, the project began by redesigning the strategic business planning, budget development and performance measurement processes for KDOR. These processes support a sound management system by providing the direction and information needed to allocate resources and make decisions. Customer service values are a part of the organization's culture. The core business processes have been redesigned to meet customer requirements. Proven technologies such as automated workflow to route and monitor processes, document scanning, imaging and taxpayer information systems are being implemented. The organization structure is being realigned with the business processes and employees are being fully trained to serve taxpayers and licensees. The Project completed

the original Stage I work on March 31, 1996. Stage II is now in progress. Implementation of the integrated tax system for income tax, customer registrations and withholding tax is scheduled for October 1998. DOR will continue to add the major tax systems (corporation income, retailers sales tax, and excise taxes) in 1999.

Records and Workflow Management System

In March of 1996, KDOT started the requirements study for the Records and Workflow Management project. During the last year and a half, the requirements study and procurement process have been completed. The RWM prototype phase is in progress. During this phase the infrastructure for an enterprise-wide RWM system will be defined and tested through the development of the prototypes. The prototypes were selected to test imaging, the management of agency documents, the development and testing of workflow processes and the use of electronic forms and electronic signatures. Using a records management system will reduce paper and microfilm storage, particularly duplicate document storage. There will be reduced time in locating documents by allowing easier access of documents through a central storage system and through key-word searches. Workflow features provide a link to internal databases to provide initial form information and the ability to update database upon final approval of the form, streamlining and simplifying the processing of information in the agency.

Library System

Academic advantages to a library system are to increase access to electronic information services and build a foundation for other cooperative programs, such as coordinated development of library collections and shared access to electronic resources. Another advantage includes increased effectiveness of technical processing within the libraries to provide increased access to electronic information. The trend is to move towards a commercially available library system for its advantages of maintainability, standardization, compatibility, lower support costs, and standard interfaces to other packages. Kansas State University installed the Endeavor Library System several years ago. The University of Kansas and Fort Hays State University are currently replacing their systems with the Endeavor package. Wichita State University and Emporia State University plan to replace their existing systems in the very near future. The State Library is currently investigating the possibility of installing a commercially available system.

Kansas Aging Management System

In 1998, the Kansas Information Resources Council (KIRC) approved the KAMIS Initial System project. This system will replace the Client Assessment and Referral System (CARS). KAMIS will provide more reliability and better performance to system users. Its improved data and enhanced analytical capability will reduce Medicaid costs and improve productivity at KDOA and the eleven Area Agencies on Aging state-wide. It will also produce reports for the National Aging Program Information System (NAPIS), a federal requirement currently not being met.

PVD County Assistance Project

Changes in technology have provided opportunities for the counties and the state to improve their appraisal process by acquisition of new equipment and software. The objective of this project will assist Kansas counties by improving their ability to effectively appraise property using up to date hardware and software which will improve analytical and communication processes. Each county will be provided with a PC configured to communicate via email and the Internet. A server for PVD at the state level will be acquired and utilized as a data warehouse. The Macintosh environment in PVD will be replaced with PCs, and GIS workstations for PVD will be acquired.

Geographic Information System

Geographic Information Systems (GIS) technology utilizes location as a reference framework to manage, integrate, and analyze data and information that have spatial characteristics. It is estimated that roughly 80% of the data managed by government agencies is spatial in nature and thus may be referenced to some position on the earth. GIS technology is a powerful tool that can also be used to integrate multiple sets of spatial data thereby creating new information regarding the relationships of the original components. Output from a GIS may be displayed as a map so that large amounts of information may be more easily conveyed and understood. For example, one can look at water quality data on a map of streams and rivers, indexed by quality with other color keyed data, perhaps population or the location of industries. Another application might examine investments in education by school district along with population and other demographic data. The Kansas GIS Initiative is supported through the Kansas Water Office under the oversight of the Governor's GIS Policy Board. The Kansas GIS Initiative was originally established by Governor Hayden in 1989, and currently operates under Governor Graves' Executive Order 95-180. The Board's GIS Strategic Management Plan emphasizes the use of representative processes in establishing partnerships, standards, and shared geographic database resources. A primary goal is to reduce redundant activities among various government agencies in the development of geographic databases. Significant cost-savings can be, and have been, realized through the coordinated development and use of geographic database resources.

General Trends

Under the umbrella of the state strategic plan for information management, agencies have established their direction for IT planning and implementation. The following highlights areas of concentration, which appear in several agencies' plans:

- There is a lot of attention to general improvement of IT infrastructure, especially in the area of data communications (e.g., Local Area Networks and e-mail service). This seems to be taken as a precondition for any major changes in application software.

- Where software development is projected, agencies are favoring development and distribution on platforms other than mainframe computers (i.e., personal or laptop computers located at remote sites, where business activity actually occurs, or on midrange systems servicing a particular agency or division).

- Many agencies are actively pursuing an Internet presence. Initially, this provides the agency with visibility in a rapidly growing medium. Agencies typically plan to move beyond "brochureware," however, to providing public access to agency data and, eventually, actual services on-line. The Information Network of Kansas (INK) is a common, but not universal, choice for developing and hosting agency homepages.

- There is building momentum, especially within some larger, lead agencies, for changing business processes to take advantage of IT opportunities. Key examples of this are document imaging (to replace routing and filing of paper), workflow management (allowing software to route electronic forms and images for action by appropriate staff), video teleconferencing, and a variety of technologies generically referred to as "electronic commerce" (e.g., electronic fund transfers, paperless interaction with contractors).

- One area ripe for coordination among agencies is telecommunication planning. The disparate planning efforts of independent agencies have resulted in a piecemeal approach to defining the overall state network. DISC plans to provide a variety of network services to meet the spectrum of demand from agencies, and many agencies are taking advantage of DISCs TCP/IP network recently established statewide to support SHaRP. The full range of DISC services is available in all state agency locations; however, this capability may be underutilized due to funding shortfalls within the customer agencies or lack of agency planning. Coordinating demand at such locations may reduce the complexity of services which DISC is expected to provide, resulting in cost savings as the network is extended.

Agency Information Technology Summaries

The charts on the following two pages are summaries of information technology expenditures under and over $100,000. "Total FY99 FTE" and "Total FY99 Budget ($K)" are from the Governor's Budget Report approved for FY99. "FY98 IT $K" includes *classified* IT salaries and benefits, DISC mainframe charges, and all vendor payments (equipment, services and consultant fees). Unclassified salaries or telecommunication expenses paid to DISC are not included in these totals. For agency summaries over $100,000, totals have been combined for the following agencies:

- "Department of Corrections" includes correctional facilities statewide.
- "Department of Social and Rehabilitation Services" includes state hospitals and youth centers statewide.
- "Judicial Branch" FTE count includes staff in district courts statewide.
- "Juvenile Justice Authority" includes juvenile facilities statewide.

Agency Information Technology Summaries - Organizations with FY98 IT Expenditures of $100K or More.

Agency	Total FY99 FTE	Total FY99 Budget ($K)	FY 98 IT Expenses ($K)	FY 1998 Inventory Mainframe	Midrange	LAN Server	Wkstation	Micro
* Adjutant General	248.0	$ 17,898.2	$ 246.0	-	-	4	-	82
Administration, Department of	864.9	$ 28,318.2	$ 42,845.6	2	15	15	1	951
Aging, Department on	161.8	$ 324,786.1	$ 762.7	-	1	9	-	235
Agriculture, Department of	327.0	$ 20,553.2	$ 1,564.3	-	1	8	20	301
* Blind, School for the	105.0	$ 4,918.0	$ 231.9	-	-	-	-	40
Commerce and Housing, Department of	134.0	$ 75,359.0	$ 441.3	-	1	-	-	150
* Corporation Commission	212.0	$ 16,359.9	$ 1,259.0	-	1	4	-	200
Corrections, Department of	3,044.5	212,129.7	$ 4,360.8	-	2	19	-	1,201
Deaf, School for the	202.5	$ 7,692.4	$ 124.5	-	-	2	-	124
Education, Department of	239.8	$ 2,433,722.6	$ 841.4	-	-	6	5	381
* Emergency Medical Services Board	13.0	$ 831.0	$ 110.5	-	1	-	-	4
* Fire Marshall	42.0	$ 2,416.3	$ 208.9	-	-	1	-	28
Healing Arts, State Board of	27.0	$ 1,679.9	$ 144.3	-	1	-	-	34
Health and Environment, Department of	973.7	$ 171,724.0	$ 3,917.9	-	5	15	3	1,309
Highway Patrol	794.8	$ 44,287.2	$ 3,153.5	-	8	25	-	376
Historical Society, State	146.5	$ 8,103.2	$ 139.0	-	-	3	-	124
Human Resources, Department of	1,030.5	$ 232,700.4	$ 7,525.9	-	1	47	4	1,154
* Indigents' Defense Services, State Board	169.5	$ 13,588.8	$ 355.8	-	-	6	-	176
Insurance Department	163.5	$ 35,019.1	$ 453.9	-	1	2	-	150
Investigation, Kansas Bureau of	206.5	$ 14,121.2	$ 3,720.4	-	3	-	14	177
Judicial Branch	1,775.0	$ 78,515.0	$ 547.9	-	-	6	-	212
Juvenile Justice Authority	595.0	63,338.2	982.0	-	-	6.0	-	316.0
* Legislature	28.0	$ 10,679.9	$ 104.1	-	-	-	-	176
* Library, State	27.0	$ 6,133.3	$ 105.1	-	-	-	-	24
* Lottery, Kansas	92.0	$ 128,318.3	$ 4,117.3	-	2	-	-	27
* Racing & Gaming commission, Kansas	65.0	$ 5,808.5	$ 222.2	-	1	-	-	34
Regents: Emporia State University	737.6	$ 49,032.5	$ 2,345.1	2	3	5	1	1,721
Regents: Fort Hays State University	692.0	$ 49,269.0	$ 2,623.0	1	5	13	-	1,829
Regents: Kansas State University	3,023.4	$ 253,796.2	$ 15,591.3	1	-	148	345	9,937
* Regents: Pittsburg State University	799.8	$ 61,780.7	$ 1,932.2	-	4	9	3	1,620
Regents: University of Kansas	4,486.5	$ 391,644.7	$ 18,685.9	1	20	149	240	9,228
Regents: University of Kansas Medical Center	4,443.8	$ 339,779.9	$ 12,664.1	-	1	71	7	4,501
Regents: Wichita State University	1,707.2	$ 122,452.9	$ 4,762.1	1	6	11	3	4,098
* Retirement System, KS Public Employee	76.0	$ 487,595.2	$ 615.6	-	2	4	-	126
Revenue, Department of	1,179.5	$ 89,679.8	$ 11,757.9	-	8	30	-	908
Secretary of State	55.0	$ 3,010.5	$ 164.3	-	1	1	-	32
Social & Rehabilitation Services, Department of	6,865.4	1,627,807.0	$ 25,852.2	1	-	115	-	5,756
Tax Appeals, Board of	30.0	$ 1,678.5	$ 156.9	-	1	1	-	37
* Technology Enterprise Corp., Kansas	31.0	$ 19,155.5	$ 156.9	-	-	2	-	27
Transportation, Department of	3,131.5	$ 887,298.7	$ 13,780.7	-	6	100	8	2,393
Treasurer, State	56.5	105,214.4	382.5	-	-	6.0	-	61.0
Veterans Affairs, Commission on	321.8	$ 9,869.5	$ 129.0	-	-	2	-	95
Wildlife and Parks, Kansas Department of	395.3	$ 45,049.3	$ 684.7	-	1	5	-	324

*Agency did not submit an IT plan for FY 2000, therefore, FY 98 inventory was carried over from the FY 99 annual report.

Agency Information Technology Summaries - Organizations with FY98 IT Expenditures Less Than $100K.

Agency	Total FY99 FTE	Total FY99 Budget ($K)	FY 98 IT Expenses ($K)	FY 1998 Inventory Mainframe	Midrange	LAN Server	Wkstation	Micro
* Abstracters' Board of Examiners	-	$ 19.1	$ -	-	-	-	-	-
* Accountancy, Board of	3.0	$ 179.0	$ 17.3	-	-	-	-	4
* Animal Health Department	29.0	$ 1,878.6	$ 39.4	-	-	-	-	14
* Arts Commission	8.0	$ 1,919.0	$ 14.1	-	-	-	-	6
* Attorney General	85.8	$ 18,709.2	$ 82.8	-	1	2	-	90
Bank Commissioner	70.0	$ 3,803.3	$ 54.2	-	-	2	-	69
* Barbering, Kansas Board of	1.5	$ 106.4	$ 0.6	-	-	-	-	2
* Behavioral Sciences Regulatory Board	6.5	$ 374.8	$ 15.8	-	-	-	-	7
* Citizens Utility Ratepayer Board	3.0	$ 376.7	$ 6.5	-	-	-	-	4
Conservation Commission	14.0	$ 11,125.0	$ 7.3	-	-	1	-	14
Consumer Credit Commissioner	7.0	$ 405.4	$ 2.2	-	-	-	-	8
* Cosmetology, Board of	11.0	$ 625.6	$ 0.1	-	-	1	-	6
* Credit Unions, Department of	12.0	$ 777.1	$ 0.2	-	-	-	-	16
* Dental Board	2.4	$ 219.8	$ 1.4	-	-	-	-	3
Fair, State	18.0	$ 4,432.7	$ 31.3	-	-	-	-	16
* Governmental Standards and Conduct	9.6	$ 503.4	$ 6.5	-	-	-	-	13
Governor, Office of the	32.1	$ 1,811.0	$ 48.9	-	-	1	-	30
* Grain Inspection Department	-	$ -	$ 26.9	-	-	-	-	30
* Guardianship Program, Kansas	12.0	$ 1,122.7	$ 41.1	-	-	1	-	13
Health Care Stabilization Fund	16.0	$ 25,868.5	$ 39.0	-	-	1	-	16
* Hearing Aid Board of Examiners	-	$ 14.5	$ -	-	-	-	-	-
* Human Rights Commission	40.0	$ 1,978.7	$ 12.8					
* Judicial Council	5.0	$ 297.5	$ 1.1	-	-	-	-	4
* Kansas Development Finance Authority			$ -					
* Kansas, Inc.	5.0	$ 339.2	$ 27.5	-	-	-	-	5
* Legislative Coordinating Council	13.0	$ 598.7	$ 0.0					
Legislative Research Department	37.0	$ 2,346.8	$ 47.0	-	1	4	6	42
Lieutenant Governor	3.0	$ 128.8	$ -					
Mortuary Arts, Board of	3.0	$ 188.6	$ 12.2	-	-	-	-	5
* Nursing, Board of	17.5	$ 1,171.4	$ 63.4	-	-	1	-	16
* Ombudsman for Corrections	4.0	$ 191.9	$ 0.7					
* Optometry, Board of Examiners In	1.0	$ 83.0	$ 0.3	-	-	-	-	1
* Parole Board, Kansas	4.0	$ 488.8	$ 1.1	-	-	-	-	5
* Pharmacy, Board of	6.0	$ 504.3	$ 8.9	-	-	-	-	6
* Post Audit, Legislative Division of	22.4	$ 1,630.6	$ 1.3	-	-	1	-	31
* Real Estate Appraisal Board	3.0	$ 174.7	$ 7.1	-	-	-	-	2
Real Estate Commission	14.0	$ 637.9	$ 5.1	-	1	-	-	10
Regents, Board of	18.0	$ 48,386.7	$ 4.1	-	-	1	-	10
* Revisor of Statutes	26.0	$ 2,223.4	$ 80.8	-	-	2	-	27
Securities Commissioner of Kansas	27.0	$ 1,770.6	$ 42.3	-	1	-	-	28
* Sentencing Commission, Kansas	13.0	$ 6,060.4	$ 23.8	-	-	-	-	11
* Technical Professions, Board of	6.0	$ 469.3	$ 9.5	-	-	-	-	5
* Veterinary Examiners, Board of	3.0	$ 244.2	$ 1.9	-	-	-	-	3
Water Office, Kansas	22.5	$ 5,895.2	$ 45.3	-	-	2	1	37
* Wheat Commission, Kansas	8.0	$ 3,347.7	$ 25.0	-	-	-	-	8

*Agency did not submit an IT plan for FY 2000, therefore, FY 98 inventory was carried over from the FY 99 annual report.

Summary of Agency IT Plans

The following section contains an agency summary of IT plans submitted by 41 state agencies. Each summary demonstrates how IT investments support business requirements. The same criteria is used as stated in the previous section for identifying FY 98 and 99 budget, FTE and IT expenditures. Each summary includes agency description, mission, budget information, IT physical assets, IT organization, major business applications, IT accomplishments for FY 98 and IT objectives for the future.

Administration, Department of CODE: 173

INCLUDES:
Accounts & Reports
Budget
Personnel Services
Purchases
Facilities Management (includes Motor Pool)
Printing
Architectural Services
Information Systems and Communications
Legal Services

MISSION: The Department of Administration shall be a central service resource for Kansas government functions. The Department shall provide quality professional and technical service for governmental functions and the citizens of Kansas.

FY99 BUDGET: **FTE:** 864.9 **$K:** 28,318.2

FY98 IT EXPENDITURES ($K): 42,845.6 (This includes off-budget expenditures)

FY98 IT STAFF:

IT FUNCTIONAL AREA	Off-Budget FY 98 ACTUAL FTE	On-Budget FY 98 ACTUAL FTE	Total FY 98 ACTUAL FTE
General Management and Administration	27.5	3.0	30.5
Central Mail	13.0	.0	13.0
Customer Service, Training, LAN Admin.	15.0	3.0	18.0
Application Maintenance and Enhancement	.0	17.0	17.0
Application Development	.0	4.0	4.0
Year 2000 Mitigation/Repair	4.0	.0	4.0
Data Administration Data Analysis/Validation and Database Administration	7.0	.0	7.0
Network Engineering, Security, Technical Management and Support	50.4	.0	50.4
Computer Operations, Management and Technical Support	39.0	.0	39.0
Computer Technical Support	14.0	2.0	16.0
Chief Information Architect Office	3.0	1.0	4.0
Data Entry	.0	11.0	11.0
TOTAL	173.0	41.0	214.0

FY98 IT PHYSICAL ASSETS:

Mainframe:	2	Amdahl 5995-5670ME Amdahl 1100A
Midrange:	15	Sun SPARC 2000 (Prod/Test) (2) Sun SPARC 1000 (Devel) Sun Enterprise 4000 (Prod/Revenue/Test) (3) Sun Enterprise 4000 (SHaRP) AS/400 (2) Sun Ultra SPARC 2 Intel PC (2) Tandem 6100 System 36 Penta Typsetter
LAN Server:	15	(Includes Governor and Lt. Governor's Office)
Workstation:	1	
Microcomputer:	951	
IBM-compatible:	951	
Apple:	0	

ORGANIZATION: **Administration, Department of, (continued)**

FY98 MAJOR APPLICATIONS:

Statewide Human Resources and Payroll (SHaRP)	[PC/Unix]
Statewide Accounting and Reporting System (STARS)	[Mainframe]
STARS Reporting System Ad Hoc	[Mainframe]
Kansas Debt Recovery System (KDRS)	[Mainframe]
Budget System	[Mainframe]
Motor Pool Asset Management and Billing	[Mainframe]
Worker's Compensation Claims System	[PC LAN/WAN]
Purchasing System	[AS/400]
KANSAN	[Mainframe]
Mail Processing (PTI)	[PC/Midrange]

FY98 IT ACCOMPLISHMENTS: Information technology support for the Department is provided by the Division of Information Systems and Communications (DISC). DISC is the major service provider to state agencies for mainframe computer processing and voice, data and video networks. IT accomplishments for the Department include the design and installation of development workstations and server, upgraded PeopleSoft upgrade for SHaRP from 4.1 to 7.0, implemented Y2K mission critical applications, and SHaRP archiving was started as well as the implementation of the Full Payroll Cycle. Other accomplishments for the Department of Administration included reduced KANSAN rates from 13 to 10 cents; established DASD rate to return over-recoveries and to consolidate storage management strategies for virtual tape; and upgraded the operating system, mainframe hardware, and server farm hardware to accommodate new or expanded applications, as well as, year 2000 mitigation. Numerous software product upgrades were also made on the MVS platform as well as on the AS400. The number of mainframe supported databases were reduced to eliminate the CINCOM's SUPRA database. The Bureau of Telecommunications converted voice services from the dedicated backbone network to dedicated and switched virtual networking; upgraded the voice mail system, OS/390, and software leases in CMS6000, CMS400 and HP openview; implemented virtual private network service for KDOR, enhanced switching architectures in the Capitol complex campus, and ATM backbone transport in the campus LAN; and installed 200 miles of copper wire (CAT5 & CAT3) and six miles of fiber cable. The Bureau of Customer Services installed and supported the Authority Network, upgraded and installed LAN hardware/software, and implemented statewide e-mail directory services.

IT OBJECTIVES FOR THE FUTURE: DOA, like many agencies, is faced with replacing legacy computer applications that are from six to ten years old. This IT infrastructure must be rebuilt to sustain the critical functions they support. These needs come at a time when IT architectures are rapidly changing toward network computing and client/server application platforms. The Department must reinvest in new applications to take advantage of these new architectures. SHaRP is the cornerstone application for this direction, challenging the Department to maximize the benefit from process re-engineering, from the client/server approach to end-user computer, and by improving service delivery that the new network infrastructure affords. The Department will continue to aggressively pursue making all application systems and infrastructure Year 2000 ready. At the same time, the Department will complete the installation of a Year 2000 compliant statewide Purchasing System. DISC plans to expand the UNIX data center, migrate SHaRP system to a SUN Sparc/4000 platform, establish facilities management services for agencies to support UNIX/Oracle based applications and migrate the shared MVS workloads to CMOS based processors while improving "just in time" resources. The Chief Information Technology Architect will create an IT statewide architecture based on commonly accepted standards and develop standards based on systems development lifecycle. This includes developing guidelines for certifying project managers for all development projects over $500,000. A web site reporting system will also be implemented for the Statewide Information Management Plan with full participation by all state agencies.

Aging, Department of — CODE: 039

INCLUDES:
Office of the Secretary
Executive Services
Administrative Services
Senior Services
Advocacy Services
Program Grants

MISSION: The Kansas Department on Aging serves all Kansas seniors by using public and private resources to improve their security, dignity and independence.

FY99 BUDGET: **FTE:** 161.8 **$K:** 324,786.1

FY98 IT EXPENDITURES ($K): 762.7

FY98 IT STAFF:

IT FUNCTIONAL AREA	FY 98 ACTUAL FTE
General Management and Administration	2.5
Application Maintenance and Enhancement	0.3
Application Development	4.2
Year 2000 Mitigation/Repair	0.1
Data Administration Data Analysis/Validation and Database Administration	0.1
Network Engineering, Security, Technical Management and Support	2.8
Computer Operations, Management and Technical Support	2.0
Data Entry	.0
TOTAL	12.0

FY98 IT PHYSICAL ASSETS:

Mainframe:	0	
Midrange:	1	Sun E3000
LAN Server:	9	
Workstation:	0	
Microcomputer:	235	
IBM-compatible:	235	
Apple:	0	

FY98 MAJOR APPLICATIONS:

Client Assessment and Referral System (CARS) [Hewlett-Packard NetServer 5/166 LS2]

FY98 IT ACCOMPLISHMENTS: A strategic Information Management Plan was developed which depicts business relationships and communication flows among KDOA, Area Agencies on Aging, aging service providers, program customers and various other entities. The Plan calls for web-centric computing as the primary model for user interaction with a new master database—a change in direction for the Kansas Aging Management Information System (KAMIS). The initial funding for KAMIS (to replace CARS) was authorized and the development contract awarded to CTA, Inc. The KIRC project was also approved based on updated contract costs. Other achievements include upgrading the local area network file server to a new Compaq ProLiant 1600; moved Topeka-area agency computers into new office spaces consolidating 125 users from three sites to one; installed a Compaq ProLiant 3000 file server; and upgraded all users to Windows 95, NetWare 4.11, and GroupWise 5.2.

ORGANIZATION: **Aging, Department on, (continued)**

IT OBJECTIVES FOR THE FUTURE: The agency plans to develop (or procure) and install the initial KAMIS software and terminate CARS. Agency management will monitor agency IT investments to validate their actual rate of return and continued functional viability. Two servers are planned for KAMIS; one as the application/web server and the other as the database server. A third server, would act as an emergency backup to either one or both of the primary servers in case of their failure. It would also provide a complete KAMIS environment for development and testing of new software without impacting the on-line servers. A prototype for an automated interface between KAMIS and the Medicaid Management Information System (MMIS) will be produced. This will allow KAMIS users to enter and retrieve MMIS data without being aware of their connection to the MMIS mainframe. A capability for mobile caseworkers and Area Agency offices to exchange data with KAMIS without live connection will also be provided. The CIA and ITAB will develop and coordinate plans for establishing electronic commerce within public agencies for private use. The KAMIS database will be integrated to link non-structured objects with existing agency data. Funding for this task will be proposed in the agency budget for FY 2001 and 2002. The KAMIS network capability and contemporary technologies will be used for remote education and testing to provide required annual training for Case Managers online, statewide. In addition KDOA document management and workflow will be automated by adopting the software successfully implemented by KDOT.

Agriculture, Department of — CODE: 046

INCLUDES:
Agriculture Commodities Assurance Program (ACAP)
Dairy Program
Meat and Poultry Program
Weights and Measures Program
Laboratories Program
Water Resources Program
Plant Protection Program
Pesticide Use Program
Commodities Commission
Field sites in 72 cities and towns

MISSION: To administer effective and efficient regulatory programs that, if challenged, will be proven credible.

FY99 BUDGET: **FTE:** 327.0 **$K:** 20,553.2

FY98 IT EXPENDITURES ($K): 1,564.3

FY98 IT STAFF:

IT FUNCTIONAL AREA	FY 98 ACTUAL FTE
General Management and Administration	1.0
Application Maintenance and Enhancement	2.0
Application Development	4.5
Year 2000 Mitigation/Repair	0.5
Data Administration Data Analysis/Validation and Database Administration	0.5
Network Engineering, Security, Technical Management and Support	1.0
Computer Operations, Management and Technical Support	1.0
Data Entry	11.0
TOTAL	21.5

FY98 IT PHYSICAL ASSETS:

Mainframe:	0	
Midrange:	1	
LAN Server:	8	
Workstation:	20	
Microcomputer:	301	
IBM-compatible:		301
Apple:		0

FY98 MAJOR APPLICATIONS:
Automated Office Management System (AOMS)
Water Rights Information System (WRIS)
Automated Inspection Programs (AIP)
Kansas Automated Plant Pesticide Regulatory Information System (KAPPRIS)
KDA Integrated Information System (KDAIIS)

FY98 IT ACCOMPLISHMENTS: To meet and exceed customer service, the department continues to enhance its automation capability through conversion of old coaxial data cabling (10 Base 2) with new multi-wire category 5 cabling (10 Base T). Additionally, the speed of the headquarters operations was increased to accept 100 megabytes per second on the KDA LAN. The department internally upgraded over 25 older 486 system and installed a new primary LAN server. In order to reduce telecommunications and automation cost, the Weights & Measures and Laboratory programs were consolidated at a new facility at Forbes Field. The first five of fifty licensing/inspection programs were migrated to the new KDA Integrated Information System application.

ORGANIZATION: **Agriculture, Department of, (continued)**

IT OBJECTIVES FOR THE FUTURE: The strategic outlook for KDA is to continue to replace or upgrade current systems at a continued rate of 20% per year. Over a five-year program 100% of all assets would be replaced which would keep the department abreast of new technology. The ultimate strategy is to have a one-stop shop for all licensing issues. These changes will improve the way the department provides customer service by decreasing the time to process requests and providing usable management reports on various programs and to ensure the effectiveness and efficiency of these programs. Implementation of a Automated Document Handling and Management System (ADHMS) with workflow technology for the department would greatly reduce the paper utilization and hard file requirements. These type of changes would ultimately reduce overall operating costs through the reduction of operating floor space.

Bank Commissioner, Office of the State CODE: 094

ORGANIZATION: Bank Commissioner, Office of the State

INCLUDES:

MISSION: To ensure the fair and reliable supervision of state chartered banks, trust companies/departments, and savings and loans; educate regulated establishments to promote a better understanding of an compliance with laws and regulations; preserve the dual banking system through the chartering of new state banks, maintenance of existing state charters, and equitable regulation of state banks; and promote and maintain public trust in the state financial system.

FY99 BUDGET: **FTE:** 70 **$K:** $3,803.3

FY98 IT EXPENDITURES ($K): 54.2

FY98 IT STAFF:

IT FUNCTIONAL AREA	FY 98 ACTUAL FTE
General Management and Administration	.0
Application Maintenance and Enhancement	.0
Application Development	.0
Year 2000 Mitigation/Repair	.0
Data Administration Data Analysis/Validation and Database Administration	.0
Network Engineering, Security, Technical Management and Support	.0
Computer Operations, Management and Technical Support	.0
Data Entry	.0
TOTAL **(Breakdown Not Provided—Non-IT personnel are in charge)**	2.0

FY98 IT PHYSICAL ASSETS:

Mainframe:	0	
Midrange:	0	
LAN Server:	2	
Workstation:	0	
Microcomputer:	69	
IBM-compatible:		69
Apple:		0

FY98 MAJOR APPLICATIONS: None provided.

FY98 IT ACCOMPLISHMENTS: None provided.

IT OBJECTIVES FOR THE FUTURE: None provided.

Commerce and Housing, Department of CODE: 300

INCLUDES: Agricultural Products Development Division
Business Development Division
Community Development Division
Housing Division
Trade Development Division
Travel & Tourism Division

MISSION: To provide leadership to ensure economic opportunity for Kansas.

FY99 BUDGET: **FTE:** 134.0 **$K:** 75,359.0

FY98 IT EXPENDITURES ($K): 441.3

FY98 IT STAFF:

IT FUNCTIONAL AREA	FY 98 ACTUAL FTE
General Management and Administration	.0
Application Maintenance and Enhancement	.0
Application Development	.0
Year 2000 Mitigation/Repair	.0
Data Administration Data Analysis/Validation and Database Administration	.0
Network Engineering, Security, Technical Management and Support	.0
Computer Operations, Management and Technical Support	.0
Data Entry	.0
TOTAL **(No Breakdown Provided)**	4.0

FY98 IT PHYSICAL ASSETS:

Mainframe:	0	
Midrange:	1	IBM AS/400
LAN Server:	0	
Workstation:	0	
Microcomputer:	150	
IBM-compatible:	150	
Apple:	0	

FY98 MAJOR APPLICATIONS:

Program Management Database	[AS/400]
KATIE Travelguide	[Windows NT contracted by MRA]
Buildings, Sites and Offices	[AS/400]
Kansas Cavalry Roster	[AS/400]
Minority Business Directory	[AS/400]
Pride Signs	[AS/400]
Film Commission Negative Tracking	[AS/400]
Agency Mailing List	[AS/400]

FY98 IT ACCOMPLISHMENTS: The Department of Commerce and Housing manages many different programs with a relatively small number of people. Accomplishments for FY98 include installation of phase one of the agency's TCPIP Ethernet LAN; installed Lotus Mail for all associates and a LAN in the Wichita office; replaced Windows 3.1 with Windows 95 on all PCs and provided dial up connections in remote locations; and replaced 16 older PCs and completed the agency Intranet web site prototype. The KATIE Travel Guide system was completed. This Internet based system is used by agency staff and Topeka Correctional Facility prisoners who are under contract to answer the travel requests for the State of Kansas.

ORGANIZATION: **Commerce and Housing, Department of (continued)**

IT OBJECTIVES FOR THE FUTURE: The Department plans to provide appropriate technology and expertise to agency associates to assist them in performing their job duties. The Department intends to put all associates on the LAN within the next 18 months and continue to integrate agency databases so that information is accessible and compatible with other data. Emphasis will be made towards visual programming and specifically Java and object oriented design. Objectives also include providing Internet access to public information on the agency's AS/400 system and integration of all agency programs in the Program Management Database (PMD). The scope of the PMD will be extended to all agency administered programs.

Conservation Commission CODE: 634

INCLUDES:

MISSION: To protect and enhance Kansas' natural resources through the development, implementation, and maintenance of policies, guidelines, and programs designed to assist local governments and individuals in conserving the state's renewable resources.

FY99 BUDGET: **FTE:** 14 **$K:** $11,125.0

FY98 IT EXPENDITURES ($K): 7.3

FY98 IT STAFF:

IT FUNCTIONAL AREA	FY 98 ACTUAL FTE
General Management and Administration	.0
Application Maintenance and Enhancement	.0
Application Development	.0
Year 2000 Mitigation/Repair	.0
Data Administration Data Analysis/Validation and Database Administration	.0
Network Engineering, Security, Technical Management and Support	.0
Computer Operations, Management and Technical Support	.0
Data Entry	.0
TOTAL **(No dedicated specific staff)**	0.0

FY98 IT PHYSICAL ASSETS:

Mainframe:	0	
Midrange:	0	
LAN Server:	1	
Workstation:	0	
Microcomputer:	14	
IBM-compatible:		14
Apple:		0

FY98 MAJOR APPLICATIONS: None provided.

FY98 IT ACCOMPLISHMENTS: None provided.

IT OBJECTIVES FOR THE FUTURE: None provided.

Consumer Credit Commissioner CODE: 454

INCLUDES:

MISSION: To protect consumers from unfair practices by suppliers of consumer credit by enforcing the laws governing consumer credit transactions. The agency will encourage the development of fair and economically sound consumer credit practices and foster competition among suppliers of consumer credit so that consumers may obtain credit at a reasonable cost and favorable terms.

FY99 BUDGET: **FTE:** 7 **$K:** $405.4

FY98 IT EXPENDITURES ($K): 2.2

FY98 IT STAFF:

IT FUNCTIONAL AREA	FY 98 ACTUAL FTE
General Management and Administration	.0
Application Maintenance and Enhancement	.0
Application Development	.0
Year 2000 Mitigation/Repair	.0
Data Administration Data Analysis/Validation and Database Administration	.0
Network Engineering, Security, Technical Management and Support	.0
Computer Operations, Management and Technical Support	.0
Data Entry	.0
TOTAL **(No dedicated staff)**	0.0

FY98 IT PHYSICAL ASSETS:

Mainframe:	0	
Midrange:	0	
LAN Server:	0	
Workstation:	0	
Microcomputer:	8	
IBM-compatible:		8
Apple:		0

FY98 MAJOR APPLICATIONS: None provided.

FY98 IT ACCOMPLISHMENTS: None provided.

IT OBJECTIVES FOR THE FUTURE: None provided.

Corrections, Department of CODE: 521

INCLUDES:

El Dorado Correctional Facility Central
El Dorado Correctional Facility North
El Dorado Correctional Facility East
Ellsworth Correctional Facility
Hutchinson Correctional Facility Central Unit
Hutchinson Correction Facility East Unit
Lansing Correctional Facility Central & East
Lansing Correctional Facility South Unit
Larned Correctional Mental Health Facility
Norton Correctional Facility Central
Norton Correctional facility East
Topeka Correctional Facility Diagnostic Units
Topeka Correctional Facility West
Winfield Correctional Facility
Wichita Work Release Facility
Parole offices in 22 cities

MISSION: The Department of Corrections, as part of the Criminal Justice System, contributes to the public safety by exercising reasonable, safe, secure, and human control of offenders while actively encouraging and assisting them to become law-abiding citizens.

FY99 BUDGET: **FTE:** 3,044.5 **$K:** 212,129.7

FY98 IT EXPENDITURES ($K): 4,360.8

FY98 IT STAFF:

IT FUNCTIONAL AREA	FY 98 ACTUAL FTE
General Management and Administration	2.0
Application Maintenance and Enhancement	2.0
Application Development	3.0
Year 2000 Mitigation/Repair	1.0
Data Administration Data Analysis/Validation and Database Administration	.5
Network Engineering, Security, Technical Management and Support	1.0
Computer Operations, Management and Technical Support	19.5
Data Entry	.0
TOTAL **(No dedicated staff)**	29.0

FY98 IT PHYSICAL ASSETS:

Mainframe:	0	
Midrange:	2	IBM AS/400 (2)
LAN Server:	19	
Workstation:	0	
Microcomputer:	1,201	
IBM-compatible:	1,201	
Apple:	0	

FY98 MAJOR APPLICATIONS:

Offender Management Information System (OMIS)	[AS/400]
Field Supervision Case Management Application	[IBM Server]
Job Tech	[IBM AS/400]

FY 98 IT ACCOMPLISHMENTS: The Department of Corrections has been using information technology as a mechanism to bring formerly autonomous correctional facilities into commonality in procedures and recordkeeping. Completion of Phrophet Projections, SCAAP program for illegal aliens, video conferencing system, OMIS Re-Engineering study, and Clean Sweep and Good Time Programming were key to the agency's success for FY 98.

ORGANIZATION: **Corrections, Department of (continued)**

IT OBJECTIVES FOR THE FUTURE: The Department is building an infrastructure that will allow its users to participate in the CJIS network, improve services provided by the productivity software and specialized applications and acquire the skills necessary to employ all of the information systems services. Plans are in place for the Field Supervision Case Management Application (FSCMA) to improve parole and community corrections' productivity by providing a user friendly and web based data entry, storage and retrieval computer interface. System proposals are also in place for the Enterprise Wide Photo Imaging System to improve the Department's ability to identify all staff and inmates. It will also assist in monitoring visitation activity. The Document Imaging System is proposed to reduce the dependence on paper files, improve accessibility to old records, reduce floor space for records and enforcement document management techniques. Internet/Intranet/Extranet Support will improve the manner in which data is retrieved and timeliness of the analysis of the data being made available to the users. The user can use the browser as a common interface to access most Department information resources and other external information sources. The Facility Maintenance Management System will improve the department's ability to collect, retrieve and analyze facility maintenance information at all levels. Transition to 800 MHz Radios will provide seamless connectivity to all public safety agencies utilizing the band. The ability to trunk radio frequencies across agency frequencies will provide a common radio interface for all agencies. Future data transmission functions will be best supported by a dedicated range of frequencies that is not available to the public or commercial enterprises.

Deaf, School for the CODE: 610

INCLUDES: Administrative Services
Instructional Services
Support Services

MISSION: Total accessibility to language and educational excellence in a visual environment. Accessibility to emerging technologies to learn and work in a technologically-advanced society.

FY99 BUDGET: **FTE:** 202.5 **$K:** 7,692.4

FY98 IT EXPENDITURES ($K): 124.5

FY98 IT STAFF:

IT FUNCTIONAL AREA	FY 98 ACTUAL FTE
IT FUNCTIONAL AREA	FY 98 ACTUAL FTE
General Management and Administration	.0
Application Maintenance and Enhancement	.0
Application Development	.0
Year 2000 Mitigation/Repair	.0
Data Administration Data Analysis/Validation and Database Administration	.0
Network Engineering, Security, Technical Management and Support	1.0
Computer Operations, Management and Technical Support	.0
Data Entry	.0
TOTAL **(Part-time)**	1.0

FY98 IT PHYSICAL ASSETS:

Mainframe:	0	
Midrange:	0	
LAN Server:	2	
Workstation:	0	
Microcomputer:	124	
IBM-compatible:		94
Apple:		30

FY98 MAJOR BUSINESS APPLICATIONS:
Pentium 200 Server
SASIxp (Grading & Student Info. Database)
Office 97
Novell Groupwise

FY98 IT ACCOMPLISHMENTS: The elementary center library LAN was connected with the Roberts building library LAN through Olathe Public Schools WAN. The Roth and Roberts buildings were connected with underground conduit and fiberoptic cable. Projects were also initiated to install cabling, hardware and software for the communication network in the Roberts building and to manage student information through the campus network.

IT OBJECTIVES FOR THE FUTURE: As renovation of buildings on campus continues, plans have been made to equip buildings with communication network hardware and software as well as installing fiberoptics cabling. Plans also include providing video conferencing and equipping classrooms with smartboards (2001). Instructional technology projects for students at KSSD plan for a graphic design lab, multimedia lab, writing lab and middle school technology center.

Education, Department of — CODE: 652

INCLUDES:

- Agency Budgeting and Programs Accounting
- General Administration: LEA Finance
- Computer Information and Communications Services
- General Administration Teacher Certification
- General Administration Educate America Act
- Nutrition Services
- Technical Education Outcomes
- Student Support Services
- Technical Education
- Teacher Education

MISSION: To prepare each person with the living, learning, and working skills and values necessary for caring, productive, and fulfilling participation in our evolving global society.

FY99 BUDGET: **FTE:** 239.8 **$K:** 2,433,722.6

FY98 IT EXPENDITURES ($K): 841.4

FY98 IT STAFF:

IT FUNCTIONAL AREA	FY 98 ACTUAL FTE
General Maintenance & Administration	1.0
Lead Application Development	4.0
Application Maintenance and Enhancement	1.0
Application Development	5.0
Year 2000 Mitigation/Repair.	2.0
Data Administration, Data Analysis/ Validation Database Administration	2.0
Network Engineering, Security, Technical Management and Support	4.0
Computer Operations, Management and Technical Support	1.0
Data Entry	0.0
TOTAL	20.0

FY98 IT PHYSICAL ASSETS:

Mainframe:	0	
Midrange:	0	
LAN Server:	6	
Workstation:	5	
Microcomputer:	381	
IBM-compatible:		160
Apple:		221

FY98 MAJOR APPLICATIONS:

- Adult Basic Education (ABE)
- Annual Report
- Annual Statistical Report (18E)
- Assessed Valuation
- Building Report
- Bureau of Census
- Certified Personnel Reporting System (Turnaround)
- Child/Adult Care Food Program (CACFP)
- Driver's & Motorcycle Education
- Federal Payments
- Film Library
- Outcomes Accreditation School Information (OASIS)
- School Accreditation
- Special Education Personnel Reporting System
- State Aid General Fund, Supplemental General & Capital Improvement
- State Special Education Catastrophic/ Transportation Aid
- Superintendent's Organizational Report (SO-66)

ORGANIZATION: **Education, Department of(continue)**

Food Service (FSIMS)
General Educational Development (GED)
Indirect Cost Rates
Internet Homepage
Intranet Homepage
Local Consolidated Plan (LCP)
Teacher Certification
Information System
Technology Assistance for Kansas Educators (TAKE)
Time Entry/Personnel
USD Budgets
Vocational Education (VocEd)
Voucher System

FY98 IT ACCOMPLISHMENTS: In the Department's pursuit to eliminate as much paper processing as possible, several systems were converted from paper collection and data entry to electronic diskettes. These systems have significantly improved accuracy, such as: USD budgets, annual QPA report, SO66 report, 18E report, annual building report, vocational education, nutrition services, teacher certification, and certified personnel. Timeliness of some data collected has been reduced from three to four months to less than one month. Over 90% of the schools and 95% of the district offices are using these systems to improve quality and performance. Other accomplishments include upgrading several in-house developed applications and continued progress to modify and work on the TAKE a STEP project. This project will collaborate with the ongoing SEA effort to provide strategies and activities that directly address the most pressing professional needs of teachers in Kansas.

IT OBJECTIVES FOR THE FUTURE: KSDE is committed to maintain cost-effective network operations and to achieve full utilization of computer hardware/software. To meet KSDE future information system needs, an upgrade to the main file server is needed. Plans are in place to add one processor, memory and storage to accommodate traffic utilization. The final phase of upgrading the KSDE network infrastructure from 10 MB backbone to switched 100 MB fiber backbone is underway. The final phase of the network upgrade is to increase the bandwidth from network backbone of 100 MB to full-duplex fast Ethernet connection running 200 MB between file servers and the backup system. KSDE is also looking into establishing a partnership with the CISCO company to build state-of-the-art network systems that meet future goals and objectives; such as, development of electronic data interchange and collect data from 304 school districts online via the Internet and using EDI technology. Other plans include: migrating from Mac computers to Intel-based PC systems running Windows environment for the next three years, consolidating all backup systems to one system and establishing a reliable backup routine for all mission critical hardware/software, developing an automated system that will support electronic data interchange between schools and offices to increase the response time and provide accurate information to customers, utilizing network tools for diagnosing and troubleshooting LAN/WAN problems, creating a community college students database, upgrading the ITV equipment and infrastructure and remote access system, and developing a Web Centric Computing environment which includes upgrading the Internet homepage server to accommodate 1,600 school districts to access the system and input data online.

Fair, Kansas State — CODE: 373

INCLUDES:

MISSION: To act as the showcase for Kansas agriculture, commerce and industry; to provide for education and entertainment; and to present a comprehensive format that meets the expectations of Kansans.

FY99 BUDGET: **FTE:** 18 **$K:** 4,432.7

FY98 IT EXPENDITURES ($K): 31.3

FY98 IT STAFF:

IT FUNCTIONAL AREA	FY 98 ACTUAL FTE
General Management and Administration	.0
Application Maintenance and Enhancement	.0
Application Development	.0
Year 2000 Mitigation/Repair	.0
Data Administration Data Analysis/Validation and Database Administration	.0
Network Engineering, Security, Technical Management and Support	.0
Computer Operations, Management and Technical Support	.0
Data Entry	.0
TOTAL **(No dedicated staff)**	0.0

FY98 IT PHYSICAL ASSETS:

Mainframe:	0	
Midrange:	0	
LAN Server:	0	
Workstation:	0	
Microcomputer:	16	
IBM-compatible:		16
Apple:		0

FY98 MAJOR APPLICATIONS: None Provided.

FY98 IT ACCOMPLISHMENTS: None Provided.

IT OBJECTIVES FOR THE FUTURE: None Provided.

Healing Arts, State Board of — CODE: 105

INCLUDES:
Licensing and Renewal
Disciplinary
Enforcement and Litigation
Impaired Provider Programs
Information and Education

MISSION: To protect the public by authorizing only those persons who meet and maintain certain qualifications to engage in eleven health care professions in this State. Also, to utilize the least restrictive yet effective means to protect the public from incompetence, unprofessional conduct or other proscribed practice by persons who have been granted authority to practice in this State.

FY99 BUDGET: **FTE:** 27.0 **$K:** 1,679.9

FY98 IT EXPENDITURES ($K): 144.3

FY98 IT STAFF:

IT FUNCTIONAL AREA	FY 98 ACTUAL FTE
General Management and Administration	.60
Application Maintenance and Enhancement	.50
Application Development	.30
Year 2000 Mitigation/Repair	.05
Data Administration Data Analysis/Validation and Database Administration	.20
Network Engineering, Security, Technical Management and Support	.20
Computer Operations, Management and Technical Support	.15
Data Entry	0.00
TOTAL	2.00

FY98 IT PHYSICAL ASSETS:

Mainframe:	0	
Midrange:	1	AS/400
LAN Server:	0	
Workstation:	0	
Microcomputer:	34	
IBM-compatible:	34	
Apple:	0	

FY98 MAJOR APPLICATIONS:

Licensing and Renewal	AS/400
Disciplinary	AS/400
Enforcement and Litigation	AS/400
Impaired Provider Programs	AS/400
Information and Education	AS/400

FY98 IT ACCOMPLISHMENTS: The Board of Healing Arts has worked towards expanding its presence on the Internet by providing the agency Newsletter on the agency's home page. Eighteen new personal computers were purchased in preparation for imitating an agency local area network and Category 5 wiring was installed in the facility to serve the planned local area network.

ORGANIZATION: **Board of Healing Arts (continued)**

IT OBJECTIVES FOR THE FUTURE: Over the next five years, the Kansas Board of Healing Arts is determined to upgrade its ability to provide its customers with prompt, complete, and efficient service. The agency intends to expand its presence on the Internet and in the area of E-commerce by implementation of an agency Local Area Network. This will enable the agency to provide its key staff members with electronic mail, internal file sharing and Internet access. The Kansas Board of Healing Arts also desires to acquire a new AS/400. This computer will serve as the agency's main computing source for the next several years and will enable the agency to take advantage of a myriad of emerging technologies. With the acquisition of a server model AS/400, the conversion of the agency's legacy RPG programs (Licensure System and Current Disciplinary System) will be possible using an object oriented tool such as Lotus Notes and Domino.

Health and Environment, Department of CODE: 264

MISSION: To promote and protect the health of Kansans through efficient and effective public health programs and services and through preservation, protection and remediation of natural resources and the environment.

INCLUDES:
General Management
Center for Health and Environmental Statistics
Division of Health
Division of Environment
Kansas Health and Environment Laboratories

FY99 BUDGET: **FTE:** 973.7 **$K:** 171,724.0

FY98 IT EXPENDITURES ($K): 3,917.9

FY98 IT STAFF:

IT FUNCTIONAL AREA	FY 98 ACTUAL FTE
General Management and Administration	4.0
Application Maintenance and Enhancement	Incl. Below
Application Development	17.0
Year 2000 Mitigation/Repair	Incl. Below
Data Administration Data Analysis/Validation and Database Administration	1.0
Network Engineering, Security, Technical Management and Support	5.0
Computer Operations, Management and Technical Support	17.0
Data Entry	.0
TOTAL	44.0

FY98 IT PHYSICAL ASSETS:

Mainframe:	0	
Midrange:	5	IBM AS/400
LAN Server:	15	
Workstation:	3	
Microcomputer:	1,309	
IBM-compatible:	1,309	
Apple:	0	

FY98 MAJOR APPLICATIONS:

Governor's Water Quality Initiative	[AS/400]
Above Ground & Underground Storage Tank Reg.	[AS/400]
Solid Waste Landfills System	[AS/400]
Well Drillers Logs (Water Wells)	[AS/400]
Waste Water Treatment	[AS/400]
Public Water Supplies	[AS/400]
Spatial Database Development	[PC/LAN]
GIS – Map Tools	[PC/LAN]
GPS System	[AS/400, PC/LAN]
Vital Statistics Database	[AS/400]
Vital Statistics Info and Imaging System	[RS/6000]
VitalTrak Custom Software Suite	[n/a]
Infocorp Point of Sale Plus System (POSPLUS)	[PC/LAN]
VitalChek	[PC/LAN]
Electronic Birth Certificate System (EBC)	[PC/LAN]
Spills	[AS/400]
Identified Sites	[AS/400]

ORGANIZATION: **Health and Environment, Department of (continued)**

Solid Waste Landfills	[AS/400]
Air & Radiation - Air Quality	[AS/400]
Waste Management Transporters	[AS/400]
Feedlot Permitting	[AS/400]
Accounting System (CHEARS)	[AS/400]
Kansas Health Insurance Information	[AS/400]
Kansas Health Care Provider	[AS/400]
Lab Neonatal Screening	[AS/400]
Special Health Services for Children	[AS/400]
Kansas Immunization Info System (KIIS)	[AS/400]
Child Care Licensing and Registration	[AS/400]
Lab Data Acquisition	[AS/400]
EPA National Databases	[AS/400]
Air and Radiation Asbestos	[AS/400]
Lab Certification	[AS/400]
Property Inventory	[AS/400]
Food and Lodging	[AS/400]
Children and Family Data	[AS/400]
Laboratory Information and Reporting System	[Data Gen/8500]

FY98 IT ACCOMPLISHMENTS: KDHE administers a variety of health-related public health services and regulatory programs. Several accomplishments were made in FY 98 to improve communications and document transfer. The agency modified the GPS Tracking System, established Windows NT domain structure and centralized administration, set standards for hardware and software, and purchased and implemented Lotus Notes and Internet access. The Federal Geographic Data Committee's (FDGC) compliant metadata for all GIS datasets was completed and released to the public and the agency migrated from token ring to ethernet (60% complete). KDHE successfully completed the GIS database development for the EPA Location Data Improvement Grant (LDIP) to acquire better locational data on federally permitted waste water treatment facilities. Other achievements include: initiated migration from NetWare to Windows NT, developed a universal core database model (UCDM) for KDHE application development, completed web development of county facilities for BAAC and UST, and completed the Geographically Integrated Whole Basin Management Grant (GIWBM).

IT OBJECTIVES FOR THE FUTURE: The strategic outlook at KDHE is for communication and document transfer among all employees and locations of KDHE, local funded entities and federal entities requiring specified reporting from KDHE. The ultimate strategy of KDHE is to develop an architectural plan and have an integrated system to process contacts with users for complaints, tracking, licensing, inspection and to track delivery of health and environmental services. A central method of building data would allow integration of permit/licensure/certificate/inspection and compliance information by client or facility. The Vital Statistics Improvement Project (VSIP) will affect citizens registering events occurring in Kansas as well as other KDHE offices including the infectious disease program, maternal and child health programs, family planning, local health departments, immunization program, and neonatal screening program. The Automation System for the Special Supplemental Nutrition Program for Women, Infants and Children (WIC Automation System) will increase efficiency and effectiveness of service delivery, will provide functionality to keep pace with federally-mandated reporting requirements, and will increase the ability to exchange data with other State and local systems. Year 2000 remediation will be complete and compliance certified.

Health Care Stabilization Fund CODE: 270

INCLUDES: Compliance Section
Claims Section

MISSION: To administer the provisions of the Health Care Provider Insurance Availability Act.

FY99 BUDGET: **FTE:** 16 **$K:** 25,868.5

FY98 IT EXPENDITURES ($K): 39.0

FY98 IT STAFF:

IT FUNCTIONAL AREA	FY 98 ACTUAL FTE
General Management and Administration	.0
Application Maintenance and Enhancement	.0
Application Development	.0
Year 2000 Mitigation/Repair	.0
Data Administration Data Analysis/Validation and Database Administration	.0
Network Engineering, Security, Technical Management and Support	.0
Computer Operations, Management and Technical Support	.0
Data Entry	.0
TOTAL **(Part-time service contract)**	1.0

FY98 IT PHYSICAL ASSETS:

Mainframe:	0	
Midrange:	0	
LAN Server:	1	
Workstation:	0	
Microcomputer:	16	
IBM-compatible:		16
Apple:		0

FY98 MAJOR APPLICATIONS: None Provided.

FY98 IT ACCOMPLISHMENTS: The Health Care Stabilization Fund has continued to refine its database information and utilize IT to assist in its operations and service to Kansas health care providers and basic professional liability insurers. Early in 1998 our Internet web site became available at www.hcsf.org.

IT OBJECTIVES FOR THE FUTURE: The Health Care Stabilization Fund is in the process of developing the availability of its coverage records to basic professional liability insurers. The possibility of receiving basic professional liability insurance coverage and surcharge information via IT will be evaluated in the future.

Highway Patrol CODE: 280

INCLUDES: Capitol Police
Highway Patrol
Patrol of the Kansas Turnpike
Motor Carrier Inspection

MISSION: To enforce traffic and state laws relating to vehicles, highways, and drivers of motor vehicles in order to enhance the safety of citizens traveling on state and federal highways in Kansas.

FY99 BUDGET: **FTE:** 794.8 **$K:** 44,287.2

FY98 IT EXPENDITURES ($K): 3,153.5

FY98 IT STAFF:

IT FUNCTIONAL AREA	FY 98 ACTUAL FTE
General Management and Administration	1.0
Application Maintenance and Enhancement	0.5
Application Development	0.5
Year 2000 Mitigation/Repair	.0
Data Administration Data Analysis/Validation and Database Administration	1.0
Network Engineering, Security, Technical Management and Support	3.0
Computer Operations, Management and Technical Support	.0
Data Entry	3.0
TOTAL	9.0

FY98 IT PHYSICAL ASSETS:

Mainframe:	0	
Midrange:	8	IBM AS/400
LAN Server:	25	
Workstation:	0	
Microcomputer:	376	
IBM-compatible:	376	
Apple:	0	

FY98 MAJOR APPLICATIONS:

Accident Index System (ACC)	[AS/400]
Criminal Interdiction (CID)	[AS/400]
Fleet Management System (FMS)	[AS/400]
Motor Vehicle Enforcement System (MVE)	[AS/400]
Notice to Appear System (NTA)	[AS/400]
Professional Standards System (PSU)	[AS/400]
Pursuit Tracking System (PTS)	[AS/400]
Global Positioning System (GPS)	[Client/Server]

FY98 IT ACCOMPLISHMENTS: Wiring was completed of the Salina Complex and GHQ in Topeka. This includes the laying of fiber-optic cable between buildings and expanding the PC use to all staff. Forty-two new PCs were approved to replace the dumb terminals used as a link to the ASTRA network. The agency plans to continue expanding its existing LAN until all sections of the patrol are able to communicate via TCP-IP and have access to standard software such as word processing. The pilot project for GPS was completed. Troop B was implemented with 52 units attached to the 800 MHz radio system. Plans for FY99 include expanding the project to statewide utilization of GPS. Other accomplishments include installation of a new router and upgraded a server with patches for 4.1.1. In addition, eight positions were approved by the Legislature for computer training related to CJIS activities in ASTRA and NCIC 2000.

ORGANIZATION: **Highway Patrol (continued)**

IT OBJECTIVES FOR THE FUTURE: The KHP has completed year two of a massive shift from the AS/400 with dumb terminals to a PC-based system using TCP-IP. All major locations will be connected using T-1 lines in anticipation of the need to share data and video files. Consultants (Thermo Information Solutions) will be hired to implement the Computer Aided Dispatching (CAD) system. This system will contain record management software to allow the agency to share data between sites and ensure timely capture of information related to field activities and the later use of that information through an RMS to reduce the staff time used in completing forms. Paper files and pictures will be scanned or digitized to allow the merge with electronic files. The agency also plans to upgrade the HTE Purchasing package with DTI's software which is compatible with the software that will be used by the state purchasing agency.

Historical Society, State — CODE: 288

INCLUDES:
Administration
Education/Outreach
Library/Archives
Cultural Resources
Historic Sites
Museum

MISSION: The mission of the Kansas State Historical Society is to identify, collect, preserve, interpret and disseminate materials and information pertaining to Kansas history in order to assist the public in understanding and appreciating their Kansas heritage and how it relates to their lives.

FY99 BUDGET: **FTE:** 146.5 **$K:** 8,103.2

FY98 IT EXPENDITURES ($K): 139.0

FY98 IT STAFF:

IT FUNCTIONAL AREA	FY 98 ACTUAL FTE
General Management and Administration	.2
Application Maintenance and Enhancement	.0
Application Development	.1
Year 2000 Mitigation/Repair	.1
Data Administration Data Analysis/Validation and Database Administration	.1
Network Engineering, Security, Technical Management and Support	.3
Computer Operations, Management and Technical Support	.2
Data Entry	.0
TOTAL	1.0

FY98 IT PHYSICAL ASSETS:

Mainframe:	0	
Midrange:	0	
LAN Server:	3	
Workstation:	0	
Microcomputer:	124	
IBM-compatible:		122
Apple:		2

FY98 MAJOR APPLICATIONS:
Archives Inventory [PC]
Cultural Resources Inventory [PC]

FY98 IT ACCOMPLISHMENTS: The Historical Society has moved forward with the second year implementation phase of computer replacement. Ten new Pentium 200 desktop workstations with Win95 operating system and Client 32 Network Architecture on existing Novell Netware 4.10 NOS were ordered and installed. A LAN implementation program to include three servers was developed. An Apple Power Macintosh system was purchased for the Graphics Design Section to utilize its abilities and software in performing their daily functions with the Society. The Society has purchased a new server and upgraded the Network Operating Systems agency-wide as well as the existing e-mail program.

IT OBJECTIVES FOR THE FUTURE: The Historical Society's IT objectives identifies infrastructure needs. This includes upgrading and replacing PC's which would put the low end Society systems at a Pentium level with the capability of running the latest operating system software (Win98). Plans include purchasing an additional five PC's to be used as a public access facility in the Reference Room with the growth of a KSHS OPAC and Web Access. Other objectives include upgrading to a switched fast Ethernet, providing laser printing systems, full e-mail and Internet capabilities and develop and maintain GIS functionality within the Society.

Human Resources, Department of CODE: 296

INCLUDES:
Administration and Support Services
Unemployment Insurance, Benefits & Taxes
Industrial Safety
Employment & Training Services
Workers Compensation
Employment Standards and Labor Relations
America's Workforce Technology Solutions
Hispanic Affairs
Apprenticeship
Disability Concerns
Advisory Committee on African-American Affairs

MISSION: Provide quality employment services in an efficient manner which exceeds customer expectations.

FY99 BUDGET: **FTE:** 1,030.5 **$K:** 232,700.4

FY98 IT EXPENDITURES ($K): 7,525.9

FY98 IT STAFF:

IT FUNCTIONAL AREA	FY 98 ACTUAL FTE
General Management and Administration	4.0
Application Maintenance and Enhancement	10.5
Application Development	8.0
Year 2000 Mitigation/Repair	4.0
Data Administration Data Analysis/Validation and Database Administration	2.0
Network Engineering, Security, Technical Management and Support	18.0
Computer Operations, Management and Technical Support	7.0
Data Entry	23.0
TOTAL	77.0

FY98 IT PHYSICAL ASSETS:

Mainframe:	0	
Midrange:	1	IBM AS/400
LAN Server:	47	
Workstation:	4	
Microcomputer:	1,154	
IBM-compatible:	1,140	
Apple:	14	

FY98 MAJOR APPLICATIONS: [KDHR internal operations - all mainframe-based]

Mass Layoff Statistics
Unemployment Insurance Statistics
Industry Employment Statistics
Current Employment Statistics
Occupational Employment
Job Service Statistics
Kansas Covered Employment
Employer Account Record
Detail Employer Account
Contribution Wage File
Contribution Tax File
Benefit Applicant System
Overpayment System
Telephone Initial Claims
Employer System
Applicant Information System
Automated Labor Exchange
Employer Information System
Property System
Time Coding/Charge System
New Hires Directory
Work Request Tracking System
Accident File
Workers Compensation SSN File
Employer Information File

ORGANIZATION: **Human Resources, Department of (continued)**

FY98 IT ACCOMPLISHMENTS: The programs of the department serve the entire labor force and business community in Kansas. To improve the services provided, KDHR has made many accomplishments in FY 98 including migrating the mainframe operations to the primary DISC production mainframe system. The migration will result in KDHR systems running on a year 2000 compliant IBM operating system, OS/390. Other accomplishments include implementation of a new hire directory database system (federally mandated database of new hires for child support enforcement); wire installation of several network and telephone services in Arkansas City, Topeka, Pittsburg, Overland Park and Wichita; development and implementation of a credit refund facility in the Employer Contribution Tax System; implementation of a year 2000 compliant audit system; establishment of a software system and procedures to track all requests for I/T services or help; provided data warehouse/data mining facilities for Labor Market database via the Internet; and provided statewide phone access to Vietnamese speaking unemployment insurance customer service representative.

IT OBJECTIVES FOR THE FUTURE: KDHR is rapidly working to make agency-held data available to the public, other agencies and agency staff via several technologies including voice response systems for unemployment continued claims, Internet and Internet Web pages. Efforts have also been expanded in electronic fund transfer for payment of unemployment insurance benefits instead of printing/mailing paper checks. KDHR, Division of Employment and Training is involved in developing plans to implement a One-Stop Information and Services System for all Kansas citizens through the collocating of employment and training service providers and/or the connectivity of service providers through information technology. Critical to the One-Stop effort is the creation of a system or systems that will allow the sharing of information and data between and within various agencies and organizations. KDHR is the lead agency in the One-Stop implementation process and is partnering with Social and Rehabilitation Services, Department of Education, Department of Aging and related state and local agencies and organization to develop an integrated system to effectively serve the customer. The development process requires the essential involvement of local communities at the "grass roots level" to build the employment and training system that best meets their needs and requirements.

Insurance Department CODE: 331

INCLUDES:

Administrative Services	Consumer Assistance
Governmental Relations	Accident and Health
Legal	Fire and Casualty
Agents & Brokers	Life
Financial Surveillance	

MISSION: The mission of the Insurance Department is to protect the insurance consumers of Kansas and to serve the public interest through the supervision, control and regulation of persons and organizations transacting the business of insurance in the state. This mission will be accomplished by assuring an affordable, accessible and competitive insurance market.

FY99 BUDGET: **FTE:** 163.5 **$K:** $35,019.1

FY98 IT EXPENDITURES ($K): 453.9

FY98 IT STAFF:

IT FUNCTIONAL AREA	FY 98 ACTUAL FTE
General Management and Administration	.40
Application Maintenance and Enhancement	.10
Application Development	.60
Year 2000 Mitigation/Repair	.30
Data Administration Data Analysis/Validation and Database Administration	.60
Network Engineering, Security, Technical Management and Support	.70
Computer Operations, Management and Technical Support	1.0
Data Entry	.30
TOTAL	4.00

FY98 IT PHYSICAL ASSETS:

Mainframe:	0	
Midrange:	1	IBM AS/400
LAN Server:	2	
Workstation:	0	
Microcomputer:	150	
IBM-compatible:	150	
Apple:	0	

FY98 MAJOR APPLICATIONS: [AS/400 applications]

Receipts	Agent Continuing Education Requirements
Voucher	Complaint and Inquiry
Company Fee Fund Assessment	Carbon Copy File
Company Estimated Tax Billings	Firefighters Relief
Accounts Receivable	Excess Lines
Expenditure	Risk Retention/Risk Purchasing
Workers' Compensation	Company Directory
Pending and Approved Policy Forms	Company Examiner Application
Agent/Agency Certifications	

ORGANIZATION: **Insurance Department (continued)**

FY98 IT ACCOMPLISHMENTS: The Kansas Insurance Department (KID) has an AS/400 system that is used as its primary agency-wide database and major business application server. In FY 98, a new AS/400 was installed. The KIDs management information system was migrated to the new AS/400. KIDs new management information system provides many benefits such as the ability to query data, increased functionality, ease of use as well as being Year 2000 compliant. The agency adopted Windows NT as KIDs direction for migration to a 32-bit operating system and determined an appropriate migration path for all existing PC's. Sixty new PC's with the NT operating system were installed, new laptops with modems and network connectivity were configured, and PC components were installed, upgraded and replaced. Novell Intranetware 4.11 network operating system was installed on a new fileserver and all users, e-mail, programs and data were moved to the new server. A new version of GroupWise and Internet e-mail were installed on all PC's and new fileserver. Other accomplishments include making the Insurance Company Directory available on KIDs Internet web site, development of KIDs Intranet, installation of TCP/IP network in the Wichita office and installation of hardware and software to provide remote computer access to the KID network. An analysis of KIDs existing document management workflow processes was also initiated.

IT OBJECTIVES FOR THE FUTURE: The Insurance Department's IT objectives identify improving the performance of the agency's existing suite of applications. Efforts will continue to increase the use of personal computers on a networked system in order to more efficiently regulate the insurance industry, more effectively serve consumers, and interface optimally with the National Association of Insurance Commissioners. Plans are to provide new and improved technology solutions to enhance the delivery of services. A trained information technology staff will be maintained to meet the technology needs of the department. Access to data and information will be provided to accurately and effectively answer all public inquiries regarding licensing requirements of this state and related issues. This includes enhancements to the KIDs Intranet and Internet web sites and business applications on the AS/400, and working with the National Association of Insurance Commissioners in implementing the national Producer Database and Producer Information Network. Strategies are in place to improve and expand the current computer database by providing on-line access to data and information about insurance companies, licensed agents and consumer complaint information. Enhancements will be made to maintain and update the consumer complaint tracking applications and the NAIC Complaints Database System (CDS). Mechanisms used to communicate consumer information and insurance regulatory policy to the general public and the insurance industry will be refined by providing on-line licensing of agencies and agents, and continuing progress and expansion of data and information on KIDs Intranet and Internet web sites. The efficiency and cost effectiveness of the operations of KID employees will be improved through expanded access to databases and information. This entails developing procedure manuals for KIDs business applications and participating in the NAIC Producer Database (PDB). The efficiency and effectiveness of the electronic procedures used to review all policy and form filing requirements will be improved by implementing electronic document management, collecting and editing data electronically and implementing a system for electronic form and rate filings. Communication with both the Financial Surveillance Division and the financial examiners will be increased so that financially troubled companies may be quickly identified and targeted for examinations.

Investigation, Kansas Bureau of CODE: 083

INCLUDES: Investigations
Forensic Laboratory
Criminal Justice Information Services
Administrative Support Services

MISSION: The Kansas Bureau of Investigation is dedicated to providing professional investigative and laboratory services to criminal justice agencies and the collection and dissemination of criminal justice information to public and private agencies for the purpose of promoting public safety and the prevention of crime in Kansas.

FY99 BUDGET: **FTE:** 206.5 **$K:** $14,121.2

FY98 IT EXPENDITURES ($K): 3,720.4

FY98 IT STAFF:

IT FUNCTIONAL AREA	FY 98 ACTUAL FTE
General Management and Administration	1.50
Application Maintenance and Enhancement	1.50
Application Development	1.50
Year 2000 Mitigation/Repair	.50
Data Administration Data Analysis/Validation and Database Administration	1.00
Network Engineering, Security, Technical Management and Support	1.00
Computer Operations, Management and Technical Support	1.00
Data Entry	.00
Compliance auditing/ASTRA and CJIS training	2.00
Communication management	1.00
Communications support	6.00
TOTAL	17.00

FY98 IT PHYSICAL ASSETS:

Mainframe:	0	
Midrange:	3	DEC VAX IBM AS/400 IBM RS/6000
LAN Server:	0	
Workstation:	14	
Microcomputer:	177	
IBM-compatible:	176	
Apple:	1	

FY98 MAJOR APPLICATIONS:

AS/400
Accounting System
Agents Time Management System
Computerized Criminal History System (CCH)
Juvenile Justice Information System (JJIS)
Laboratory Case Management System
Missing Persons System (MPS)
Telephone Toll System
A/R Invoicing System
Agent Case Management System

DECAlpha/Compaq
Automated Fingerprint Identification System (AFIS)

PC LAN
Kansas Incident Based Reporting System (KIBRS)

Compaq File Server
Report Processing System
Violent Offender Registration

Compaq PC
DNA Databank

ORGANIZATION: **Investigation, Kansas Bureau of (continued)**

FY98 IT ACCOMPLISHMENTS: The KBI is the state's central repository for the collection, storage and dissemination of criminal history information and criminal fingerprints. The KBI installed a new automated Fingerprint Identification System (AFIS) to improve the accuracy and timeliness of fingerprint identifications. Ten local law enforcement agencies installed Livescan fingerprint devices capable of transmitting fingerprints electronically to the AFIS host system. An evidence tracking/inventory system was created for agent evidence. The KBI programming team began development of a new agent/laboratory case management system. The KBI acquired the Florida DNA database system and contracted to have it converted to the KBI SQL Server. Software is being developed for free distribution to local law enforcement agencies, courts and prosecutors. This local case management software will provide electronic criminal history data to the KBI host system in a timely and accurate manner. A new violent offender system was implemented. Various enhancements were made to the LAN administration hardware, software and security. 190 court service officers were given access to the KBI web based criminal abstracts, reducing their turnaround time from several weeks to several minutes. The KBI changed from a token ring network to 100MB Ethernet between servers and 10MB to the desktops, implemented network management software, virus detection, and Windows NT. The KBI completed a Year 2000 study with excellent results, and implemented an Acceptable Use Policy for the Internet and email. The Criminal Justice Information System (CJIS) acquired funding to establish a backup site at the Kansas Highway Patrol facilities in Salina. The KBI provided 211 employees training in NT, Word, Excel and PowerPoint. CJIS held two regional conferences for local agencies with over 950 attendance.

IT OBJECTIVES FOR THE FUTURE: Understanding customers and their unique expectations allows the KBI to focus and prioritize efforts to obtain the greatest benefits for those dependent on services. The KBI will be focusing on implementing and enhancing a number of existing and emerging technologies such as the Internet, e-mail, document imaging, digital photo's, mug shots, desktop video conferencing, bar coding, remote access and network faxing. These technologies will quickly benefit KBI agents and agency staff as well as agency customers such as local law enforcement agencies, courts and prosecutors. IT objectives for the future entail distributing 49 laptop computers to agents and forensic laboratory staff to better allow them to produce quality services for their customers and collecting timely and accurate criminal justice information by receiving data electronically from the information originators. This includes implementation of the CJIS public web server for data access and CJIS security card system, replicating data from the KBI central repository to the public web server, and implementing livescans updating to the AFIS and CCH. Databases will be automated and integrated to store fingerprint images, crime reports, adult and juvenile records and forensic evidence to support identification and investigative operations at the local, state and federal level. KBI agents and supporting staff will be provided with enhanced tools for communicating with criminal justice agencies statewide (e-mail, Internet and video conferencing). This includes administering the CJIS e-mail server for local law enforcement agencies. Training will also be provided to KBI staff and Kansas law enforcement officers on the utilization of emerging technologies and software. A training help desk staff will be created and implemented to respond to questions from KBI staff, local law enforcement agencies, courts and prosecutors related to KBI technology programs and systems such as ASTRA, AFIS and CCH.

Judicial Branch CODE: 677

INCLUDES: Supreme Court
Court of Appeals
Judicial Administration

MISSION: Justice is effective when it is: Fairly administered without delay by competent judges operating in a modern court system under simple and efficient rules of procedure.

FY99 BUDGET: **FTE:** 1,775.0 **$K:** 78,515.0

FY98 IT EXPENDITURES ($K): 547.9

FY98 IT STAFF:

IT FUNCTIONAL AREA	FY 98 ACTUAL FTE
General Management and Administration	1.0
Application Maintenance and Enhancement	.5
Application Development	3.5
Year 2000 Mitigation/Repair	See above
Data Administration Data Analysis/Validation and Database Administration	.5
Network Engineering, Security, Technical Management and Support	.5
Computer Operations, Management and Technical Support	4.0
Data Entry	.0
TOTAL	10.0

FY98 IT PHYSICAL ASSETS:

Mainframe:	0	
Midrange:	0	
LAN Server:	6	
Workstation:	0	
Microcomputer:	212	
IBM-compatible:		43
Apple:		169

FY98 MAJOR APPLICATIONS:

Appellate Clerk's Case Tracking System	[Sun SPARCServer 1000]
Attorney Registration System	[Macintosh PC]
Case Management & Support System (CMASS)	[IBM PC]
Case Management & Reporting System (CMRS-Trial)	[IBM PC]
Case Management & Reporting System (CMRS-Central)	[IBM PC]
Legislation Tracking System	[Macintosh PC]
Municipal Court Case & Judge Tracking System	[Macintosh PC]

FY 98 IT ACCOMPLISHMENTS: Many accomplishments were made in FY98 including the implementation of the Appellate Case Tracking System (ACTS), testing and distribution of KESSEP modifications to the CMASS accounting system to the trial courts, and the development of CMRS communications component and trial court software. A detailed system design for the Case Management and Reporting System (CMRS) was also developed as well as the prototype test retrieval system. Computers were upgraded in the Court of Appeals chambers and the Clerk of the Appellate Courts' office. Unix upgrades were made to all but two of the district courts and the Helios EtherShare upgrade was completed. A draft plan was finalized for converting Macintosh computers to IBM/Windows and funding was received from the Byrne Grant for development of a multi-year plan to provide courts with information technology to automate the management and sharing of court data.

ORGANIZATION: Judicial Branch (continued)

IT OBJECTIVES FOR THE FUTURE: The immediate goal of the Judicial Branch is to develop a long-range strategic plan for Kansas court information technology improvements. The objective of this strategic plan is to identify application and infrastructure requirements and define tactical projects to improve the efficiency and effectiveness of the courts. The development and execution of a multi-year strategic plan will provide guidance to the district courts for future purchases of information technology. It will also give direction to the Judicial Branch for future technology projects. Strategies include providing automation capabilities on all desktops consistent with the American Bar Association Guidelines and Recommendations Relating to Computer Support for Judges. To accomplish these objectives as efficiently as possible, plans are in place to ensure that all Judicial Center hardware and software are year 2000 compatible, the SHaRP system network is integrated with the Judicial Center network to permit better resource sharing. The Branch will continue to replace and upgrade system hardware and software, and provide local area network enhancement and development of Internet-based Chapter 61 case filing procedures through the Judiciary Technology Fund Grant Program. The vast majority of information utilized in the Kansas Judicial Branch is textual. A prototype of a text search and retrieval database will allow research attorneys and judges to search previously published opinions, research memoranda and other relevant documents and reuse existing work product wherever appropriate. This prototype will be implemented as a pilot project in the appellate courts. The On-line Legal Research System will provide a new range of possibilities in finding and applying relevant case law. Development of a Court Information Technology Master Plan will provide courts with the information technology necessary to automate the management of data. This plan will integrate with the overall CJIS planning framework to maximize the state's existing technology investments and integrate with criminal justice agencies and applications. For FY 2000 and beyond, planning projects will be based upon the outcome of this plan.

Juvenile Justice Authority CODE: 350

INCLUDES: Operations Division
Division of Contracts and Audits
Research and Prevention Division
Includes: Atchison, Beloit, Larned and Topeka Juvenile Correctional Facilities

MISSION: To promote public safety, hold juvenile offenders accountable for their behavior, and improve the ability of juveniles to live more productively and responsibly in the community.

FY99 BUDGET: **FTE:** 595.0 **$K:** 63,382.2

FY98 IT EXPENDITURES ($K): 982.0

FY98 IT STAFF:

IT FUNCTIONAL AREA	FY 98 ACTUAL FTE
General Management and Administration	1.0
Application Maintenance and Enhancement	.0
Application Development	.0
Year 2000 Mitigation/Repair	.5
Data Administration Data Analysis/Validation and Database Administration	.0
Network Engineering, Security, Technical Management and Support	1.0
Computer Operations, Management and Technical Support	3.0
Data Entry	.0
TOTAL	5.0

FY98 IT PHYSICAL ASSETS:

Mainframe:	0	
Midrange:	0	
LAN Server:	6	
Workstation:	0	
Microcomputer:	316	
IBM-compatible:		314
Apple:		2

FY98 MAJOR APPLICATIONS: JJA presently is utilizing Microsoft Access Databases for principal software application.

FY 98 IT ACCOMPLISHMENTS: The Juvenile Justice Authority was formed on July 1, 1997, as the statewide agency responsible for the reduction and prevention of delinquency and rehabilitation of juvenile offenders. Legislation specifies that information systems are to address the collection and dissemination of information surrounding juvenile offenders. JJA submitted the State General Fund Budget Amendment for the JJIS Project and for IS Operations funds, configured the Novell 4.11 server and placed it on-line at the JJA central office, and deployed desktop systems at all facilities and at the central office. The Microsoft Access 97 database is currently in development to track bill payments to service providers.

IT OBJECTIVES FOR THE FUTURE: The agency will develop its IT architecture following the standards set by CJIS. The JJIS will be an integral part of the statewide CJIS project. The JJA Infrastructure Project will provide all necessary JJA personnel with the standard end user workstation environment (hardware and software), and appropriate network infrastructure. This includes desktop computers, office automation software, network servers, etc. Objectives are in place to develop the JJIS application and develop local applications. These objectives will provide internal JJA organizations with a juvenile case and jail management system while providing all other juvenile agencies a core of centralized juvenile information. As a by-product of the system, JJA management will gain the ability to analyze and review performance based on statistical information collected by the system. Strategies are in place to establish a grant program to assist organizations.

Legislative Research Department, Kansas CODE: 425

INCLUDES:

MISSION: To perform research and fiscal analysis for the Legislature and its committees as well as individual legislators.

FY99 BUDGET: FTE: 37.0 **$K:** 2,346.8

FY98 IT EXPENDITURES ($K): 47.0

FY98 IT STAFF:

IT FUNCTIONAL AREA	FY 98 ACTUAL FTE
General Management and Administration	.0
Application Maintenance and Enhancement	.0
Application Development	.0
Year 2000 Mitigation/Repair	.0
Data Administration Data Analysis/Validation and Database Administration	.0
Network Engineering, Security, Technical Management and Support	.0
Computer Operations, Management and Technical Support	.0
Data Entry	.0
TOTAL **(No breakdown provided)**	1.7

FY98 IT PHYSICAL ASSETS:

Mainframe:	0	
Midrange:	1	
LAN Server:	4	
Workstation:	6	
Microcomputer:	42	
IBM-compatible:		42
Apple:		0

FY98 MAJOR APPLICATIONS: None Provided.

FY 98 IT ACCOMPLISHMENTS: None Provided.

IT OBJECTIVES FOR THE FUTURE: None Provided.

Mortuary Arts, State Board of CODE: 204

INCLUDES:

MISSION: To establish and enforce standards to ensure that professional funeral services are performed in a manner providing the maximum protection of the health, safety and welfare for the people of Kansas.

FY99 BUDGET: FTE: 3 **$K:** 188.6

FY98 IT EXPENDITURES ($K): 12.2

FY98 IT STAFF:

IT FUNCTIONAL AREA	FY 98 ACTUAL FTE
General Management and Administration	.0
Application Maintenance and Enhancement	.0
Application Development	.0
Year 2000 Mitigation/Repair	.0
Data Administration Data Analysis/Validation and Database Administration	.0
Network Engineering, Security, Technical Management and Support	.0
Computer Operations, Management and Technical Support	.0
Data Entry	.0
TOTAL **(No dedicated IT staff.)**	.0

FY98 IT PHYSICAL ASSETS:

Mainframe:	0	
Midrange:	0	
LAN Server:	0	
Workstation:	0	
Microcomputer:	5	
IBM-compatible:		5
Apple:		0

FY98 MAJOR APPLICATIONS: None Provided.

FY98 IT ACCOMPLISHMENTS: None Provided.

IT OBJECTIVES FOR THE FUTURE: None Provided.

Real Estate Commission CODE: 549

INCLUDES:

MISSION: To protect the public interest by ensuring that individuals are properly licensed and certified to work in the real estate industry and that consumers of the services and products offered by licensees are protected.

FY99 BUDGET: FTE: 14 **$K:** $637.9

FY98 IT EXPENDITURES ($K): 5.1

FY98 IT STAFF:

IT FUNCTIONAL AREA	FY 98 ACTUAL FTE
General Management and Administration	.0
Application Maintenance and Enhancement	.0
Application Development	.0
Year 2000 Mitigation/Repair	.0
Data Administration Data Analysis/Validation and Database Administration	.0
Network Engineering, Security, Technical Management and Support	.0
Computer Operations, Management and Technical Support	.0
Data Entry	.0
TOTAL **(No dedicated IT staff)**	.0

FY98 IT PHYSICAL ASSETS:

Mainframe:	0	
Midrange:	1	
LAN Server:	0	
Workstation:	0	
Microcomputer:	0	
IBM-compatible:		10
Apple:		0

FY98 MAJOR APPLICATIONS: Real Estate Licensee Database — IBM RS/6000

FY98 IT ACCOMPLISHMENTS: None provided.

IT OBJECTIVES FOR THE FUTURE: None provided.

Regents, Board of CODE: 561

INCLUDES: Administration
Special Programs

MISSION: Will assure that the Regents universities are efficiently operated and academically and financially accountable. Promoting excellence, Regents universities will provide students and Kansas with high quality educational, research and service programs.

FY99 BUDGET: FTE: 18 **$K:** $48,386.7

FY98 IT EXPENDITURES ($K): 4.1

FY98 IT STAFF:

IT FUNCTIONAL AREA	FY 98 ACTUAL FTE
General Management and Administration	.0
Application Maintenance and Enhancement	.0
Application Development	.0
Year 2000 Mitigation/Repair	.0
Data Administration Data Analysis/Validation and Database Administration	.0
Network Engineering, Security, Technical Management and Support	.0
Computer Operations, Management and Technical Support	.0
Data Entry	.0
TOTAL **(One research associate)**	1.0

FY98 IT PHYSICAL ASSETS:

Mainframe:	0	
Midrange:	0	
LAN Server:	1	
Workstation:	0	
Microcomputer:	19	
IBM-compatible:		19
Apple:		0

FY98 MAJOR APPLICATIONS: None provided.

FY98 IT ACCOMPLISHMENTS: None provided.

IT OBJECTIVES FOR THE FUTURE: None provided.

Regents: Emporia State University CODE: 379

INCLUDES:

FY99 BUDGET: **FTE:** 737.6 **$K:** 49,032.5

FY98 IT EXPENDITURES ($K): 2,345.1

FY98 IT STAFF:

CATEGORY	FULL-TIME (FTE)	PART-TIME (PEOPLE)
Classified IT specialist/manager	16	1
Unclassified IT specialist/manager	7	
Classified Keyboard/Data Entry Op.	0	
Switchboard Operator	1	
Classified Non-IT series	1	
Unclassified, other		
Student or intern		16
Volunteer		
On-site contractor IT specialist		
TOTAL	25	17

FY98 IT PHYSICAL ASSETS:

Mainframe:	2	IBM 9121-260 HP 9000 K210
Midrange:	3	IBM RS/6000 Sun UltraSparc
LAN Server:	5	
Workstation:	1	
Microcomputer:	1,721	
IBM-compatible:	1,436	
Apple:	285	

FY98 MAJOR APPLICATIONS:

Student Information System (SIS)	[Mainframe]
Financial System	[Mainframe]
Library System	[Mainframe]
Alumni and Foundation System	[LAN]

FY98 ITACCOMPLISHMENTS: None provided.

IT OBJECTIVES FOR THE FUTURE: Information technology will continue to be integrated into the instruction, scholarly activity, student life, and administrative functions of Emporia State University. ESU will target four degree programs of study each year to be redesigned for delivery via advanced technology. A comprehensive data warehouse of University information is being planned, to reside in a relational database. The University's budget, accounting and payroll programs are largely a collection of in-house developments, many of which are outdated and/or require constant maintenance. A new comprehensive financial system is likely to be installed. Resources are being examined to determine the financing and funding sources from which this need might be met. The Crumbling Classroom Project is intended to upgrade the available instructional technology in general purpose classrooms. Seventy-two classrooms have been identified to be upgraded to one of four levels of connectivity and instructional technology. This project will benefit students by facilitating use of audio/video, Internet and computing inside the classroom.

Regents: Fort Hays State University CODE: 246

MISSION: Dedicated to providing instruction within a computerized environment in the arts and sciences, business, education, the health and life sciences, and agriculture. The University's primary emphasis is undergraduate liberal education, which includes the humanities, the fine arts, the social/behavioral sciences, and the natural/physical sciences. These disciplines serve as the foundation of all programs. Graduates are provided a foundation for entry into graduate school, for employment requiring well-developed analytical and communication skills, and for coping with global complexities of the 21st century.

FY99 BUDGET: **FTE:** 692.2 **$K:** 49,269.0

FY98 IT EXPENDITURES ($K): 2,623.0

FY98 IT STAFF:

IT FUNCTIONAL AREA	FY 98 ACTUAL FTE
General Management and Administration	1.0
Application Maintenance and Enhancement	4.5
Year 2000 Mitigation/Repair	.5
Data Administration Data Analysis/Validation and Database Administration	.5
Network Engineering, Security, Technical Management and Support	1.0
Computer Operations, Management and Technical Support	2.0
Data Entry	1.0
User Services	3.0
Central Systems Administration	2.5
Telecommunications: manage the PBX, install cabling, switchboard	4.0
Microcomputer Technician	3.0
LAN Administration	1.0
TOTAL	24.0

FY98 IT PHYSICAL ASSETS:

Mainframe:	1	IBM 9121-260
Midrange:	5	DEC Alpha 2100 DEC Alpha 4100 IBM RS/6000 HP E25 (ES-9000) DEC Alpha 300
LAN Server:	13	
Workstation:	0	
Microcomputer:	1,829	
IBM-compatible:	1,641	
Apple:	188	

FY98 MAJOR APPLICATIONS:

- Student Information System
- Budgetary Accounting System
- Financial Assistance System (SAFE)
- Receivables
- Personnel Information System
- Admissions
- Degree Audit
- Alumni/Endowment System
- Facilities System
- Career Planning
- Time and Leave
- Payroll/Personnel System
- Course System
- Telecommunications Billing Sys.
- Transcript System
- Course Equivalency System
- Financial Aid System
- Scholarship System
- Housing System
- Work History
- NOTIS Library System
- Voyager

ORGANIZATION: **Regents: Fort Hays State University (continued)**

FY98 IT ACCOMPLISHMENTS: Fort Hays State University is committed to providing for the information technology needs of students, faculty, staff and administration. The bid process for a new campus-wide library system was completed. Endeavor Information Systems, Inc. was selected (Voyager). Over 100 computers were configured and installed on campus, five media classrooms were completed and other upgrades to the infrastructure have been accomplished. In preparation for extending the campus Ethernet to all offices on campus and eliminating the AT&T ISN, the University added capacity to Ethernet hubs in McCartney, Malloy Hall, Rarick Hall, Sheridan Hall, and Tomanek Hall.

IT OBJECTIVES FOR THE FUTURE: The University will strive to become a unique and eminent regional University by computerizing the campus environment. It will continue to evaluate the overall direction for moving administrative systems to a commercial client-server system. Efforts will focus on the web/legacy initiative and the data warehouse.

Regents: Kansas State University CODE: 367

INCLUDES:
- Institutional Support
- Educational Program
- Research
- Public Service
- Student Financial Aid
- Auxiliary Enterprises
- Physical Plant

MISSION: To enrich the lives of the citizens of Kansas by extending to them opportunities to engage in life-long learning and to benefit from the results of research.

FY99 BUDGET: **FTE:** 3,023.4 **$K:** 253,796.2

FY98 IT EXPENDITURES ($K): 15,591.3

FY98 IT STAFF:

IT FUNCTIONAL AREA	FY 98 ACTUAL FTE
General Maintenance & Administration	10.5
Application maintenance and Enhancement	23.5
Application Development	10.5
Year 2000 Mitigation/Repair.	4.0
Data Administration, Data Analysis/ Validation Database Administration	8.0
Network Engineering, Security, Technical Management and Support	12.0
Computer Operations, Management and Technical Support	20.0
Data Entry	6.0
TOTAL	94.5

FY98 IT PHYSICAL ASSETS:

Mainframe:	1	S/390-2003 CMOS
Midrange:	0	
LAN Server:	148	
Workstation:	345	
Microcomputer:	9,937	
IBM-compatible:	8,873	
Apple:	1,064	

FY98 MAJOR APPLICATIONS:
- Human Resource Information System (HRIS)
- Filling Receivables System (BRS)
- Financial Aid Management System (FAMS)
- Facilities billing and Accounts Receivable System (FBS)
- Student Information System (SIS)
- Financial Records System (FRS)
- Inventory System (INV)
- Facilities space Utilization Reporting System (SUR)
- Annual Budget System (ABS)
- Legislative Request System (LRS)

ORGANIZATION: **Regents: Kansas State University (continued)**

FY98 IT ACCOMPLISHMENTS: KSUs information technology efforts are supported by four service units, who cooperate closely to meet the needs of the campus community. K-State's Access Technology System (KATS) Phase I applications were implemented in FY98. The KATS System provides secure interactive self-access to student information and service functions via the web, campus-based KIOSKS, and interactive voice response. Three significant application systems are in progress and on target for initial implementation in 1998: KATS, the Degree Audit and Reporting System (DARS), and the Classroom and Event Room Scheduling System. Implementation of the second and third phases of KATS applications is planned for Spring 1998. The majority of the major production databases and applications systems supported by the ISO were assessed and made ready for the transition to and through the year 2000. Checking and testing of all applications for year 2000 readiness will continue. Two IT initiatives have tremendous potential for KSU: Commencement of the Oracle Campus-Wide Agreement and initial implementation of the Magic Solutions Help Desk and Asset Management System. Several projects were implemented and completed which pertain to the University's basic infrastructure. The security system was updated to the phone switch rooms to include card readers and electric latches, cellular wireless phone system was installed, three more generators were purchased and are being installed to supply emergency power in the switch rooms, and the Oracle-based student long-distance billing programs were initiated.

IT OBJECTIVES FOR THE FUTURE: Information is a basic asset of the University. Information technology at K-State is a mainstay of supporting and leveraging that asset. Strategies are in place to move to a networked system with the capability to support the clients as the user access device; to create a system of information assets that are well organized on centrally managed relational databases; to create tools and sources of information to allow users to do most of their computing without assistance to make information available widely on the campus; and finally to be very aggressive in providing remote monitoring and maintenance of IT systems. The network strategy, network centric, now is focused on client/server with peer-to-peer being investigated. Protocols are still in flux nationally so a strategy for high bandwidth backbone is under investigation with an experimental ATM as the current project. Currently Oracle is the database of choice, and products are generally selected which can maintain this central strategy. Tools to allow the faculty to create more active learning environments and asynchronous information sources, e.g. electronic journals, web compendiums, or consulting databases, are a major need. The strategy is to purchase commercial products when they exist and to create tools to bridge the time until they are available. Two major continuing efforts are Y2K and BCP/DR. Strategies are also being enhanced to address security issues.

Regents: University of Kansas CODE: 682

INCLUDES:

- Institutional Support
- Instruction
- Academic Support
- Student Services
- Research
- Public Service
- Scholarships and Fellowships
- Auxiliary Enterprises
- Physical Plant Operations

MISSION: The University of Kansas will continue to be a major comprehensive research and teaching University that serves as a center for learning, scholarship, and creative endeavor. The University of Kansas will also continue to provide programs that represent excellence in graduate and professional education and the highest achievements in research internationally.

FY99 BUDGET: **FTE:** 4,486.5 **$K:** 391,644.7

FY98 IT EXPENDITURES ($K): 18,685.9

FY98 IT STAFF:

CATEGORY	FULL-TIME (FTE)	PART-TIME (PEOPLE)
General Maintenance & Admin	29.50	
Application Maint & Enhancement	14.10	
Application Development	24.30	
Year 2000 Mitigation & Repair	0.50	
Switchboard Operator	5.00	
Data Administration	2.00	
Network Eng, Security, & Support	58.20	
Computer Op & Tech Support	44.50	
Data Entry	2.00	
TOTAL	180.10	0

FY98 IT PHYSICAL ASSETS:

Mainframe: 1 Amdahl 5995/700A (Replaced w/ an IBM S/390 in 8/98)

Midrange: 20
- SGI Origin 2000
- DEC Alphaserver 1000A-5/400
- DEC Alphastation 500-5/266
- DEC Alphastation 500/400-4/266
- DEC Alphastation 250-4/266
- DEC 3000 Model 500
- DEC 3000 Model 500X
- DEC Alphaserver 600-5/266
- DEC 3000 Model 300L
- SUN SPARC 1000E
- DEC Alphaserver 4100
- SUN Enterprise 4000
- SUN Enterprise 2
- SUN SPARC 5
- SUN SPARC 20
- DEC Alphastation 500/266
- DEC 3000 Model 5005
- DEC Alphastation 500
- IBM RS 6000 350
- Digital 5000PC

Regents: University of Kansas (continued)

LAN Server:	149	
Workstation:	240	
Microcomputer:	9,228	
IBM-compatible:		6,075
Apple:		3,153

FY98 MAJOR APPLICATIONS:

Financial Aid Management System (FAMS)
Student Records Information System (SRIS)
Human Resources/Payroll System (HRMS)
Permanent Property Inventory (PPI)
Billings/Receivables System (BRS)
Accounting System (BACIS)
Budget Information System (BIS)
Library Systems

FY98 IT ACCOMPLISHMENTS: Four departments provide computing support for research and instruction; information support systems for administrative computing; voice, video and data communications infrastructure and management; and comprehensive printing support for all units of the Lawrence campus. The Academic Computing Services created an Internet Pak CD-ROM for Macintosh and Windows networking for distribution to faculty, students and staff as well as replacing computer systems for research processing, instruction, web support services, student/faculty e-mail, and the internal data network. Expanded services to the Internet were provided, software upgrades were made and a new server for USENET NEWS was created. Computing Services installed in test the 7.0 release of PeopleSoft's HR/Pay system. In the fall of 1997, the University purchased PeopleSoft's integrated financial system and PeopleSoft's student administration system. Teams have been organized for project implementation. The contract with VTLS, Inc. was cancelled for the Library System. The Library signed a new contract with Endeavor. Approximately 300 new computers have been acquired for users with the new system. Plans call for the system to be operational by December 1998. Networking and Telecommunications Services provided enhancements to the video, voice and data network including partnering with Sunflower Cablevision on various activities and providing upgrades to enhance communication paths and technology to link faculty, staff and students within the University and promote a global exchange of information.

IT OBJECTIVES FOR THE FUTURE: Networked electronic resources are critically important to the future of the University of Kansas. To improve instruction and quantity of research, the University plans to replace up to 250 faculty workstations per year based on roughly a four-year cycle for usable technology. To expand the number of points of access to computing for student labs, an additional 200 student workstations are needed. The expansion of processing capacity for researchers is planned to improve the quantity and quality of research. In 1998 a University-wide committee was formed and determined that GroupWise 5.5 be deployed as the University standard for email/groupware. The University intends to implement the first phase of a common system during FY 1999 with costs expected through FY 2001. A full-scale effort is in place to replace the current IBM BACIS accounting system and related systems (Permanent Property Inventory and Research Information System) with PeopleSoft's new financial information system. This will provide the Lawrence campus with an administrative system that supports sound financial management. The 7.0 release of HR/Pay is slated to be moved from test phase to production during FY 2000. Full implementation of the student records information system will be a multi-year project. The existing locally developed system was modified to be Year 2000 compliant. The mainframe was replaced with a newer cost effective system because it will be necessary to maintain mainframe computing for the next three to four years. A bid was accepted from Real Applications for the necessary equipment and services. This mainframe replacement occurred in August 98. An ongoing IT priority is staff development and retention. Network and Telecommunications will continue its work on expanding and enhance the network capacity on campus. The University plans to continue its regional and national leadership roles in the development of the Great Plains Network and Internet 2 initiatives. The exploration of a possible video distribution network continues during FY99.

Regents: University of Kansas Medical Center CODE: 683

INCLUDES: Instruction
Research
Service

MISSION: To serve the health care needs of the citizens of Kansas, the region, and the nation.

FY99 BUDGET: **FTE:** 4,443.8 **$K:** 339,779.9

FY98 IT EXPENDITURES ($K): 12,664.1

FY98 IT STAFF:

IT FUNCTIONAL AREA	FY 98 ACTUAL FTE
General Management and Administration	15.45
Application Maintenance and Enhancement	4.05
Application Development	31.45
Year 2000 Mitigation/Repair	2.50
Data Administration Data Analysis/Validation and Database Administration	5.05
Network Engineering, Security, Technical Management and Support	19.05
Computer Operations, Management and Technical Support	9.25
Data Entry	.00
Voice (includes installation and service techs and equip. planning techs.)	7.90
TOTAL	94.70

FY98 IT PHYSICAL ASSETS:

Mainframe:	0	
Midrange:	1	
LAN Server:	71	
Workstation:	7	
Microcomputer:	4,501	
IBM-compatible:		4,201
Apple:		300

FY98 MAJOR APPLICATIONS:
HR/Pay System
Financial System
Student Administration
Facilities Management System
Telephone Billing System
World Wide Web Service ("Pulse")

FY98 IT ACCOMPLISHMENTS: Many accomplishments were made in the field of information technology in FY 1998. Approximately 500 additional LAN workstations were installed, increasing the campus total to more than 4,500 networked PCs, servers, and printers. Systems installed included the AEC vendor client/server for the Facilities Management System, CompCO vendor client/server telephone billing/tracking system, Net.Analysis, and VeriSign digital certificates on the Pulse servers. Tele-KidCare in four Kansas City elementary schools was also launched providing healthcare to children with limited or no access to healthcare. In addition enhancements were made to multimedia communications, medication information management tools and information technology in the day-to-day business processes at KUMC.

ORGANIZATION: **Regents: University of Kansas Medical Center (continued)**

IT OBJECTIVES FOR THE FUTURE: Over the next five years, The University of Kansas Medical Center will be focusing on the integration of information resources, thus adding value to new and existing IT investments. Data Management will be created to maintain standard data dictionaries, directory tools and data models. Ongoing development and enhancement of EDM will result in the reduction or elimination of paper reports while making stored digital data available to staff needing this information to do their daily business tasks. Through the use of KUConnect, physicians can continue their practice in small communities without sacrificing access to current knowledge. Beginning in FY 2000 the Medical Center will implement an integrated Library System by installing Endeavor/Voyager client/server. Networking will fully deploy network management using NetView 6000 and will continue to invest in and deploy Ethernet Switching technology and VLAN service. Version 7.0 will be installed for Financials and Student Administration. The agency will continue to install new PeopleSoft releases in FY2000-2001. This will provide new functionality and technical capabilities as these major administrative systems in PeopleSoft continue to mature. Other objectives include a phone switch upgrade, rearchitecture of the mail system, building a core research and analysis unit, establish supportable desktop standards, provide clinical and educational services to medically under-served Kansas and rural health professionals through the state via interactive televideo, and redesign and update "Pulse."

Regents: Wichita State University CODE: 715

MISSION: To provide comprehensive educational opportunities in an urban setting. Through teaching, research, scholarship, and public service, the University seeks to equip both students and the large community with the educational and cultural tools they need to thrive in a complex world and to achieve both individual responsibility in their own lives and effective citizenship in the local, national and global community.

FY99 BUDGET: **FTE:** 1,707.2 **$K:** 122,452.9

FY98 IT EXPENDITURES ($K): 4,762.1

FY98 IT STAFF:

IT FUNCTIONAL AREA	FY 98 ACTUAL FTE
Administrative Services	3.0
Academic Computing	3.0
Administrative Computer	14.0
Data Administration Data Analysis/Validation and Database Administration	2.0
Network Engineering, Security, Technical Management and Support	2.0
Computer Operations, Management and Technical Support	6.0
Technical Services	10.0
Telecommunications	11.0
TOTAL	51.0

FY98 IT PHYSICAL ASSETS:

Mainframe:	1	IBM ES 9121-440
Midrange:	6	IBM RS/6000 (5) DEC VAX 4000/500 (1)
LAN Server:	11	
Workstation:	3	
Microcomputer:	4,098	
IBM-compatible:	3,239	
Apple:	859	

FY98 MAJOR APPLICATIONS:

- Admissions
- Student Records
- Touch-tone Access
- Student Financial Assistance
- Query Systems
- Library
- Accounting
- Budgeting
- Human Resources and Payroll
- Telecommunications Billing
- Network management
- Purchasing
- Research Administration Time and Effort Reporting
- Affirmative Action
- Alumni/Foundation Records
- Student Union
- Bookstore
- Athletics
- Campus One-Card

FY98 IT ACCOMPLISHMENTS: Administrative Applications devoted up to 70% of staff time to year 2000 related projects. All Y2K-related programming is scheduled to be completed by the end of calendar year 1998. In the library system area, NOTIS release 6.41 was implemented, and a migration from an internally developed circulation system to the NOTIS circulation system was completed. The telecommunications staff continued to prepare the campus for the Lucent G3R PBX conversion. The cut-over for replacement of the old processor module to the new G3R PBX was completed. Voice mail was successfully deployed to all students living in WSU residence halls as well as student organizations as a basic service. Eleven departments were converted from obsolete key system telephones to contemporary telephone technology. A new call accounting system was acquired for long distance billing.

ORGANIZATION: **Regents: Wichita State University (continued)**

Four full-time personnel with three part-time students provide hardware and software support to nearly 4,500 desktop workstations and associated servers. Over 600 new workstations were connected to the campus Ethernet backbone, with requisite software and hardware. Support personnel continued to assess Year 2000 issues surrounding desktop operating systems and applications to ensure compliance. Campus network support completed the planning phase for a multi-year campus network improvement plan. This plan will upgrade current switched 10Mb backbone between buildings to switched 100Mb, with an upgrade path to take advantage of the increase in speed when warranted. In addition, current shared 10Mb technologies within buildings will be upgraded to switched 10Mb to the desktop, with switched 100Mb for multi-user/server machines. At the mainframe level, operating system upgrades are nearly complete for both VM and VSE, along with third-party and layered applications.

IT OBJECTIVES FOR THE FUTURE: Wichita State University has requested funding for FY 2000 be used to upgrade the campus network infrastructure, student computer labs in colleges, and student computer labs in University Computing, and upgrade technology resources in the Media Resources Center and the Ablah Library. The continued growth of digital communications and the exploding high bandwidth applications have pushed the campus's network beyond the capacity it can deliver. To meet the demand for higher bandwidth applications, a migration to switched Ethernet was begun in 1996. The proposed upgrade will increase capabilities in the future. The first phase of the student computer lab upgrade was initiated in FY 99. Workstations are required to allow students to participate actively in their courses, and more and more courses expect access to contemporary technology for instruction and research. Student computer labs located throughout the campus will be upgraded to contemporary technology. The Media Resources Center will continue to replace and/or upgrade a wide array of technology equipment and software to meet expectations of students and faculty. A computer training lab located in the University's Ablah Library will be upgraded to new technology microcomputers and faster network capabilities.

Revenue, Department of CODE: 565

INCLUDES:
Administrative Services
Alcoholic Beverage Control
Tax Operations
Property Valuation
Motor Vehicles

MISSION: To collect taxes and fees as fairly as possible, to administer Kansas law with fairness to all citizens, and to provide exemplary service to our customer, the Kansas taxpayer.

FY99 BUDGET: **FTE:** 1,185.5 **$K:** 84,600.9

FY98 IT EXPENDITURES ($K): 11,757.9

FY98 IT STAFF:

IT FUNCTIONAL AREA	FY 98 ACTUAL FTE
General Management and Administration	12.0
Application Maintenance and Enhancement	25.0
Application Development	23.0
Year 2000 Mitigation/Repair	4.0
Data Administration Data Analysis/Validation and Database Administration	5.0
Network Engineering, Security, Technical Management and Support	23.0
Computer Operations, Management and Technical Support	14.0
Data Entry	0.0
TOTAL	106.0

FY98 IT PHYSICAL ASSETS:

Mainframe:	0	
Midrange:	8	IBM AS/400 (2) IBM RS/6000 (4) Sun Enterprise 4000 (2)
LAN Server:	28	
Workstation:	0	
Microcomputer:	1020	
IBM-compatible:	980	
Apple:	40	

FY98 IT ACCOMPLISHMENTS:

Strata – ADA (Decision Analytics)	[Mainframe]
Policy and Information Repository	[NT Server, PCs]
Alcoholic Beverage Control	[AS/400, PCs]
Computer Assisted Mass Appraisal (CAMA)	[AS/400, Mainframe, PCs]
Property Valuation Parcel Abstracts	[AS/400, PCs]
Property Valuation Sales Ratio	[AS/400, Mainframe, PCs]
Commercial Imaging System	[PCs]
Accounts Receivable Mgmt System (ARMS)	[Mainframe, PCs]
Kansas Integrated Collection System (KICS)	[Mainframe, PCs]
Income Tax	[Mainframe, PCs]
Telefile	[Mainframe, DEC Intel Servers]
MOSAIX	[HP, Mainframe, PCs]
Taxpayer Registration System (TRS)	[Mainframe, PCs]
Corporation Tax	[Mainframe, PCs]
Sales Tax	[Mainframe, PCs]

ORGANIZATION: Revenue, Department of (continued)

FY98 MAJOR APPLICATIONS, continued

Excise Tax	[Mainframe, PCs]
Withholding Tax	[Mainframe, PCs]
Motor Fuel Tracking System	[Mainframe, PCs, FTP Server]
International Fuel Tax Agreement	[Mainframe]
Mineral Tax	[Mainframe, PCs]
Inheritance Tax	[Mainframe, PCs]
ASTRA Case Sub-System (ACSS)	[SUN E 4000, PCs]
Channel Management System	[PCs, Server, SUN E4000]
ACM	[Mainframe, PCs, SUN E4000]
Dealer License	[PC, Server, Mainframe]
Kansas Apportioned International Registration	[Mainframe, PCs]
Kansas Drivers License System (KDLS)	[PCs, Server, Mainframe]
Vehicle Information Processing System (VIPS)	[AS/400, Mainframe]
Motor Carrier Central Permit (MCCP)	[Mainframe, PCs]

FY 98 IT ACCOMPLISHMENTS: KDOR has continued transforming the department into a high performance organization through Project 2000. Many accomplishments were made in 1998 including implementation of the Motor Fuel Distributor's Registration System, ASTRA Case Management, ASTRA Decision Analytics and ASTRA Case Management Sub-system. KDOR also implemented automated software distribution using CA Unicenter TNG, monthly deletion of queue entries from the Driver Control Docket queue, selected Document Type for printing folders in control, and dial-up on Shiva LAN-Rovers. The SUN Solaris E 4000 database server for ASTRA and the FTP server to support electronic filing of tax information for the Motor Carrier Division, were configured and installed. A total of 4,136 programs were converted, 116 programs were rewritten, and 321 programs received corrected software from third party vendors for the Year 2000 readiness. Upgrades were made to the Vehicles servers and PC's, as well as the operating system on two AS/400's. Program enhancements were also made to the Central Permits System and VIPS II.

IT OBJECTIVES FOR THE FUTURE KDOR will continue to accelerate its efforts to coordinate, standardize, and manage the Agency's data resources as an enterprise asset to better serve all of the needs of the business community, the Kansas counties, and the citizens of Kansas. Expanded data sharing efforts will use the Internet, EDI, EFT, EBT, the KDOR Intranet and KANWIN network. Greater accessibility of the agency's data resources will facilitate enhanced strategic alliances with the agency's business partners. Migration off of the mainframe to mid-range UNIX enterprise environments and distributed computer environments will continue. KDOR is leveraging Project 2000 to implement agency data administration. KDOR will move toward increased computer telephony integration and electronic tax filing, electronic benefits transfer and electronic funds transfer. Developing meta-data infrastructure with the SAS Data Warehouse Administrator will facilitate the transformation of data found in Oracle and ADABASE tables into business information. While Project 2000 has introduced these tools to the agency, they will be applied across the entire application portfolio in the coming years. The Oracle relational database management system has been selected as the backbone to future application development. Object-oriented programming techniques will be used to develop the ASTRA system utilizing Sybase PowerBuilder supported by WindowsNT at the network and desktop. Proposals are being made to combine the Tele-File, Tel-Assist, Refund Status Line and inbound MOSAIX calls as part of one system (Computer Telephony Integration); the CAMA Replacement Project will provide Kansas counties with improved software with which to conduct computer assisted mass appraisals; and KDORs Intranet infrastructure enhancements will strengthen the information technology services provided on the Intranet, and provide for dynamic distribution of operational policies and procedures.

Secretary of State CODE: 622

INCLUDES: Uniform Commercial Code
Corporations
Administration
Elections/Legislative Matters
Legal
Information Technology

MISSION: To be the least complicated, most accessible agency in state government.

FY99 BUDGET: FTE: 55 **$K:** $3,010.5

FY98 IT EXPENDITURES ($K): 164.3

FY98 IT STAFF:

IT FUNCTIONAL AREA	FY 98 ACTUAL FTE
General Management and Administration	.0
Application Maintenance and Enhancement	.0
Application Development	.0
Year 2000 Mitigation/Repair	.0
Data Administration Data Analysis/Validation and Database Administration	.0
Network Engineering, Security, Technical Management and Support	.0
Computer Operations, Management and Technical Support	.0
Data Entry	.0
TOTAL **(No breakdown provided)**	5.0

FY98 IT PHYSICAL ASSETS:

Mainframe:	0	
Midrange:	1	IBM AS/400
LAN Server:	1	
Workstation:	0	
Microcomputer:	32	
IBM-compatible:	31	
Apple:	1	

FY98 MAJOR APPLICATIONS: None provided.

FY98 IT ACCOMPLISHMENTS: The Office of the Secretary of State acts as a clearinghouse for information requested by the general public and by county election officers in matters pertaining to election statutes and practices. To improve services, an AS/400 was installed which replaced the Model B70; corporation file changes were completed for the AS/400 conversion; the validation program for the UCC rewrite and rewrite of lawbook and elections was completed as well as starting the year 2000 rewrite for the Kansas Register and creating a home and web page for elections.

IT OBJECTIVES FOR THE FUTURE: To further the agency's mission, the SOS will complete all preparations to install an imaging system in the UCC and Corporation Divisions. A budget proposal will be prepared for approval prior to FY 2000 and bidders will be selected to move on to a task of imaging. Plans are in place to complete the installation of upgraded software on PCs that will replace Macintosh units and other noncompliant PCs with Pentium PCs.

Securities Commissioner CODE: 625

INCLUDES:

MISSION: To protect investors and the public from unfair or fraudulent offerings of securities and other financial services to preserve the integrity of financial markets and to promote the capital formation process.

FY99 BUDGET: FTE: 27 **$K:** $1,770.6

FY98 IT EXPENDITURES ($K): 42.3

FY98 IT STAFF:

IT FUNCTIONAL AREA	FY 98 ACTUAL FTE
General Management and Administration	.0
Application Maintenance and Enhancement	.0
Application Development	.0
Year 2000 Mitigation/Repair	.0
Data Administration Data Analysis/Validation and Database Administration	.0
Network Engineering, Security, Technical Management and Support	.0
Computer Operations, Management and Technical Support	.0
Data Entry	.0
TOTAL **(No dedicated IT staff)**	0.0

FY98 IT PHYSICAL ASSETS:

Mainframe:	0	
Midrange:	1	IBM AS/400
LAN Server:	0	
Workstation:	0	
Microcomputer:	28	
IBM-compatible:	28	
Apple:	0	

FY98 MAJOR APPLICATIONS: None provided.

FY98 IT ACCOMPLISHMENTS: During FY 1998, CTA Inc. performed an assessment of this agency's information systems for Year 2000 compliance. In general, the personal computer systems are Y2K ready, with the exception of some miscellaneous software packages, which will be replaced or upgraded as needed. Four applications on the IBM AS/400 minicomputer system are not Y2K compliant, and the hardware and operating system must also be upgraded to attain compliance. The necessary hardware and operating system upgrades have been ordered and will be acquired with FY 1998 funds.

IT OBJECTIVES FOR THE FUTURE: Consultation was also provided on the feasibility and cost of connecting the stand-alone personal computers with the agency through a network. Estimates were provided on the cost of hardware acquisition and installation to develop this network. This project will not be undertaken until FY 2000.

Social and Rehabilitation Services, Department of CODE: 629

INCLUDES:
Commissioner of Administrative Services
Commissioner of Alcohol and Drug Abuse Services
Commissioner of Adult and Medical Services
Commissioner of Income Maintenance/Employment Preparation Services
Commissioner of Mental Health and Developmental Disabilities
Commissioner of Rehabilitation Services
Commissioner of Children and Family Services
Office of the Secretary
Office of Public Affairs
Human Resource management
Office of Research
Office of Finance
Legal Services Division (Child Support Enforcement)
Field sites in 105 counties

Note: Includes other umbrella agencies (Kansas Neurological Institute; Rainbow Mental Health Center; and Larned, Osawatomie, Parsons, Topeka and Winfield State Hospital)

MISSION: To protect children and promote adult self-sufficiency.

FY99 BUDGET: **FTE:** 6,865.4 **$K:** 1,627,807.0

FY98 IT EXPENDITURES ($K): 25,852.2

FY98 IT STAFF:

IT FUNCTIONAL AREA	FY 98 ACTUAL FTE
General Management and Administration	.0
Application Maintenance and Enhancement	.0
Application Development	.0
Year 2000 Mitigation/Repair	.0
Data Administration Data Analysis/Validation and Database Administration	.0
Network Engineering, Security, Technical Management and Support	.0
Computer Operations, Management and Technical Support	.0
Data Entry	.0
TOTAL **(No breakdown provided.))**	243.16

FY98 IT PHYSICAL ASSETS:

Mainframe:	1	
Midrange:	0	
LAN Server:	111	
Workstation:	0	
Microcomputer:	5,756	
IBM-compatible:		5,754
Apple:		2

FY98 MAJOR APPLICATIONS:

Electronic Benefits Transfer (EBT)	AMDAHL; TANDEM HIMALAYA 6000
Family and Child Tracking System (FACTS)	AMDAHL
Financial Accounting Reporting Management System (FARMS)	DISC AMDAHL
KS Automation eligibility and Child Support Enf. Sys. (KAECSES)	AMDAHL
KS Sys. For Child Care and Realizing Economic Self-Sufficiency (KsCares)	AMDAHL
Kansas Management Information System (KMIS)	AMDAHL

ORGANIZATION: Social and Rehabilitation Services, Department of (continued)

FY98 MAJOR APPLICATIONS, continued

Medcaid Management Information System (MMIS)	IBM 3090; AMDAHL
Medical Records Management (MRM)	486 DX50 File Server
Patient Accounts Management System (PAM)	486 DX50 File Server
Client Information Form (CIF)	Microcomputer

FY98 IT ACCOMPLISHMENTS: SRS systems are highly driven by federal requirements for programs the agency executes. During FY98, SRS completed the transfer of voice and data communications for consolidation of staff into the Docking State Office Building. Installation was started for an upgraded version of GroupWise (version 5.2) and a client/server development standard was established (Oracle). Two systems were retired—CANIS and FAME—for the Children & Family Services Commission and a data warehouse was initiated. Year 2000 compliance was established with the FARMS system and mainframe printing was converted.

IT OBJECTIVES FOR THE FUTURE: SRS plans to accelerate sharply it efforts to coordinate, standardize and manage the Agency's data resources as an enterprise asset. Upgrades to mainframe software applications and software for personal computers are the primary strategies to achieve Y2K compliance by December 1999. The Kansas Enhanced Statewide Support Enforcement Program (KESSEP) will upgrade the current subsystem for the Child Support Enforcement Program. KESSEP will provide a major enhancement to the current subsystem in the KAECSES. The Medicaid Management Information Systems Modifications (Healthwave) system must integrate with two existing SRS systems; KAECSES and Medicaid MMIS. A private contractor will serve as a "clearinghouse" by accessing KAECSES to register applicants and to determine eligibility. The Service Delivery project is planned to enhance the Family and Child Tracking System (FACTS) and bring the system in SACWIS compliance. The CSE Welfare Reform program is critical to the SRS mission. This project is partially federally funded and will implement additional system requirements after the KESSEP project is completed and will provide a major enhancements to the current subsystem in KAECSES. DISC has selected Sungard as a contractor to provide Business Contingency, a statewide computer system and network site. Sungard will also assist state agencies with completing a business impact analysis of critical systems, with performing a risk assessment and developing, testing and implementing a business recovery plan. DISC has also selected new software to replace the existing Asset Management software for reporting to DISC. SRS will need to customize entry screens, database files, reports and the integration features for the Help Desk. This system will replace three different software packages to manage the day-to-day operations. SRS has also began planning for implementation of the Health Insurance Portability and Accountability System.

Tax Appeals, Board of CODE: 562

INCLUDES:

MISSION: To ensure that all property in the State of Kansas is assessed in an equal and uniform manner, to impartially and in a timely manner resolve disputes regarding any tax issue between various taxing authorities and the taxpayers of the state, to correct tax inequities, determine when property qualifies for exemption from taxation, and authorize taxing subdivisions to exceed current budget limitations and/or issue no-fund warrants.

FY99 BUDGET: **FTE:** 30 **$K:** 1,678.5

FY98 IT EXPENDITURES ($K): 156.9

FY98 IT STAFF:

IT FUNCTIONAL AREA	FY 98 ACTUAL FTE
IT FUNCTIONAL AREA	FY 98 ACTUAL FTE
General Management and Administration	.0
Application Maintenance and Enhancement	1.0
Application Development	.0
Year 2000 Mitigation/Repair	.0
Data Administration Data Analysis/Validation and Database Administration	.0
Network Engineering, Security, Technical Management and Support	.0
Computer Operations, Management and Technical Support	.0
Data Entry	.0
TOTAL	1.0

FY98 IT PHYSICAL ASSETS:

Mainframe:	0	
Midrange:	1	
LAN Server:	1	
Workstation:	0	
Microcomputer:	37	
IBM-compatible:		37
Apple:		0

FY98 MAJOR APPLICATIONS:

Case Tracking System (8/97 to Present)	IBM 330
IBM AS/400 Case Tracking (Off-line FY 99)	AS/400

FY98 IT ACCOMPLISHMENTS: BOTA was given authorization by the 1996 Legislature for unlimited re-appropriation of the unspent FY 96 budget for the Implementation/Conversion of BOTA AS/400 to LAN case tracking system, and word processing system. Implementation of the system occurred in FY 98.

IT OBJECTIVES FOR THE FUTURE: An enhancement project was initiated in FY 99 for programming the addition of a Small Claims Division to BOTA Case Tracking System. This project will allow the current system to track and integrate data used in both divisions by the addition of database fields and reports. Changes are planned to be in place by December 15, 1998. In FY 2000 improvements in PC technology are being proposed. The replacement of PC's would begin with older PC's and continue in the next fiscal year.

Transportation, Department of CODE: 276

INCLUDES: Highway Maintenance
Highway Construction
Local Support
Management

MISSION: To provide a statewide transportation system to meet the needs of Kansas.

FY99 BUDGET: **FTE:** 3,131.5 **$K:** 887,298.7

FY98 IT EXPENDITURES ($K): 13,780.7

FY98 IT STAFF:

IT FUNCTIONAL AREA	FY 98 ACTUAL FTE
General Management and Administration	19.3
Application Maintenance and Enhancement	16.0
Application Development	13.9
Year 2000 Mitigation/Repair	8.4
Data Administration Data Analysis/Validation and Database Administration	12.5
Network Engineering, Security, Technical Management and Support	18.9
Computer Operations, Management and Technical Support	9.7
Data Entry	6.2
TOTAL	104.9

*26 FTE do not have an IT classification. They are engineers, management analysts, engineering technicians, etc.

FY98 IT PHYSICAL ASSETS:

Mainframe:	0	
Midrange:	6	IBM AS/400
LAN Server:	100	
Workstation:	8	
Microcomputer:	2,393	
IBM-compatible:	2,389	
Apple:	4	

FY98 MAJOR APPLICATIONS:

ANALYSIS System for KDOT (ASK)	[Mainframe]
Automated Traffic Records System (ATRS)	[Compaq Server]
Beautification System	[PC]
Bid Analysis Management System (BAMS)	[Mainframe]
Bridge Management System (BMS)	[PC]
Budget System	[Mainframe]
Capital Inventory	[Mainframe]
City Connecting Links	[Mainframe]
Comprehensive Program Management System (CPMS)	[Mainframe]
Computer Aided Drafting and Design/Computer Aided Mapping (CADD/CAM)	[Compaq PCs]
Construction Management System (CMS)	[Mainframe]
Consumable Inventory Management	[Mainframe]
Control Section Analysis System (CANSYS)	[Mainframe]
Cost Center Feedback (CCFB)	[Mainframe]
Electronic Surveying/Photogrammetry	[UNIX]
Employee Time System	[Mainframe]

ORGANIZATION: **Transportation, Department of (continued)**

FY98 MAJOR APPLICATIONS, continued

Equipment Management System (EMS)	[Mainframe]
Equipment Rental System	[Mainframe]
Federal Aid Billing System	[Mainframe]
Geographic Information System (GIS)	[Workstation]
Highway Frequency Accident Location Analysis System (HFALAS)	[Mainframe]
Highway Maintenance Management System (HMMS)	[Mainframe]
Highway Safety Information System	[Mainframe]
Human Resources Systems	[Mainframe]
Integrated Financial Information System (IFIS)	[Mainframe]
Kansas Accident Reporting System (KARS)	[Compaq Server]
National Bridge Inspection Program (NBIP)	[Mainframe]
Operations Budget System	[Mainframe]
Pavement Management System (PMS)	[PC, Intergraph]
Portable Coverage Counts (CVRG)	[Compaq Server]
Reinforced Concrete Box	[PC]
Right of Way	[PC, Mainframe]
Road Weather Information System (RWIS)	[PC]
Traffic Classification System	[PC]
Voucher Entry System (VES)	[Mainframe]
Weigh-in-Motion System (WIM)	[Mainframe]

FY98 IT ACCOMPLISHMENTS: KDOT has administrative and planning responsibilities for aviation, highways, public transportation, railroads, and waterways. To improve the efficiencies of information technology in the agency, the following accomplishments were made in FY 1998: completed the conversion of key components of the Automated Traffic Records System (ATRS) from Supra to Oracle client server, completed the FIMS/IMMS Business Process Reengineering "As-Is" assessment of existing processes, implemented CMS enhancement packages that included enhanced edits and features, implemented CPMS enhancement package and screens and reports to allow Federal Fund Management tracking, installed 36 Novell servers in the District and area offices, enabled all district and area office staff to access GroupWise via the Ethernet system and converted EIS to the Intranet based Analysis System for KDOT (ASK).

IT OBJECTIVES FOR THE FUTURE: With the publication of the Information Technology Architecture (ITA) Plan in 1996, KDOT set strategic directions to bring efficiencies to information technology in KDOT. This includes implementation of application systems such as the Comprehensive Program Management System (CPMS), Control Section Analysis System (CANSYS), and Pavement Management System (PMS). The agency will convert the Construction Management System (CMS) to a new technology platform in FY 1999 and develop a Commercial Permit Routing System in FY 2000. The agency will continue efforts to implement the new Financial Information Management System, along with the Integrated Maintenance Management System (FIMS/IMMS). The agency will maintain and enhance an information technology management process that supports the strategic use of information technology and will standardize the desktop environment to provide a technology platform to support an integrated information technology environment at all organizational locations. Strategies have been identified to provide an integrated IT environment and continued expansion of the Ethernet System, as well as the 800 MHz system as specified in the Radio Plan by 2002. The agency will complete the prototype phase of Records and Workflow Management and begin phased Solution Implementation in FY 1999. The agency will continue to expand and enhance Intranet and Internet technology using SAS to deliver information to more KDOT users. The agency will also update the GIS Direction plan and provide GIS technology where applicable.

Treasurer, Office of the State CODE: 670

INCLUDES: Administration
Municipal Bond Services
Cash Management Services
Unclaimed Property
Pooled Money Investment Board

MISSION: To participate in the management of public funds to ensure safe and sound financial practices to benefit the people of Kansas. The office of the Kansas State Treasurer will act in accordance with Kansas laws maintaining the highest standards of ethics and accountability. We take seriously our fiduciary responsibilities. We will strive to achieve non-tax revenues through practices which provide safety and increased earnings, always taking into account cost effectiveness and efficiency.

FY99 BUDGET: **FTE:** 56.5 **$K:** 105,214.4

FY98 IT EXPENDITURES ($K): 382.5

FY98 IT STAFF:

IT FUNCTIONAL AREA	FY 98 ACTUAL FTE
General Management and Administration	1.0
Application Maintenance and Enhancement	1.1
Application Development	1.0
Year 2000 Mitigation/Repair	0.0
Data Administration Data Analysis/Validation and Database Administration	0.6
Network Engineering, Security, Technical Management and Support	1.3
Computer Operations, Management and Technical Support	1.0
Data Entry	0.0
TOTAL	6.0

FY98 IT PHYSICAL ASSETS:

Mainframe:	0	
Midrange:	0	
LAN Server:	6	
Workstation:	0	
Microcomputer:	61	
IBM-compatible:		61
Apple:		0

FY98 MAJOR APPLICATIONS:

Bonds Services	[PC LAN]
Distributions	[PC LAN]
Government Assets & Investments Network System (GAINS)	[PC LAN]
Unclaimed Property System	[PC LAN]
Warrants	[PC LAN]

FY 98 IT ACCOMPLISHMENTS: Several years ago, the agency began a move from the mainframe platform to the smaller less expensive PC LAN environment. With this transition came a great number of time and cost savings along with a huge boost in efficiency such as upgrading three internal LAN servers to Novell version 4.11, completion of a remote Unclaimed Property System which can be downloaded from a website (a major upgrade of Unclaimed Property software is underway and is 80% complete), expanded print sharing, and completed the networking of the entire Treasurer's Office staff.

ORGANIZATION: **Treasurer, State (continued)**

IT OBJECTIVES FOR THE FUTURE: The State Treasurer's Office plans to launch an extensive investigation into the pros and cons of completely renovating the infrastructure of its operation. Over the next five years they plan to continue moving toward the best technologies. Objectives include the implementation and testing of the Disaster Recovery Plan, implementation of an effective and efficient imaging process to replace manual filing and retrieval of documents for Unclaimed Property and Bond Services programs, implementation of a new Unclaimed Property System in order to fully exploit the advantages the Windows platform has to offer, conversion of all DOS applications to Windows format, collection of Bond Services data through the Internet, development and implementation of a procedure for agencies to submit their daily receipt vouchers either through the Treasurer's website or by some other file transfer method, design and implement a state-wide interfund voucher system that utilizes the Treasurer's website, and continue a three year plan for rotation of hardware and software.

Veterans Affairs, Commission on CODE: 694

INCLUDES: Administration and Veterans Services
Persian Gulf War Veterans Health Initiative Program (PGWVHI)
Kansas Veterans Home (KVH)
Kansas Soldiers Home (KSH)
Capital Improvements

MISSION: Afford Kansas veterans, their relatives and dependents information, advice, direction, and assistance through the coordination of programs and services in the fields of education, health, vocational guidance and placement, mental care, and economic security as well as Persian Gulf veterans Health Program, and to manage, operate, and control the Kansas Soldiers Home located at Fort Dodge, Kansas and the Kansas Veterans Home located at Winfield, Kansas.

FY99 BUDGET: **FTE:** 321.8 **$K:** 9,869.5

FY98 IT EXPENDITURES ($K): 129.0

FY98 IT STAFF:

CATEGORY	FULL-TIME (FTE)
Classified IT specialist/manager	1
Unclassified IT specialist/manager	
Classified Keyboard/Data Entry Op.	
Classified, non-IT series	
Unclassified, other	
Student or intern	
Volunteer	
On-site contractor IT specialist	
TOTAL	1

FY98 IT PHYSICAL ASSETS:

Mainframe:	0	
Midrange:	0	
LAN Server:	2	
Workstation:	0	
Microcomputer:	95	
IBM-compatible:		93
Apple:		2

FY98 MAJOR APPLICATIONS: None provided.

FY98 IT ACCOMPLISHMENTS: The agency hired its first information resource manager.

IT OBJECTIVES FOR THE FUTURE: The initial technology strategy for this agency will be to ensure that the technology required for the opening of the new Kansas Veterans Home meets the facility's needs and is Year 2000 compliant. Additionally, emphasis will be placed on moving the agency to one hardware and software platform to provide uniformity within the agency and the provision of Internet connectivity for all offices to allow for electronic communications and file sharing.

Water Office, Kansas CODE: 709

INCLUDES:

MISSION: To achieve proactive solutions for water resource issues of the state and to ensure good quality water to meet the needs of the people and the environment of Kansas.

FY99 BUDGET: **FTE:** 22.5 **$K:** 5,895.2

FY98 IT EXPENDITURES ($K): 45.3

FY98 IT STAFF:

IT FUNCTIONAL AREA	FY 98 ACTUAL FTE
General Management and Administration	1.0
Application Maintenance and Enhancement	.0
Application Development	.0
Year 2000 Mitigation/Repair	.0
Data Administration Data Analysis/Validation and Database Administration	.0
Network Engineering, Security, Technical Management and Support	.0
Computer Operations, Management and Technical Support	.0
Data Entry	.0
TOTAL **(Part-time position)**	1.0

FY98 IT PHYSICAL ASSETS:

Mainframe:	0	
Midrange:	0	
LAN Server:	2	
Workstation:	1	
Microcomputer:	37	
IBM-compatible:		37
Apple:		0

FY98 MAJOR APPLICATIONS: None Provided.

FY98 IT ACCOMPLISHMENTS: None Provided.

IT OBJECTIVES FOR THE FUTURE: None Provided.

Wildlife and Parks, Department of CODE: 710

INCLUDES: Fisheries and Wildlife Division; Parks Division; Law Enforcement Division; Public Lands Division; Field sites in 38 cities, towns, state parks and wildlife areas

MISSION: Conserve and enhance Kansas natural heritage, its wildlife and its habitats—to ensure future generations the benefits of the state's diverse, living resources. Provide the public with opportunities for the use and appreciation of the natural resources of Kansas, consistent with the conservation of those resources. Inform the public of the status of the natural resources of Kansas to promote understanding and gain assistance in achieving this mission.

FY99 BUDGET: **FTE:** 395.3 **$K:** 45,049.3

FY98 IT EXPENDITURES ($K): 684.7

FY98 IT STAFF:

CATEGORY	FULL-TIME (FTE)
Classified IT specialist/manager	3
Unclassified IT specialist/manager	
Classified Keyboard/Data Entry Op.	2
Classified, non-IT series	
Unclassified, other	
Student or intern	
Volunteer	
On-site contractor IT specialist	
TOTAL	5

FY98 IT PHYSICAL ASSETS:

Mainframe:	0	
Midrange:	1	IBM AS/400
LAN Server:	5	
Workstation:	0	
Microcomputer:	324	
IBM-compatible:	236	
Apple:	88	

FY98 MAJOR APPLICATIONS:

AS/400 applications

- Boat Registration
- Property Inventory
- Cost Accounting System (CAS)
- Hunter Education
- Law Enforcement System
- Planning System
- Big Game System
- License Agent System

- Environmental Permitting and Project Tracking **[PC LAN]**
- Creel Survey (Creel) **[Mainframe]**
- Aquatic Data Analysis System (ADAS) **[PC/LAN]**

FY98 IT ACCOMPLISHMENTS: Major accomplishments made for FY 98 include an upgrade to the IBM AS/400 to the 9402-400 model, AS400 programs and all PC's are Y2K compliant, Automated Data Analysis System enhancement was completed, and the vehicle rental program was written and implemented in the Cost Accounting System. Significant progress was also made on standardizing to Microsoft Office, upgrading/replacing older PCs and enhancing electronic communication capabilities across the Department through the establishment of Internet accounts and e-mail addresses.

ORGANIZATION: **Wildlife and Parks, Department of (continued)**

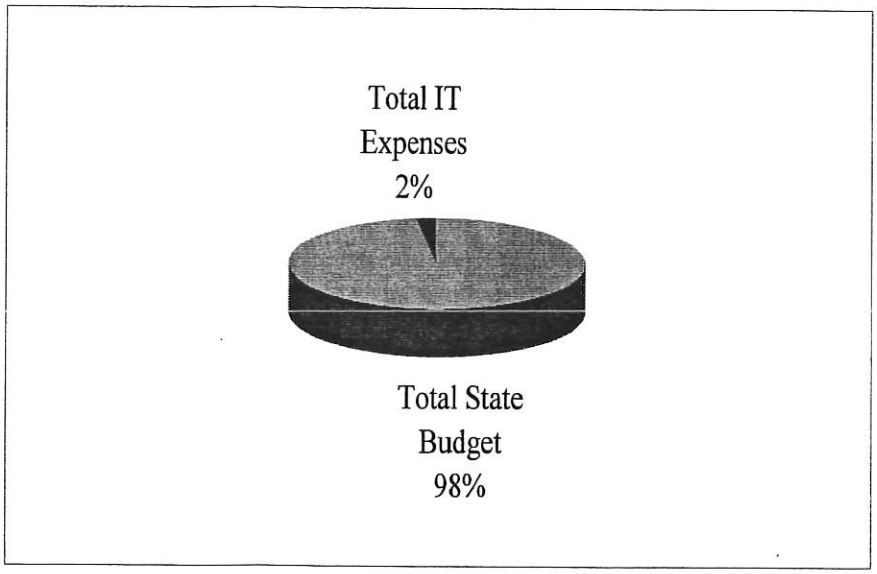
IT OBJECTIVES FOR THE FUTURE: The Department of Wildlife and Parks has several information systems to manage various permit activities (e.g., boat registration, fishing permits, big game permits), wildlife population tracking, and internal administration. Wildlife and Parks seeks to continue efforts to extend their minicomputer, Local Area Network (LAN) and wide area network capabilities, replacing obsolete and insupportable equipment and taking advantage of more cost-effective network technology. The Department also plans to continue evaluating point-of-sale (POS) opportunities at satellite offices. A pilot POS project is being considered for the Kansas City District office.

Overview - Statistics on Technology Resources

The following statistics are intended to provide a high level perspective of the resources employed by state government organizations and state universities. Financial statistics are drawn from the state's financial system. It should be recognized that most information technology costs are associated with agency service delivery and management programs. This presentation focus on resources is simply to provide a view of this data from a technology perspective. Personnel resource data was drawn from the state's personnel system. Fiscal year 1998 data was drawn in November 1998. Inventory data was drawn from agency reports. The total costs of technology as a percent of total state budget would indicate that Kansas invests conservatively.

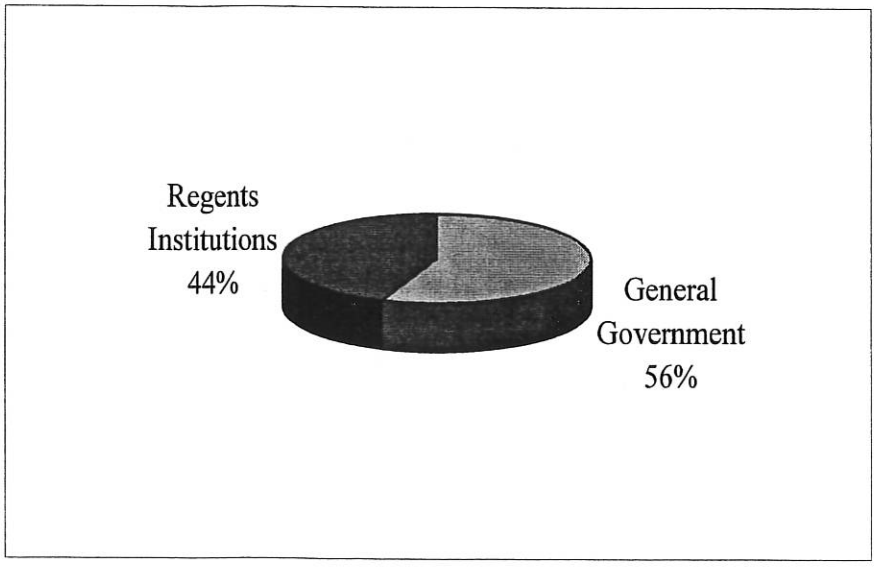
FY 98 State Budget and IT Expenses

Total State Budget **$8.7 Billion**
Total IT Expenses **$192 Million**



Distribution of IT Expenses FY98 – General Government/Regents

General Government $133 Million
Regents $59 Million



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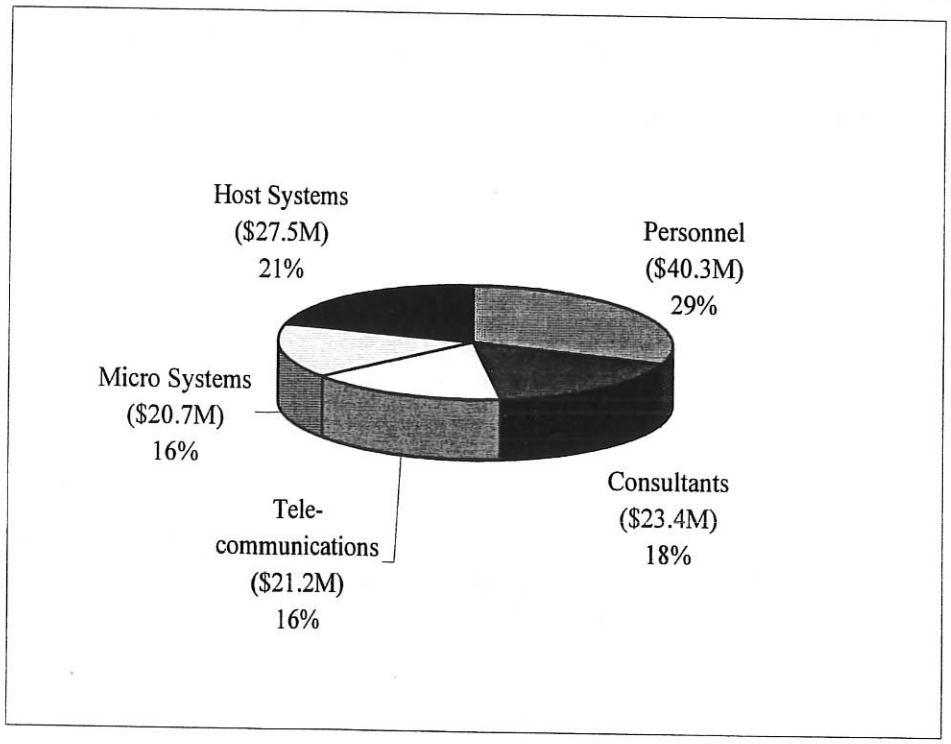
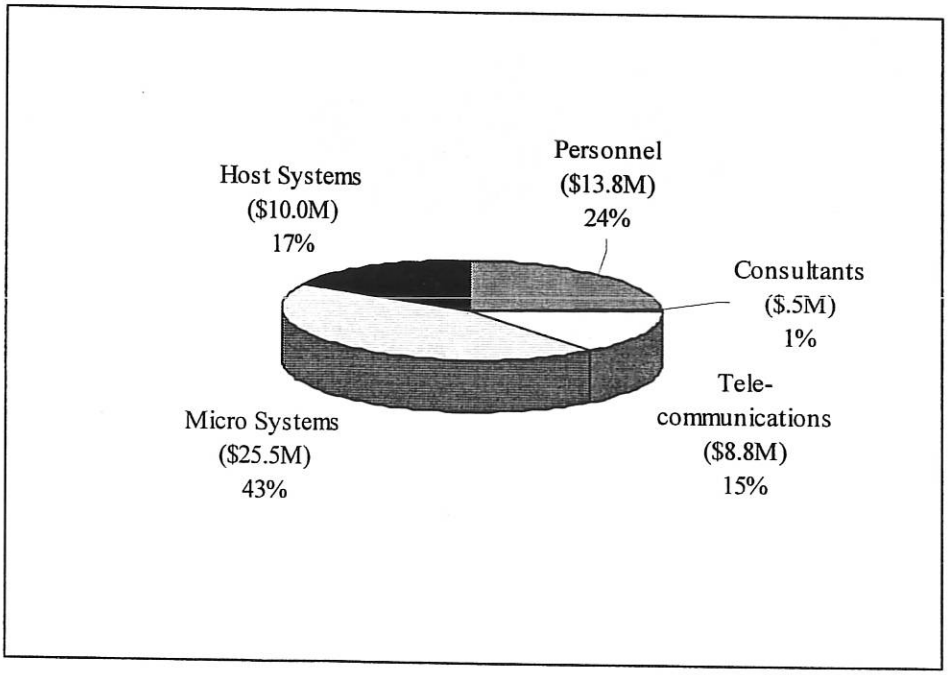
Distribution of IT Expenses – General Government – $133.0 Million



Distribution of IT Expenses –Regents Institutions -- $58.6 Million

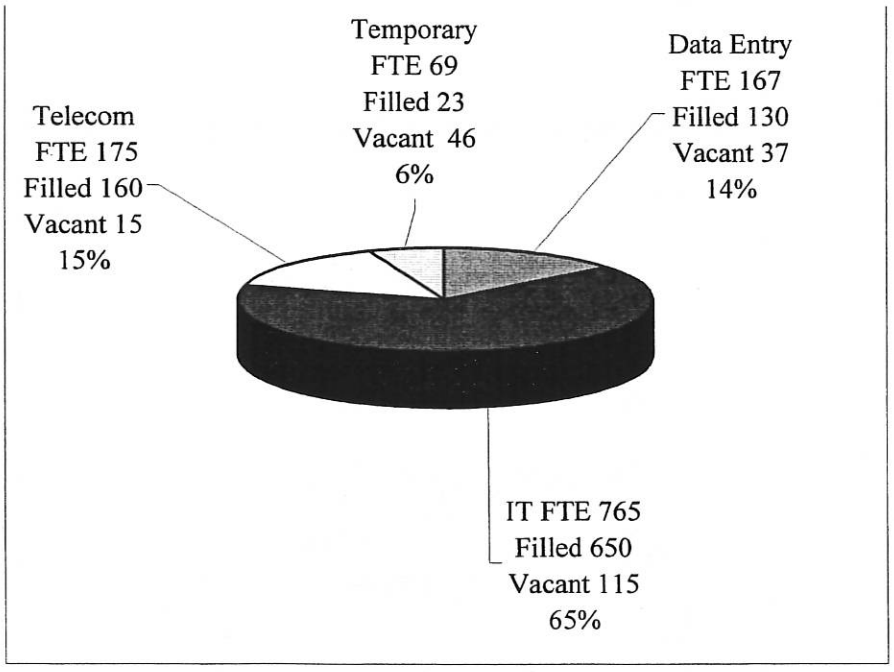


Authorized IT Staff – General Government/Regents

General Government	Total	Regents	Total
SRS	219.9	KSU	156.4
D of A	199.9	KU	122.6
Revenue	136.0	KUMC	37.0
DHR	137.1	Others	102.5
DOT	127.0		418.5
KHP	94.0		
KDHE	45.0		
Others	218.2		
	1,177.2		

Distribution of Classified IT Personnel – General Government

Total FTE 1,177



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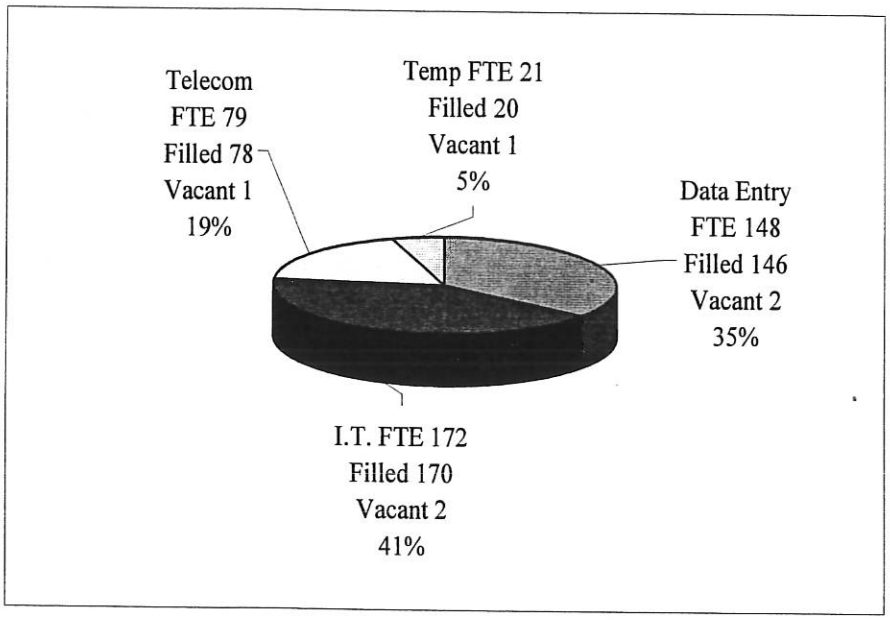
Distribution of Classified IT Personnel – Regents

Total FTE 419



Distribution of Hardware General Government/Regents

Category	Mainframe	Midrange	LAN Server	Wkstation	Micro
Total General Government	3.0	67.0	464.0	62.0	18,362.0
Regents	6.0	39.0	357.0	599.0	32,934.0
Total	9.0	106.0	821.0	661.0	51,296.0

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Overview

The material in this report was prepared from Information Technology Management and Budget Plans filed by agencies. We reviewed the material supplied and have provided a summary for each project submitted. Summaries are based on the project's business objectives or motivators. Unless the cost of each project exceeds $250,000, it will not be included in the summary.

For each project we have summarized, we have provided a description, business objective/motivator, scope statement and project status.

State of Kansas

PROJECT 1

Name: Year 2000

Acronym: YR2K

Sponsor: Don Heiman, Director, DISC

Contact: John Oliver, Kansas Information Technology Office

Project Cost: $25 million

Budget Cost: $7.2 million

Budget FTE: Not provided.

Start: 1997

Project Business Objectives or Motivators: To provide state agencies computer platforms and consulting services that will ensure that information systems are ready to operate with the passage of the Year 2000.

System Description and Scope: In March 1996, DISC began planning and participating in discussions with the CIA and agencies to increase awareness for issues related to the proper performance of state computer applications for the Year 2000. Because many computer programs were developed with two-digit year fields, computations and uses of date fields will create unpredictable results and have adverse impact on the business continuity of state government. To assist agencies DISC has created a mainframe task force, established a Year 2000 data center, established a Year 2000 awareness center, and established a contract for consulting assistance for the assessment, planning and repair of computer applications by December 1999.

The scope of the project includes: 1) Plan the communications architecture needed to support switching and information systems; 2) Prepare implementation plan for infrastructure roll out in conjunction with consultant and CJCC; 3) Implement new network during FY 1999 and FY 2000.

Project Status: The project began in 1997. To date CTA has entered into 38 task orders to conduct assessments and Year 2000 repairs. In addition, an MVS test platform is available for customers to test year 2000 changes to computer programs.

The Project Task Force for mainframe planning meets regularly. DISC has established requirements for all mainframe computer software that it operates to be Year 2000 compliant and will test this compliance on the test platform. In addition, DISC has established a Year 2000 Awareness Center to assist agencies and publishes a bi-monthly newsletter. The awareness center will be expanded in FY 1998 to include an additional FTE for managing the state's federal and local units of government interface compliance initiative. The awareness center will also sponsor 12 summits with local units over government. These summits will occur every three months. They will be held in Wichita, Fort Hays, and Topeka.

DEPARTMENT OF ADMINISTRATION

PROJECT 1 (DISC)

Name: Law Enforcement Switching Update

Acronym: ASTRA

Sponsor: Criminal Justice Coordinating Council

Contact: Andy Scharf, Bureau of Telecommunications

Project Cost: 75% funded from federal grant moneys and 25% from state match money.

Budget Cost: Final funding approach subject to legislative and CJCC review.

Budget FTE: 2 (DISC Only)

Start: Fall 1996

Project Business Objectives or Motivators: To provide the law enforcement community with a replacement network infrastructure that will fully support the Criminal Justice Information System (CJIS).

System Description and Scope: DISC currently provides data communications services to the law enforcement community by operating a Tandem 6100 message switching system. The system is used to switch messages between law enforcement sites across the state for local and state sites, including the Kansas Bureau of Investigation, Kansas Highway Patrol and police and sheriff's offices. Beside message switching, this system provides access to state motor vehicle files, the National Crime Information Center (NCIC), and other state law enforcement communications across the county. The current switch was implemented in 1986. With the formation of the Criminal Justice Coordinating Council in 1995, the planning process began for CJIS. As part of this process, the council, with assistance from a consultant, identified the need for a replacement data communication infrastructure to serve the new information systems architecture and to address the related requirements for message switching and interagency communications.

The scope of the project includes: 1) Plan the communications architecture needed to support switching and information systems proposed; 2) Prepare implementation plan for infrastructure roll out in conjunction with consultant and CJCC; 3) Implement new network during FY 1999 and FY 2000.

Project Status: Circuits are being installed and user is converting to the new system.

Administration, Department of (continued)

PROJECT 2 (DISC)

Name: UNIX Upgrade

Acronym: UNIX U

Sponsor: Dan Stanley, Secretary of Administration

Contact: Joe Hennes, System Software Manager

Project Cost: $500,000

Budget Cost: $250,000

Budget FTE: 12

Start: January 1997 – Complete December 1998

Project Business Objectives or Motivators: To provide infrastructure for the operation of Public Sector 7.0 for SHaRP, for Office of Judicial Administrator, and for support of the Department of Revenue Tax systems. Processor upgrade is needed to assure necessary availability of the system, accommodate the implementation of the new software and relieve pressure currently on the production schedule. The production SHaRP system has been moved to a new SUN Ultra-Enterprise/4000 system and the existing servers will be used to process Courts and Revenue's new Unix systems.

System Description and Scope: In FY 1998, DISC operated two Sun SPARC 2000 processors. One processor is used for the current production processing for SHaRP release 4.02 and the second processor is available to backup the first and to provide for development and testing of Release 7.0 for the Public Sector version of PeopleSoft and for the development of KDORs Tax 2000 software, as well as the Courts case management system under development.

Project Status: The data center and 150 gig of DASD is installed and fully tested. Final implementation of the SHaRP 7.0 upgrade was completed in October 1998 concurrent to this upgrade is the installation of a CITRIX (Winframe) server to allow dial-up users to operate their clients. This will avoid upgrading client machines that use dial-up access to SHaRP.

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Administration, Department of (continued)

PROJECT 3 (DISC)

Name: CMOS Mainframe

Acronym: CMOS

Sponsor: Don Heiman, Director, DISC

Contact: Joe Hennes, System Software Manager

Project Cost: $750,000 (with on-going annual costs at $180,000)

Budget Cost: $750,000

Budget FTE: 5

Start: Initial Planning Phase

Project Business Objectives or Motivators: To provide cheaper processing in support for all mainframe users and to provide additional capacity for KESSEP, SRS child support enforcement.
System Description and Scope: DISC currently operates a single MVS processor for all state agencies. This processor is 250 MIPS Amdahl 5995/5670 and is separated into two logical partitions (LPARS). This processor was acquired in November 1996 and upgraded in November 1997 to accommodate SRS requirements for the Kansas Eligibility System and Child Support Enforcement Program, a large application to process approximately 14,000 child support enforcement cases throughout the state. In FY 1999-2000, the economics of CMOS will allow DISC to replace the processor with CMOS (300 MIPS) and this will lower software and maintenance costs. We expect a 20% savings in processing costs with the CMOS architecture.

The scope of the project includes: DISC will manage the implementation of the replacement and coordinate with SRS as well as DHR technical staffs.

Project Status: Initial planning phase.

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Administration, Department of (continued)

PROJECT 4

Name: Year 2000

Acronym: YR2K

Sponsor: Dan Stanley, Secretary of Administration

Contact: Tom Riggle, Deputy Director, BDAS

Project Cost: $3.5 million

Budget Cost: $3.2 million

Budget FTE: 2

Start: January 1997 – Complete December 1998

Project Business Objectives or Motivators: To insure that the Department's major applications will function properly with the passage of the Year 2000. This requirement is part of the business continuity planning for the department.

System Description and Scope: The department will identify and repair its applications by December 1998 with the assistance of external consultants and internal staff. This project includes assessing the impact of Year 2000 on its major applications, planning for the repair of the application, correcting the application, testing changes, and implementing the repaired applications into production.

The scope of the project includes: Although the Department will examine all applications for year 2000 issues, its principal focus is on repairing STARS, and the VM legacy applications reported in this plan. Because STARS involves interfaces from several state agencies, the scope of the year 20000 project will include coordinating with these agencies the repair of their feeder systems to insure that all dates function within and between the applications.

Project Status: The STARS system was fully repaired and passed user acceptance in August 1998. The State budget system is repaired. The Motor Pool System will be replaced with a Lotus notes application. This application was ready for pilot in July 1998. Ninety-two percent of the Department's applications are repaired. All PCs and servers in the department are assessed.

Administration, Department of (continued)

PROJECT 5

Name: PeopleSoft Upgrade for SHaRP from version 4.1 to 7.0

Acronym: None

Sponsor: Dan Stanley, Secretary of Administration
Bill McGlasson, Director of Personnel Services
Shirley Moses, Director of Accounts and Reports

Contact: Tom Riggle, Deputy Director BDAS

Project Cost: $3.80 million (Contractor Application Development Only)
$350,000 (Sun 4000, DAS and CITRIX server)

Budget Cost: $3.8 million

Budget FTE: 12.0

Start: March 1997 – Estimated completion October 1998

Project Business Objectives or Motivators: To insure that the payroll and human resources system is consistent with the releases for which PeopleSoft provides support and to implement the functionality in release 7.0 for public sector processes. This will position the state to reduce the costs associated with future releases, by reducing the level of modifications to the core PeopleSoft software.

System Description and Scope: The department will work with consultants to plan the upgrade consistent with PeopleSoft migration rules and with respect to changing custom functionality to corresponding functionality in release 7.0. The project will also address all year 2000 compliance issues for this application and is expected to take approximately one year.

The scope of the project includes: This upgrade project affects all state agencies for payroll and human resources processing. The implementation for release 7.0 will require roll out planning and updates for user training.

Project Status: Project is completed.

Administration, Department of (continued)

PROJECT 6

Name: Client-Server Budget System

Acronym: None

Sponsor: Duane Goossen, Budget Director

Contact: Don Heiman, Department of Administration CIO

Project Cost: Not yet determined

Budget Cost: Not yet determined

Budget FTE: Not yet determine

Start: Est. Fiscal 2000

Project Business Objectives or Motivators: Replace current budget system that is outmoded with a client-server based system running on a Unix-Oracle platform and fully integrated with State accounting, State payroll, and State human resources management systems.

System Description and Scope: Phase I: Conduct a high level analysis of system requirements, Phase II: Acquire Software Licenses, and Phase III: Design Code and Implement.

Project Status: Planning phase.

Administration, Department of (continued)

PROJECT 7

Name: STARS Replacement

Acronym: None

Sponsor: Shirley Moses, Director of Accounts and Reports

Contact: Don Heiman, Department of Administration CIO

Project Cost: $8.5 million

Budget Cost: None

Budget FTE: None

Start: October 2000 for requirements (functional users)
July 2001 for start of systems development

Project Business Objectives or Motivators: Install a statewide client/server central accounting system using PeopleSoft financials or a highly compatible equivalent for full integration with the Department's HR/Payroll PeopleSoft system. The new system will be fully GAAP compliant and integrate purchasing, HR/Payroll, budgeting, general ledger, and reporting. The asset management (purchasing subsystem will replace the system that was acquired in 1998 to bridge Year 2000.

System Description and Scope: Phase I: Requirements/Feasibility, Phase II: Procurement/Systems Integration, and Phase III: System Development Life Cycle.

Project Status: On hold.

Administration, Department of (continued)

PROJECT 8

Name: State Receipts System Replacement

Acronym: None

Sponsor: Shirley Moses, Director of Accounts and Reports

Contact: Don Heiman, Department of Administration CIO

Project Cost: $450,000

Budget Cost: None (benefits based)

Budget FTE: 1.0 (outsourced)

Start: January 1999 – July 1999

Project Business Objectives or Motivators: Establish a single point of entry for all state receipts using an electronic lock box provided by United Missouri Bank. The goal is to reduce the number of accountants and clerical staff who process checks and bank deposits. Also the objective is to deposit all funds in state interest bearing accounts within 2 days of receipt with no human intervention.

System Description and Scope: The Department of Administration would establish a middleware server to accept electronic deposit confirmations from UMB Bank. These confirmations would be forwarded to the State Accounting System and to the Treasurer. Electronic payment notices would also pass through the middleware server, and base systems of various agencies would receive an electronic file to update their base files. UMB Bank would forward all hard copy attendant documents to the appropriate agency. The State would pay a transaction charge to the software vendor and UMB Bank for handling the transaction. Accounts and Reports would bill this charge to the benefiting agencies.

No State workers would handle checks or make deposits. Agencies would save labor costs, the State reduces Year 2000 risks by reducing multiple points of entry to a single point of entry, and the State improves its interest earnings by insuring more timely deposits. A feasibility study is under way to determine full costs and benefits.

Project Status: On hold.

2-91

Administration, Department of (continued)

PROJECT 9

Name: Mainframe Print Services

Acronym: Print Services

Sponsor: Don Heiman, CITO Executive Branch

Contact: Joe Hennes, DISC Technical Support

Project Cost: $500,000

Budget Cost: $500,000

Budget FTE: 5

Start: December, 1998 – March 1999

Project Business Objectives or Motivators: The AS400 midrange Data Center in DISC and high speed laser printers are not year 2000 compliant according to an assessment completed by CTA and Hodges and Reed.

System Description and Scope: The DISC mainframe printer services supports state agencies and mission critical Department of Administration applications. The D of A applications include 20 subsystems operating on an IBM AS400. This midrange computer functions as a printer server for D of A applications using the DISC laser printers. The applications affected by the server include: payroll, personnel, STARS warrants, set-off, welfare warrant processing, income tax refunds, KPERS retirement warrants, and state treasurer bonds.

Project Status: The assessment of DISCs printing services began in September 1998. It was the last year the 2000 assessment was conducted. The assessment was scheduled to complete at year-end, to allow time to implement SHaRP and STARS Y2K repair. CTA with Hodges and Reed determined it would take 12,000 hours to repair the existing system. This would cost in excess of $1.2 million. DISC can replace the system for $500,000 and thus avoid $700,000 of additional expenditures. The project is scheduled for implementation in March, after W-2 processing.

Administration, Department of (continued)

PROJECT 10

Name: Year 2000 Audits

Acronym: Y2K Audit

Sponsor: Don Heiman, CITO Executive Branch

Contact: Morey Sullivan, DISC

Project Cost: $250,000

Budget Cost: $250,000

Budget FTE: .5

Start: December 1998 – December 1999

Project Business Objectives or Motivators: State agencies are completing Y2K initiatives. Many of these initiatives were done in-house. As a consequence, there are no independent verifications that the repair has been done completely.

Systems Description and Scope: The audit program will be done by CTA with certified EDP auditors. The methodology uses questionnaires and techniques recommended by the federal Government Accounting Office (GAO). To the extent DISC funds are available through its Y2K accounts, DISC will assist state agencies with funds to audit Y2K compliance for systems repaired in-house. This includes computer systems that directly affect citizens such as the state's Medicare program ($180,000 SGF).

The federal government recently announced that GAO style audits are required for select applications that receive federal funding. The federal government will provide partial funding for these audits. If any agency task orders an audit from CTA and fails to pass the audit, the agencies are responsible for the full cost of the audit without assistance from DISC.

Project Status: A task order for Medicare Audit has been issued. Future task orders are pending.

Aging, Department On

PROJECT 1

Name: Kansas Aging Management Information System

Acronym: KAMIS

Sponsor: Thelma Hunter-Gordon, Secretary

Contact: Steven E. Johnson, Director, Information Services Division

Project Cost: $3.6 million

Budget Cost: $722,230

Budget FTE: 6.8

Start: September 1998

Project Business Objectives or Motivators: Replace the existing, inadequate system (CARS – Client Assessment and Referral System) which supports agency data collection and reporting, client case profiles, and payments to Area Agencies on Aging and their regional service providers. Increase "30-day diversion rate" through better data for analysis (i.e., identify which customers can postpone entry into resident nursing facilities by at least 30 days, by using lower-cost community-based programs). Provide greater business benefit to Area Agencies on Aging in the new system (e.g., case management and assessment quality assurance), and reduce their costs of operation. Provide reporting capability for the National Aging Program Information System (NAPIS) and other requests for data, both internal and external, which cannot be met through CARS.

System Description and Scope: Buy or develop software to support a web-centric model for data entry and retrieval. The client/server model for the current system, CARS, requires distribution of Progress v. 7.2 run-time software and CARS processing modules to all CARS user sites, including 11 Area Agencies on Aging (which are not state agencies) and several, commercial service providers. In contrast, the concept for KAMIS is to allow access to a centrally managed database for Aging client and provider data using only low-cost, readily available web browser software (e.g., Netscape Communicator, Internet Explorer) at the remote site. Communication with the KAMIS database could be by either KANWIN connection (now a mandate for heavy users of CARS) or though the Internet.

This project will require close involvement by staff from select Area Agencies on Aging, as primary users of KAMIS. KDOA is using a models-based, Information Engineering approach to identify and document system requirements. This will be followed by rapid prototyping of an initial functional module, with twin objectives of producing visible results early and solidifying new development techniques.

CTA, Inc., the KAMIS contractor, is performing analysis, design and prototyping work early in the project, but is also charged to transfer knowledge and skills to KDOA staff for subsequent system growth and support. KDOA is working with SRS to coordinate specification (especially data design) for functional modules KAMIS will have in common with software guided by the SRS Agency-Wide Information Systems Plan (AWISP).

2-94

Aging, Department on, (continued) – Project 1

KAMIS will be the primary mission-critical application supporting Aging programs in Kansas. It will provide data entry and report generation (including ad hoc reports) for KDOA, the 11 Area Agencies on Aging, and any commercial or volunteer service provider authorized access into the database. Extracts from the KAMIS database, secure behind a firewall, will be posted on the agency home page for public access via the Internet.

As a result of follow-on projects to be proposed separately, it will include automated interfaces with mainframe systems necessary for Aging programs: the Medicaid Management Information System (MMIS) and Pre-Certification System (run for SRS by Blue Cross/Blue Shield of Kansas), and MDS Plus (run for the federal Health Care Financing Administration by Myers and Stauffer, a local accounting firm). When fully developed after several years, KAMIS will also support non-structured data types and automated workflows, to allow ready exchange between KDOA and AAAs of grant proposals and awards, contracts, policy documents, document and photograph images, and similar items. Areas of information processing which are unique within each AAA, such as personnel administration and financial management, are excluded from the scope of KAMIS.

Project Status: As of December 1, 1998, Phase I is 40% complete—requirements, analysis and system design. Phase 2 is 15% complete—initial prototype, which runs concurrently with Phase 1.

2-95

Aging, Department on, (continued)

PROJECT 2

Name: Kansas Aging Management Information System Mobile/Batch Access

Acronym: KAMIS

Sponsor: Thelma Hunter-Gordon, Secretary

Contact: Steven E. Johnson, Director, Information Services Division

Project Cost: $336,212

Budget Cost: $336,212

Budget FTE: 5

Start: September 1998

Project Business Objectives or Motivators: The Kansas Aging management Information System (KAMIS) Initial System, as it will be implemented in September 1999, will require on-line access to a central database using Internet technology. This model does not address (a) mobile caseworkers who cannot connect with the database due to their location (e.g., a customer's home with no telephone), or (b) interface with separate systems run by the Area Agencies on Aging for their own management purposes (including three AAAs which are branches of county government).

System Description and Scope: This project will provide a mechanism for "off-line" access to KAMIS data, as well as the computer resources needed by caseworkers in the field.

Assessment forms, customer histories and available-service data will be automated as part of the KAMIS initial system and accessible through KANWIN or any Internet Service Provider (ISP). Equipment and network connections are being provided to Area Agencies under the KAMIS Initial System project, as a replacement for CARS functionality within the Agency offices. However, there is a strong demand from caseworkers for having computer availability on-site with the customer, as they discuss alternatives within the plan of care.

Laptop computers are capable of dialing a local ISP or a 1-800 number managed by DISC; this will give them direct access to KAMIS. There are many occasions, though, when telephone access is not possible – customer without phone service in their home, common areas in a senior center or nursing facility, or customers with inadequate phone service (party line, etc.).

Under this project, KAMS software which encapsulates the business logic of Aging services will be ported from central-server versions to operate on laptop computers, with a local, replicated subset of the central database. Development of KAMIS using the Java language and object-oriented techniques will greatly simplify this migration of code. Server-side code will also be developed to handle the exchange of data in a batch mode with laptops, as they are periodically connected to KAMIS for updates.

Much of the code developed for handling batch updates to and from remote laptops will also be applicable to automated data exchanges with other, third-party systems at the Area Agencies. Many AAAs have their own internal systems for managing their finances, staff and cases. There is significant variation of business models being applied by AAAs, so one single solution within KAMIS is germane to these internal-management functions is not currently feasible. However, much of the data collected within KAMIS is germane to these internal systems. A common KAMIS batch interface definition and protocol will allow any AAA which so desires to customize their own system to handle this type of data exchange.

Project Status: Proposed. No activity planned until FY 2000.

2-96

Corrections, Department of

PROJECT 1

Name: Enterprise Wide Photo Imaging System

Acronym: None

Sponsor: Carlos A. Usera, Director of Information Technology

Contact: Gary Bach, Technical Support Division Manager

Project Cost: $210,000

Budget Cost: $210,000

Budget FTE: .5

Start: January 1999

Project Business Objectives or Motivators: The current photo imaging system is rapidly deteriorating. It does not have the necessary features to centrally store, edit and retrieve photographs. Additionally, the Department desires the ability to centrally store staff and visitors' photographs.

System Description and Scope: This system will be capable of collecting photographic images and merging them with data from the Offender Management Information System. Images of inmates, staff and visitors will be captured at the facilities and major offices. A web browser capability will be incorporated to allow for browser based retrieval and inquiry.

Project Status: Request for proposal completed in early December 1998.

Corrections, Department of (continued)

PROJECT 2

Name: Document Imaging System

Acronym: None

Sponsor: Carlos A. Usera, Director of Information Technology

Contact: Gary Bach, Technical Support Division Manager

Project Cost: $1,500,000

Budget Cost: $0

Budget FTE: .5

Start: FY 2000

Project Business Objectives or Motivators: The Department handles a large number of documents that must be shared by a variety of users. Easy access to inmate documents will save time and delivery costs.

System Description and Scope: Document imaging of inmate records consists of the hardware and software necessary to digitize the documents, as well as the storage and retrieval of the images in a seamless fashion. The user interface will be web browser capable.

Project Status: Needs assessment is underway.

2-98

Corrections, Department of (continued)

PROJECT 3

Name: Internet/Intranet/Extranet Support

Acronym: None

Sponsor: Carlos A. Usera, Director of Information Technology

Contact: Dave Nations, Technical Support Division Manager

Project Cost: $450,000

Budget Cost: $450,000

Budget FTE: 1.5

Start: July 1998

Project Business Objectives or Motivators: The use of web browsers to access information anywhere for Department personnel and selected official agencies is critical to achieving universal access. The high costs of customized client software requires a solution that will minimize costs and reduce system administration of the system. All internet servers must be protected by firewalls and other security measures.

System Description and Scope: DOCNET comprises web pages and information stored for retrieval by Department personnel and eventually the public. This project provides the requisite hardware and security measures to protect intrusion by unauthorized and malicious users. The security software will provide the tools to monitor wrongful utilization of information resources.

Project Status: Currently in the infrastructure design phase to determine requirements.

Corrections, Department of (continued)

PROJECT 4

Name: Transition to 800 MHz Radios

Acronym: 800Hz Radios

Sponsor: Carlos A. Usera, Director of Information Technology

Contact: Norman Bacon, Technical Support Division Manager

Project Cost: $3,525,000

Budget Cost: $295,000

Budget FTE: .25

Start: July 1999

Project Business Objectives or Motivators: The State of Kansas is migrating to 800 MHz radio system. This will provide a range of frequencies devoted specifically to public safety activities.

System Description and Scope: The 800 MHz system includes the replacement of current lower range transmitters and receivers to 800 MHz range system. This migration will occur over several years. The first phases will involve replacement of systems for the transport hub, Wichita Work Release Facility and Winfield Correctional Facility. Other facilities and activities will migrate in the future years.

Project Status: Project plan is being developed for a multi year phase out of the existing system.

2-100

Health and Environment, Department of

PROJECT 1

Name: Vital Statistics Improvement Project

Acronym: VSIP

Sponsor: Gary Mitchell, Secretary

Contact: Jerry Schmid, System and Analysis Program Manager

Project Cost: $943,595

Budget Cost: $943,595

Budget FTE: 1

Start: 1999

Project Business Objectives or Motivators: The Genexus system will be replaced with a standard system to improve processing and replace manual processes. DOS Genexus is no longer supported. Hardware needs upgraded to integrate KDHEs Universal Core Data Model (UCDM) and upgrade the electronic birth registration system (EBC) to WIN95 as well as automating of the death registration process. In addition, all microfiche not previously converted must be converted to electronic format as it is being damaged by a microfiche virus. Paper records not previously converted to electronic data must occur as continued handling of old bound documents destroys the quality and readability of those documents.

System Description and Scope: Citizens and those registering events occurring in Kansas will be affected as will be other KDHE offices including the infectious disease program, maternal and child health programs, family planning, local health departments, the immunization program, and the neonatal screen program.

Project Status: Awaiting funding.

Health and Environment, Department of (continued)

PROJECT 2

Name: Automation System for the Special Supplemental Nutrition Program for Women, Infants and Children

Acronym: WIC Automation System

Sponsor: Gary Mitchell, Secretary

Contact: Lorraine I. Michel, PhD., Director, Children's Developmental Services

Project Cost: $5,000,000 (proposed)

Budget Cost: $610,522

Budget FTE: 3

Start: January, 1999

Project Business Objectives or Motivators: The US Department of agriculture (USDA) has identified discretionary funds for states to implement automation of all functions completed at the WIC local agency level (e.g., participant certification; food instrument issuance; vendor monitoring; data dissemination); and State functionality (e.g., preparing federal reports; editing food instruments; quality control). At the present time, paper processes at the WIC local agency level are time consuming, inefficient, and reduce time to meet participant needs. Data processing at the State level lacks the capability to accommodate automated support of WIC programs. The proposed technology will increase efficiency and effectiveness of service delivery, will provide functionality to keep pace with federally mandated reporting requirements, and will increase the ability to exchange data with other State and local systems. The proposed system will be a significant step toward the use of EBT in WIC.

System Description and Scope: All WIC personnel at the local agency level (located in health departments and in the outreach clinics) and all WIC participants will be affected by this proposed automation system. At the state level, in KDHE the WIC program and the Office of Information Systems (OIS) will be affected. Depending on the extent of the out-sourcing of parts of the automation system, other State agencies may be affected. The scope of work consists of the modification, transfer and implementation of a new Modern WIC Application system for Kansas; all portions of the current WIC data processing system will be replaced.

Project Status: Awaiting JUT approval and USDA final approval and funding

2-/02

Highway Patrol, Kansas

PROJECT 1

Name: Acquisition of Automated Procurement System

Acronym: DTI (Decision Technical International)

Sponsor: John Houlihan, Director of the Division of Purchases

Contact: Leo Vogel, Assistant Director

Project Cost: $550,000

Budget Cost: $550,000

Budget FTE: None

Start: 7/1999

Project Business Objectives or Motivators: The Kansas system of procurement is a paper-based process. Automation of this process can provide significant improvements to the process including timeliness and accuracy. This system would allow the KHP to work seamlessly with the Division of Purchases in the requesting and purchase of items.

System Description and Scope: This system will be open and available to all staff within the KHP. The staff will be able to request items needed, send requests to supervisors for approval, have the item ordered and delivered, all with the ability to check on the progress of the request at any time.

Project Status: Research is being conducted to determine purchasing and system options.

Juvenile Justice Authority

PROJECT 1

Name: Juvenile Justice Information System

Acronym: JJIS

Sponsor: Albert Murray, Commissioner, JJA

Contact: Janee Roche, Information Resource Manager

Project Cost: $6,405,885

Budget Cost: $1,672,750

Budget FTE: 1

Start: 10/97

Project Business Objectives or Motivators: Passage of the Juvenile Justice Reform Act of 1996 (House Bill 2900) is the situation prompting development of the JJIS. The act formed JJA as the agency responsible for all juvenile criminal justice activity in the state of Kansas. According to the reform act, the JJA Commissioner is responsible for developing a Juvenile Justice Information System (JJIS). The information sharing envisioned for the JJIS will create a single location to which agencies may send juvenile information and access information.

System Description and Scope: This information system will provide juvenile information collected through regional intake and assessment centers, as well as correctional and program history collected from various agencies. The JJIS will serve as a central router for all juvenile justice information within the state. All appropriate agencies that wish to retrieve details surrounding a particular juvenile will be able to use the JJIS to perform searches of multiple databases from a single screen.

Project Status: JJA infrastructure is ahead of schedule. All tasks have been initiated with the exception of one--infrastructure assistance grants to local jurisdictions.

Regents: University Of Kansas Medical Center

PROJECT 1

Name: Telephone Switch Upgrade

Acronym: TSU

Sponsor: James L. Bingham, CIO, Information Resources, KUMC

Contact: Don Stanze, Director, Telecommunications and Networking

Project Cost: $980,000

Budget Cost: $475,000

Budget FTE: 0

Start: 1999

Project Business Objectives or Motivators: 1. The current Telephone switch is 12-year-old technology. Lucent no longer manufactures the existing telephone switch. Major component parts are not readily available and few Lucent technicians are trained in this older technology. This presents the potential for frequent and longer outages. Any outage of the telephone switch has the potential of affecting patient care, which could lead to large financial losses. 2. Some components of the existing telephone switch are not year 2K compliant (e.g.: the administration and management tools). 3. Future CTI applications will require this upgrade.

System Description and Scope: Upgrade existing Lucent Definity G2.2 Telephone Switch to Lucent Definity G3r Telephone Switch. The telephone switch has approximately 5700 stations and provides telephone service to the Hospital, KUPI outpatient clinics, academic and research, and administration at KUMC. The system is mission critical and any outage has the potential to affect patient care and our academic mission.

Project Status: Project completed.

2-105

Regents: University of Kansas Medical Center (continued)

PROJECT 2

Name: Re-Design Campus E-Mail System

Acronym: RDCMS

Sponsor: Don Stanze, Director, Information Resources, KUMC

Contact: Scott Ramsey, Associate Director, Telecommunications and Networking

Project Cost: $548,000

Budget Cost: $548,000

Budget FTE: 5

Start: February 1998

Project Business Objectives or Motivators: 1. The need for a properly functioning, reliable, robust, and redundant e-mail system is now mission-critical to all campuses at the University of Kansas. For this reason, a University-wide committee was appointed in February 1998 to evaluate and make recommendations concerning 3-mail/groupware standards for the University. The committee's consensus recommendation was to design and implement a single integrated system (GroupWise) across all four university campuses. 2. At KUMC, GroupWise has been the standard system in place for approximately four years. The focus of the KUMC portion of the GroupWise redesign will be to (a) consolidate over 40 post offices/domains running on 25 servers down to 10 or fewer post offices running on 4-6 servers; and (b) create redundancy in the overall system design/implementation to improve e-mail up time and reliability. 3. Additional information pertinent to the committee's recommendation appears in a summary contained within the University of Kansas technology plan.

System Description and Scope: At project completion, all campuses of the University – Edwards, KUMC, Lawrence, and Wichita – will utilize GroupWise as the standard communications package. System redundancy and reliability are key implementation objectives. Project duration is estimated at 18-24 months.

Project Status: On schedule--equipment purchases are ready to begin.

2-106

Regents: Wichita State University

PROJECT 1

Name: Tuition/State Financed Equipment Enhancements

Acronym: None

Sponsor: Dr. Peter Zoller, Associate Vice President of Academic Affairs

Contact: Gary Ott, Executive Director

Project Cost: $3,420,000

Budget Cost: $ 855,000

Budget FTE: 0

Start: August 1, 1998

Project Business Objectives or Motivators: The continued growth of digital communications and the exploding high bandwidth applications have pushed the campus network beyond the capacity it can deliver. To meet the demand for higher bandwidth applications, a migration to switched Ethernet was begun in 1996. The proposed upgrade will increase the bandwidth between buildings to 100 megabits per second and position the campus for higher bandwidth capabilities in the future.

System Description and Scope: . The computing center lab currently has two and three generations old technology that limits student's access to contemporary software and networking capabilities. Students require workstations that will allow them to participate actively in their courses, and more and more courses expect access to contemporary technology for instruction and research. Students must have access to workstations that provide high speed Internet access for e-mail, library access, collaborative work group computing, WWW access, and other institutional applications and resources. The student computer labs located throughout the campus in college buildings are also out-dated and being upgraded to contemporary technology. Colleges must be able to provide technology resources to meet the expectations of students and faculty to support a technology-enhanced environment that promotes lifelong learning and supports a student centered approach to learning.

The Media Resources Center will continue to replace and/or upgrade a wide array of technology equipment and software to meet expectations of students and faculty. The MRC works with faculty to develop instructional materials that promote student learning.

A technology training lab located in the university's Ablah Library will be upgraded to new technology microcomputers and faster network capabilities. Student and faculty training in the use of library resources will be enhanced to meet exploding expectations.

Project Status: In FY 1999, the first phase of the student computer lab upgrade was initiated. The first year of the overall project is two-thirds complete.

Revenue, Department of

PROJECT 1

Name: Maintenance of Functional County VIPS Systems

Acronym: None

Sponsor: Betty McBride, Director of Vehicles

Contact: Laura Foltz, Information Resource Specialist

Project Cost: $2,379,800

Budget Cost: $900,000

Budget FTE: Existing FTEs

Start: July 1, 2000

Project Business Objectives or Motivators: This project replaces antiquated printers and terminals used by the counties for Titles and Registration services.

System Description and Scope: This initiative will provide all 105 counties with current, functional printers and terminals. The current technology is ten years old and has exceeded the anticipated useful life of both the terminals and printers by five years. Currently the help desk receives more than 3,000 trouble calls per year on just the printers and terminals.

Project Status: This project will start at the conclusion of the VIPS II project (prior to July 1, 2000). At the conclusion of VIPS II, excess funds will be available to begin acquiring equipment for this project.

Revenue, Department of (continued)

PROJECT 2

Name: PVD Computer Assisted Mass Appraisal Replacement Project

Acronym: PVD - CAMA

Sponsor: Mark Beck, Director Property Valuation

Contact: Charlie Sowell, Property Valuation Division

Project Cost: $1,510,000

Budget Cost: $0 (Phase I funded in FY 99 and Phase II funded in FY 2001)

Budget FTE: Existing FTEs

Start: July 1, 1998

Project Business Objectives or Motivators: Pursuant to KSA 79-1477 enacted during the 1986 legislative session, the Secretary of Revenue is to establish a statewide computerized mass appraisal (CAMA) system. A system was installed in 1986 and is still in use although it has undergone several enhancements. The system is aging and increasingly more difficult to support and enhance for changes in the law.

System Description and Scope: This project will provide Kansas counties with improved software with which to conduct computer assisted mass appraisals.

Project Status: RFP is in the process of being written to hire consultant for needs assessment.

2-109

Revenue, Department of (continued)

PROJECT 3

Name: Computer Telephony Integration

Acronym: CTI

Sponsor: Karla Pierce, Acting Secretary

Contact: Gary Centlivre, Tax Operations

Project Cost: $796,000 (plus computer telephony integration link and on-going costs)

Budget Cost: $796,000

Budget FTE: Existing FTEs

Start: Jan. 1, 2000

Project Business Objectives or Motivators: This initiative will satisfy a Management Council mandate which will assist KDOR in achieving and maintaining its status as the benchmark for the nation. Customer service will be positively impacted through greater access to information by customers and more effective and efficient utilization of resources.

System Description and Scope: This project is an adjunct to Project 2000. The services resulting from this project ensure that KDORs customers receive the full benefit of Project 2000. All inbound calls to Tax Operations will be managed using call routing, integrated voice mail with computer email functions, integrated web and fax services and terminal emulation of telephone features. Existing options will also be integrated making Tele-File, Tel-Assist, the Refund Status Line and inbound MOSAIX calls all part of one system. Associates will be trained to effectively utilize the technology and integrate it into all customer contacts. In FY 2001, this technology will be widely distributed to KDOR customer representatives. Customers will be provided automated access to their account data and have the ability to order forms and provide address information electronically. In FY 2002, the KDOR regional offices will be added to the architecture, speech recognition will be integrated and abandoned calls will be recorded.

Project Status: Planning phase.

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Revenue, Department of (continued)

PROJECT 4

Name: KDOR Intranet Infrastructure Enhancements

Acronym: None

Sponsor: Timothy R. Blevins, Chief Information Officer

Contact: Glen Yancey, Technical Architecture Manager

Project Cost: $1,054,249

Budget Cost: $305,002

Budget FTE: 3

Start: July 1, 1998

Project Business Objectives or Motivators: The enhancements to the KDOR Intranet covered by this project will provide for improved dynamic distribution of operational policies, procedures, and organizational learning information. Public access to the KDOR home page will be improved.

System Description and Scope: This project will enhance the information technology services provided on the KDOR Intranet. This initiative will integrate voice recognition and fax services technology at the desktop, provide for electronic archiving and retrieval of documents, improve Intranet search capability, implement desktop video, integrate voice mail and electronic mail into a single in-box, and provide improved WEB based customer service all of which will improve KDORs ability to implement electronic government.

Project Status: Preliminary review work is being conducted until cap on electronic database fee fund is lifted.

Revenue, Department of (continued)

PROJECT 5

Name: Kansas Wide Area Network Infrastructure Enhancements

Acronym: None

Sponsor: Timothy R. Blevins, Chief Information Officer

Contact: Glen Yancey, Technical Architecture Manager

Project Cost: $1,576,247

Budget Cost: $1,057,347

Budget FTE: 1 (Temporary)

Start: October 2, 1998

Project Business Objectives or Motivators: This project will provide the equipment and telecommunications infrastructure necessary to support expanded communications and data sharing between the KDOR central office staff and distributed KDOR offices and county business partners.

System Description and Scope: This initiative will provide for the dynamic distribution of operational policies and procedures, mission critical data and applications to KDOR associates and county staffs (county clerks, driver's license stations, county appraisers and county treasurers). PCs will be placed in county clerk's offices, SNA terminals and transmission equipment will be replaced at driver's license facilities, and broadcast e-mail will be provided to all Titles and Registration terminals.

Project Status: Preliminary review work is being conducted until cap on electronic database fee fund is lifted.

Revenue, Department of (continued)

PROJECT 6

Name: Project 2000

Acronym: None

Sponsor: Karla J. Pierce, Acting Secretary

Contact: Janice Birdsall, Acting Project 2000 Director

Project Cost: $77,000,000

Budget Cost: $5,223,000

Budget FTE: Existing FTEs

Start: 1995

Project Business Objectives or Motivators: Project 2000 is transforming the Kansas Department of revenue into a high performance organization.

System Description and Scope: Project 2000 is transforming tax administration by addressing all aspects of the business operations. Specifically, the Project began by redesigning the strategic business planning, budget development and performance measurement processes for KDOR. These processes support a sound management system by providing the direction and information needed to allocate resources and make decisions. Customer service values are a part of the organization's culture. The core business processes have been redesigned to meet customer requirements. Proven technologies such as automated workflow to route and monitor processes, document scanning, imagining and taxpayer information systems are being implemented. The organizational structure is being aligned with the business processes. Finally, the employees are being fully trained to serve taxpayers and licensees.

Project Status: The project is progressing on schedule with major releases scheduled for December 1998, February 1999, and June 1999.

Revenue, Department of (continued)

PROJECT 7

Name: Fuel Tax Evasion

Acronym: None

Sponsor: Karla J. Pierce, Acting Secretary

Contact: Ray Rhoads, Project Manager

Project Cost: $629,000

Budget Cost: $2,700

Budget FTE: Existing FTEs

Start: May 1, 1995

Project Business Objectives or Motivators: This project will combat motor fuel tax evasion through the Dyed Diesel Fuel inspection program.

System Description and Scope: House Bill 2161 is a comprehensive package aimed at reducing fuel tax evasion through a total fuel tracking system and visible enforcement. This bill mandates electronic filing of motor fuel distributor tax returns and schedules.

Project Status: This project is in ongoing operations and has ceased to be an information technology project.

Social and Rehabilitation Services, Department of

Name: Year 2000

Acronym: Y2K

Sponsor: Mary Hoover, Commissioner

Contact: Mike Purcell, Project Manager

Project Cost: $12,000,000

Budget Cost: $3,358,029

Budget FTE: 21 (6 State FTE and 15 Contract FTE)

Start: November 1996

Project Business Objectives or Motivators: 1. All aspects of service delivery and management will be severely disrupted by the lack of accurate and reliable information systems. 2. Exposure to litigation for service interruptions or failure to provide services. 3. Inability to realize the mission of the agency.

System Description and Scope: This project has made progress to research and resolve all data field problems on mainframe software applications, hardware and software for personal computers, telephone systems, fax and TTD machines, and embedded processors. Advanced date-aged testing and repairs for problems found in testing are schedule for calendar year 1999.

Project Status: Five of the nine mainframe applications will be repaired for Year 2000 compliance by January 1, 1999. The remainder are scheduled for completion by March 1, 1999. Assessment of personal computers has been completed and the number of computers that cannot be repaired or upgraded have been identified. Project staff have prepared and distributed to agency employees a list of compliant PC software in the agency's inventory and regularly update it. A methodology to assess mission critical databases and spreadsheets on agency servers has been selected. Compliance issues as a result of embedded processors in telecommunications, building facilities, and medical equipment are being investigated. Mailings to verify compliance of vendors, who provide services and products, are progressing.

Social and Rehabilitation Services, Department of (continued)

PROJECT 2

Name: Kansas Enhanced Statewide Support Enforcement Program

Acronym: KESSEP

Sponsor: Jim Robertson, Director

Contact: Jim Davis, Project Manager

Project Cost: $50,000,000

Budget Cost: $4,614,606

Budget FTE: 35

Start: April 1991

Project Business Objectives or Motivators: 1. The Family Support Act of 1988 established system enhancements and provided enhanced federal funding to improve the effectiveness and efficiency of child support enforcement programs. 2. If states do not implement a certifiable system that meets these enhancements, fiscal sanctions for IV-D administrative funding and are established by law and regulations. 3. Custodial parents will not access child support payments from absent parents who are not making payments.

System Description and Scope: This project will upgrade the current subsystem for the Child Support Enforcement Program. Federal requirements encompass automated processing to improve productivity and efficiency with adequate controls to ensure timely, accurate, and comprehensive case processing with reduced worker intervention.

Project Status: System deficiencies continue to be identified which includes performance issues and all issues will be addressed. The project plan includes an independent review process and expedited development/fix and testing procedure. Application developers and subject matter experts (SME) work in teams where system deficiencies are identified, modified or fixed, and tested. SMEs are involved in all phases of testing by assisting developers with development testing. In the past, SMEs completed the last phase-user acceptance testing. This approach increases the likelihood that problems will be identified early in the testing life cycle to minimize the time and resource demands for corrections. At the conclusion of the integration test, those components are made available for a field review.

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Social and Rehabilitation Services, Department of (continued)

PROJECT 3

Name: Service Delivery

Acronym: SACWIS (Statewide Automated Child Welfare Information System)

Sponsor: Joyce Allegrucci, Commissioner

Contact: Loren Benoit, Project Manager

Project Cost: $ Not provided

Budget Cost: $ Not provided

Budget FTE: 31

Start: October 1997

Project Business Objectives or Motivators: 1. Service Delivery is critical to the SRS mission. 2. Achieve Statewide Automated Child Welfare Information System (SACWIS) compliance thus avoiding federal financial sanctions.

System Description and Scope: The system will store all information necessary to manage the delivery of social services to children in need due to abuse or neglect. It also will contain data on adoptions and foster care. The system would allow field staff to have full access to information on social services needed or being provided to children removed from their homes. This project would enhance the Family and Child Tracking System (FACTS) and bring that system into SACWIS compliance.

Project Status: This project is on hold pending completion of Year 2000 and KESSEP.

Social and Rehabilitation Services, Department of (continued)

PROJECT 4

Name: Child Support Enforcement Welfare Reform Program

Acronym: CSE Welfare Reform

Sponsor: Jim Robertson, Director

Contact: Gina Hoffman, Project Manager

Project Cost: $31,000,000

Budget Cost: $4,965,437

Budget FTE: 31

Start: November 1999

Project Business Objectives or Motivators: 1. The Personal Responsibility and Work Opportunity Act of 1996 added 18 system requirements to existing Child Support Enforcement systems. 2. Enhanced federal funding totaling $6 million ($1.2 million SGF) is allocated to Kansas. 3. CSE system is critical to the SRS mission.

System Description and Scope: This project will implement additional system requirements after KESSEP project is completed. System requirements include: National new hire registry; state new hire registry; national CSE-network information interface; federal and state case registry; expanded federal parent locator service; administrative and tax offset programs; referrals from Welfare to Work programs; federal UIFSA forms (interstate cases); state centralized collection and disbursement unit for non-IV-D cases; performance-based incentives in the Financial and Statistical Reporting System; financial institution data match; distribution policy changes; suspension of driver's, professional, occupational and recreation licenses; passport denial, and high volume administrative enforcement (interstate cases).

Project Status: Planning will begin after completion of the KESSEP project.

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Social and Rehabilitation Services, Department of (continued)

PROJECT 5

Name: Business Contingency Plan

Acronym: None

Sponsor: Mary Hoover, Commissioner

Contact: Gina Hoffman, Director

Project Cost: $1,600,000

Budget Cost: $490,000

Budget FTE: 5

Start: December 1999

Project Business Objectives or Motivators: 1. It is imperative to secure contingency resources of mission critical information technology systems in the event of a natural or human disaster so that the health and safety of clients and employees, as well as services to customers, are not seriously interrupted. 2. A comprehensive review of the existing plan developed in 1992 is needed prior to January 1, 2000.

System Description and Scope: The Division of Information Systems and Communications (DISC) has selected Sungard as a contractor to provide a statewide computer system and network site. Sungard will also assist the state agencies with completing a business impact analysis of critical systems by performing a risk assessment, and by developing, testing, and implementing a business recovery plan. In addition, Sungard will also assist with establishing guidelines for the maintenance and enhancement of these plans.

Project Status: Prior to starting this project in FY 2000, discussions with DISC and the contractor, Sungard, will clarify how to coordinate activities with work completed by DISC for the state's hot site.

Social and Rehabilitation Services, Department of (continued)

PROJECT 6

Name: Asset Management

Acronym: None

Sponsor: Mary Hoover, Commissioner

Contact: Gina Hoffman, Project Manager

Project Cost: $1,800,000

Budget Cost: $315,000

Budget FTE: 7

Start: July 1999

Project Business Objectives or Motivators: DISC has selected new software to replace the existing software for reporting to DISC a uniform database of hardware/software and telecommunication problems.

System Description and Scope: SRS will need to customize entry screens, database files, reports, and the integration features for the Help Desk, the Telecommunications Assistance Center (TAC), the PC/LAN/Office automation Support Center who currently supports users of personal computers, mainframe systems, and new systems development. The new system will perform the following functions: problem reporting and tracking voice, data, and personal computer issues; new service requests for voice, data and personal computer issues; track issues for software development and problems; standardized communications between SRS and DISC; learning tree, and inventory control and tracking.

Project Status: Prior to starting this project, staff will analyze the customization work completed by DISC in FY 1999 to prioritize tasks.

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Transportation, Department of

Name: Access Permit Database

Acronym: None

Sponsor: Terry Heidner, Director, Division of Planning Development

Contact: Chris Huffman, Corridor Management Administrator

Project Cost: $450,000

Budget Cost: $100,000

Budget FTE: 1

Start: FY 2000

Project Business Objectives or Motivators: 1. KDOT has no efficient means of calling up permit information on access points and correlating this information to accidents, geometric or vehicle count information in order to objectively analyze access connections or evaluate permit applications. This fact makes curtailment of access under police power, or defending such curtailments in the legal arena, unnecessarily difficult. 2. The lack of access information severely hampers corridor management efforts and increases the costs of improving highways. Right of way negotiations and enforcement against encroachment become needlessly complicated and expensive. A comprehensive database containing not only permit information, but also location information in the form of location-route and longitude-latitude will help address these problems. It will also allow KDOT to identify gaps in the permit records and control unpermitted access points. A complete access point database will make the business of corridor management much more efficient, and will assist in other traffic engineering and design processes. Use of existing KDOT computer infrastructure will aid in the optimization of the technology needed to accomplish this task.

System Description and Scope: This project would examine the feasibility and requirements for creating an access point database for all segments of KDOT. The first phase is a requirements study in FY 2000 to determine what data will need to be collected, how much data will likely be accumulated, the most efficient means of accumulating the data and what the hardware requirements will be to manage the data. Feasibility of constructing the data as a CANSYS layer, or migrating the data to CANSYS at a later date will also have to be examined and a timetable developed. Also, basic questions of who the users are and how the information will be utilized as well as the most efficient interface will need to be answered.

The vision of the resulting system is one that will enable district and headquarters personnel to display access information in a user-friendly environment and correlate this information to other database information. Ultimately, a system should exist that provides users with access, accident, vehicle count and geometric information in a graphical and/or tabular display. This system should also eliminate the need for archival of paper permit forms by electronically archiving permit information similar to what the Construction Management System (CMS) did to replace the field book and supporting paperwork. It is expected that a trial implementation will be undertaken, probably with a single district, that will identify challenges in data gathering and administration and assist in evaluating the feasibility of implementing a statewide database. Feasibility of making this information available to design or right of way consultants as well as city and county authorities should also be investigated.

Project Status: Discussions are underway to develop the work order or RFP for the requirements study in FY 2000.

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Transportation, Department of (continued)

PROJECT 2

Name: Automated Commercial Routing

Acronym: None

Sponsor: Mike Lackey, State Transportation Engineer and Assistant

Contact: Ken Gudenkauf, Assistant Bureau Chief

Project Cost: $400,000

Budget Cost: $400,000

Budget FTE: To be determined at later date

Start: FY 2000

Project Business Objectives or Motivators: 1. KDOT issues approximately 60,000 permits annually. Before issuing an approval, the technician carefully examines a map to check vertical clearances, locate posted structures, and note routes that have been restricted in width. This information is then relayed to the customer and a permit is approved. Posted bridges, railroads, overpasses and low structures create many problems for persons less experienced in routing because they cannot easily provide alternate routes. 2. Width restrictions can cause problems in work zones, primarily because restrictions are not always transmitted from the field in a timely fashion and movers do not always move on the same day the permit is approved. Since it is very difficult for extra wide loads to turn around or backup, KDOT officials are asked to remove barriers and assist the customer through restricted areas, often resulting in additional expenses for the customer as well as KDOT.

System Description and Scope: The Automated Commercial Permit Routing System will develop a computerized method of routing and issuing oversize/overweight permits to vehicles traveling in Kansas. KDOT will automate the permitting process and implement a system which uses GIS features and CANSYS information so that routing information can be displayed and plotted on the highway system base map.

Project Status: This project has not begun; however, the GIS study currently underway, will review the interdependencies between this system and other GIS applications.

Transportation, Department of (continued)

PROJECT 3

Name: Electronic Accident Data Collection

Acronym: None

Sponsor: Terry Heidner, Director, Division of Planning Development

Contact: James Tobaben, Bureau Chief

Project Cost: $600,000

Budget Cost: $400,000

Budget FTE: 1 to 2

Start: FY 1999

Project Business Objectives or Motivators: 1. Motor Vehicle Accident Report data is currently being collected, maintained and analyzed in a variety of ways by local law enforcement agencies on a variety of platforms. Each reporting agency is required, by law, to submit a written report to KDOT within ten days of the investigation of the accident. The data is not always collected in a timely manner and it is not always in a form consistent with KDOT needs. 2. With emerging interest in GPS technology and GIS, many communities are planning new systems that meet their needs for timely and accurate data to support local transportation planning. A statewide automated system would 1) insure standardization in field collection of data and the electronic reporting of accidents, 2) eliminate the duplication of data entry and thereby reduce work efforts and the chance for errors, and 3) make available to local entities timely and relevant information for planning purposes.

Description of Project: This project supports the implementation of an automated statewide motor vehicle accident reporting system in order to ensure standardization in the reporting of motor vehicle accidents. In FY 1998 a related K-TRAN feasibility study was completed which included an investigation into the feasibility of implementing a pen-based computer system for field reporting and electronic transmission of motor vehicle accident reports; identification of hardware, software and electronic transmission considerations; and examination of statutory issues and issues related to the development of standardized data collection forms. A survey of Kansas's law enforcement agencies was also conducted. The KHP is currently automating the accident form along with other forms used by the KHP. KDOT remains the "owner" of the content of the forms, by law.

In FY 1999, KDOT expects to utilize the results of the studies to implement a first phase that would put a system in place that has the required interfaces at KDOT, automate the update of KDOT accident databases from remote reporting units, and automate the collection and transmission of accident data for selected reporting agencies/units. In FY 2000, the system would be expended into a statewide system.

Project Status: This project will interface with the KHP automation of accident forms. When those forms are developed, this project will kick-off, with automated interfaces and design of electronic transmission of data. The expected start is the spring of 1999.

Transportation, Department of (continued)

PROJECT 4

Name: Pavement Management System/Network Optimization System Module

Acronym: PMS/NOS

Sponsor: Steve Woolington, Director of Operations

Contact: G. Norman Clark, Geotechnical Engineer

Project Cost: $505,000

Budget Cost: $175,000

Budget FTE: 1

Start: FY1998

Project Business Objectives or Motivators: 1. Enhancements are needed to the Network Optimization System module (NOS) of the PMS in order to optimally allocate funds and designate candidate project locations in future years. 2. The OS/2 operating system environment supporting this module is becoming increasingly difficult to maintain. The NOS is the only part of the PMS, which presently runs on an OS/2 platform. KDOTs networking environment and continual upgrades of Microsoft operating systems for business software makes maintenance of existing dual boot systems difficult. Currently, installations of OS/2 do not support full network connectivity. 3. In order to integrate all functions of the PMS, the NOS optimization processes and the Pavement Management Information System (PMIS) should reside on compatible platforms. The PMIS is the supporting database for NOS, which is developed in ORACLE and runs on a SUN Solaris platform. Currently the optimization software resides on OS/2 clients. Moving the optimization software to a server facility would not only allow for tighter integration of all PMS functions, but allow for centralized backups of optimization data files, and improved client access. The NOS is used not only in the yearly production of the candidate project list for KDOTs Substantial Maintenance Program, but also as a planning tool. The NOS needs additional tools to allow for easier manipulation of the feasible action sets, multiple runs of the steady-state budget minimization mode, and possibly additional constraints or objective functions to better reflect 'feasible' agency policies such as the maximum amount of routine maintenance which can be accomplished by state forces. Problems encountered while developing cost/benefit curves to support long-term planning highlight many of the difficulties now experienced using the NOS.

System Description and Scope: The NOS module models the Kansas highway network as a Markov process which is optimized through linear programming techniques. The products of the NOS module include the minimum cost to maintain the highway network at a designated performance standard, or the maximum performance standard that can be achieved with a fixed rehabilitation budget. For either of these scenarios the module also designates the required rehabilitation policy in terms of project locations and scopes needed to achieve and maintain the target performance goals over a long term planning horizon.

Currently, constraints on the NOS' objective functions used in the optimization are limited to total cost and minimum performance requirements for various road categories. Additional solution constraints are needed to reflect user costs and to limit the amount of routine maintenance funds to those provided in the Agency's budget. Further, the OS/2 platform is becoming increasingly burdensome to support independent of the mainstream core of the PMS database and software. The goals of the project are to add functionality to the module and to port it to a platform that is better supported and will integrate directly with the PMS database.

Project Status: Options for initiating this next phase of the project are being studied.

Transportation, Department of (continued)

PROJECT 5

Name: Integrated Design Environment Training and Support

Acronym: IDE Training and Support

Sponsor: Warren Sick, Director, Division of Engineering and Design

Contact: Randy Leonard, Road CADD Engineer, and Chair, IDE Subcommittee

Project Cost: $640,000

Budget Cost: $160,000

Budget FTE: 0.1

Start: FY 1997

Project Business Objectives or Motivators: 1. Design software (Microstation) is being used by district and area engineers to develop some designs and update plans "as built." Training and consulting support is needed for district personnel. 2. Training resources are not available in-house to keep up with changing engineering software products. Outsourcing training and support has proved a viable option for KDOR.

System Description and Scope: The agency has been using contracts with consultants for support and training for the integrated design environment since FY 1997. As more design functions are available for engineers and engineering technicians throughout the state, a level funding for training and technical support is needed to keep those engineers and technicians knowledgeable about the engineering software products. In FY 2000, more capabilities will be available to the district and area engineers. This support is needed to provide them with consulting assistance and training.

KDOT has a contract with two Kansas City companies to provide this kind of training and support. They provide training classes on-site or at locations near the work site, and provide consultant services on-site as needed.

Project Status: On-going training and support for the integrated design environment.

Transportation, Department of (continued)

PROJECT 6

Name: Statewide 800 MHz Radio System

Acronym: None

Sponsor: Steve Woolington, Director, Division of Operations

Contact: Ed Geer, Installation/Service Supervisor

Project Cost: $33,478,622

Budget Cost: $5,619,610

Budget FTE: 1

Start: FY 1991

Project Business Objectives or Motivators: 1. In November of 1992, the Federal Communications Commission issued PR Docket No. 92-235 that contained a comprehensive set of proposals that required changes to existing radio systems. These changes adversely affected the existing KDOT and KHP radio system; therefore, it became necessary to replace existing radio equipment and develop a new statewide radio system. 2. Safety related communications require clear reliable channels. 3. KDOT and KHP have had a VHF Low-Band radio system, operating on separate frequencies. Over the last thirty-five years, the systems have been continuously upgraded and enhanced. However, low-band radios are plagued with interference from power lines, vehicle ignition noise, "skip" from other users on the same frequency, and microprocessors and computers in vehicles and buildings. During periods of snow and ice control, effective radio communications is very critical. Present radio frequencies have become very congested. The availability of low-band base station equipment is extremely limited, and remote-controlled base stations using 70 MHz control stations are no longer available. Mobile units purchased in the last few years have not performed as well as units purchased in the past due to the changes in communication standards.

System Description and Scope: Installation of a new 800 MHz radio system throughout the state will improve safety and efficiency and provide clear, reliable radio communications for KDOT and the KHP. In FY 1992, KDOT installed a 5-channel trunked 800 MHz radio system which serviced Shawnee County and could be used by other state and government agencies. A complete statewide 800 MHz radio system, which can be used by KDOT and the KHP, will be implemented by 2002.

Project Status: Implementation in districts 2 and 5 continue.

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Transportation, Department of (continued)

PROJECT 7

Name: Business Recovery Plan

Acronym: None

Sponsor: Robert Haley, Director, Division of Administration

Contact: Ben Nelson, Bureau Chief

Project Cost: $250,000

Budget Cost: $200,000

Budget FTE: 1-3

Start: FY 1999

Project Business Objectives or Motivators: 1. Disasters can occur at any time, from natural disasters such as floods, tornadoes, earthquakes or fire to mechanical failures such as are air conditioning failure, telecommunications, malfunction, central processor or channel failure, operating systems software problems, or computer viruses. Also included are bomb threats, explosions, or employee sabotage. The State recognized a weakness in disaster planning and contracted with a consulting firm that specializes in business continuity planning. This contact may be used by state agencies to develop contingency plans based on their specific needs. 2. KDOT has approximately 90 computer servers and 2,000 personal computers. These are protected by various ad-hoc and undocumented backup and recovery procedures. If major damage to one of KDOTs main office buildings, such as Docking State Office Building, were to occur, data could be irretrievably lost because backup tapes are stored on-site and only a few individuals know recovery procedures.

System Description and Scope: In FY 1999, KDOT will develop a plan for conducting the Agency-wide Recovery Plan in FY 2000. The study will result in more definitive estimates. In FY 2000, consultants with expertise in business recovery services will conduct comprehensive study of KDOT for up to fifty-five functional areas. The study would result in disaster alert/assessment/activation procedures, recovery management procedures, recovery of operational service procedures, and facility restoration procedures. Included in the study will be recovery procedures for data processing systems housed in Topeka locations.

Project Status: Discussions have begun with Sungard for an estimate for this preliminary study. A start date has not been established.

Transportation, Department of (continued)

PROJECT 8

Name: Contract Programming

Acronym: None

Sponsor: Mike Lackey, State Transportation Engineer and Assistant

Contact: Ben Nelson, Bureau Chief

Project Cost: $7,000,000

Budget Cost: $3,000,000

Budget FTE: 2.5

Start: FY 1998

Project Business Objectives or Motivators: 1. Over the last few years, KDOT has been successfully developing new information systems, using architectures and computer tools which will decrease the effort to maintain the systems. While building these new systems, demand for maintenance of old systems continues to out-pace the available resources. 2. Increased utilization of automated processes has resulted in a growing need for computer programming services that cannot be met by current IT staffing. These needs are in the areas of (a) support or vendor supplied software such as operating systems and network Groupware, and (b) support for programs and procedures that have been developed in-house to meet the unique processing requirements of KDOT. 3. Outside mandates for change to software, such as metrication and SUPRA conversion, result in new demands on programming resources. 4. Downsizing in the agency results in more reliance on automation and technology, while it staffing remains the same.

System Description and Scope: Contract programming resources have been used since 1993 to maintain, enhance or develop those projects with the greatest needs. Those needs are re-evaluated at the beginning of each fiscal year by KDOTs EXIT Committee and funds are then allocated to specific projects and/or tasks. Through the use of contract programming, KDOT is able to meet the demands for enhancement and information needs. In FY 2000, KDOT is requesting an increase in Contract programming to further meet the growing demand for services as legacy systems age and newer technologies offer greater productivity.

Project Status: Work orders for FY 99 contract programming resources are underway.

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Transportation, Department of (continued)

PROJECT 9

Name: Ethernet Maintenance and Server Replacement Strategy

Acronym: None

Sponsor: Robert Haley, Director, Division of Administration

Contact: Stanley Young, Data Center Manager

Project Cost: $1,200,000

Budget Cost: $600,000

Budget FTE: 2-3

Start: FY 1999

Project Business Objectives or Motivators: 1. There is a business need to improve communications and computing capabilities throughout KDOT. 2. KDOTs Ethernet infrastructure provides the backbone for statewide communications and for accessing applications. KDOT must continue to replace, upgrade and expand server computing equipment on a three-cycle, using a constant level of funding each year.

System Description and Scope: KDOTs Ethernet System has been expanded over the last few years from an engineering based environment to a relational database environment that supports Ethernet Systems applications that are business-oriented. In order to provide distributed processing, char files and data, and gain productivity, KDOT expanded the Ethernet System to KDOT headquarters, districts and area offices. In FY 1999, there are approximately 90 servers on the Ethernet System. These servers support mission critical applications in KDOT by providing network access, GroupWise, file sharing, print and plot services, and application services such as office products and Oracle database. These servers must be reliable, scaleable, and fault tolerant to reduce down time and provide enough computing power to run today's applications. Technology experts publish that the current life of a computer technology is only 18 months. While there may not be a need to adjust technology in KDOT that often, the need to address replacement, expansion and upgrades of at least 30% of critical hardware each year is important. Funding was approved in FY 1999 for $600,000 to implement this program of preventive maintenance, upgrade and expansion.

Project Status: Server replacements and upgrades are scheduled, as needed.

Transportation, Department of (continued)

PROJECT 10

Name: Intranet/Internet

Acronym: None

Sponsor: Robert Haley, Director, Division of Administration

Contact: Bill Roth, CPMS Manager

Project Cost: $450,000

Budget Cost: $350,000

Budget FTE: 5

Start: FY 1999

Project Business Objectives or Motivators: 1. There is a business need to improve communications and computing capabilities throughout KDOT and with external partners. 2. KDOT has been using an Intranet form over a year and has seen considerable use for this technology. KDOT has also had an Internet working for several years and has migrated the majority of this information to a location under the INK provided Public Internet. The technology is expanding and there are many opportunities to significantly improve communication and collaborative efforts with external customers, as well as providing a consistent user interface for a great amount of KDOT information.

System Description and Scope: The purpose of this project is to expand the use of the Internet/Intranet technologies to the best advantage for KDOT. The agency's Internet/Intranet plan explores the best solutions and practices KDOT can utilize. Recognizing that KDOT is a mobile agency and geographically distributed, it makes sense to utilize, to its full potential, a solution which, by its very nature, provides necessary information to all employees and external customers, regardless of location, and makes business processes more efficient.

Internet/Intranet is another component in the overall KDOT computing architecture and integrates with the other major ITA efforts, including GIS, RWM, EIS replacement, FIMS/IMMS, etc. This project will confirm the Intranet direction and provide directions on Internet development. It will develop and promote standards for Internet server solutions, browser solutions, and development tools that help manage the environment and provide for a more effective use of KDOT resources. It will identify area where we can take advantage of Internet technologies to improve internal and external communications. Actual development of these solutions will require that some application development management practices will need to be put into place to ensure that accurate information is readily accessible and adequate security of KDOTs network is provided.

Project Status: KDOT subcommittees on Internet/Intranet content and technology continue to set priorities and direction for expanding and improving KDOTs Intranet and Internet presence.

Transportation, Department of (continued)

PROJECT 11

Name: Records and Workflow Management

Acronym: RWM

Sponsor: Mike Lackey, Assistant Secretary of Transportation and State Transportation Engineer

Contact: Sue Swartzman, Programming and Analysis Manager

Project Cost: $5,423,526

Budget Cost: $1,500,000

Budget FTE: Not provided

Start: FY 1998

Project Business Objectives or Motivators: 1. Agency managers reported a need for a records management system during interviews for the Information Technology Architecture study. The need for RWM was ranked as very high priority for the agency. 2. KDOT bureaus and districts maintain paper records of correspondence, reports and plan sheets. Some of this information has been converted to microfilm but it is generally difficult to locate and there are duplicate copies throughout the agency.

System Description and Scope: RWM will manage how information is created, the flow of information from one user to the next, the storage of information and retrieval as needed. Workflow management will automate entire processes, ensuring that everyone involved in a selected process complies with policies, follows approved procedures and adheres to agency standards.

Records and Workflow Management includes the storage of quality electronic copies of various sized originals, creation and maintenance of multi-key references to the documents, and the access to a central storage system from all bureaus and districts. The system will be used to locate documents while reducing paper and microfilm storage requirements. Components of the system include a Document Management System that will provide a database of document characteristics and control the management of these documents. Another component is Imaging and the faster data representation of images that are needed for archiving hand-drawn engineering drawings, bridge inspection files and other paper documents, and for rendering and modeling software. Workflow provides an audit trail that identifies who participated in the workflow, the contributions made to the work, when the work was done and how long it took. E-forms provide an electronic equivalent for paper forms with the ability to update a database from the data entered.

Project Status: Work continues on the RWM prototypes. The four prototypes under development are the Traffic Engineering, 883 (Project Initiation), Bridge Inspection and Plan Development.

Transportation, Department of (continued)

PROJECT 12

Name: Upgrade to Windows NT Workstations

Acronym: None

Sponsor: Robert Haley, Director, Division of Administration

Contact: Robert Grochowsky, Network Technology Center Manager

Project Cost: $2,712,000

Budget Cost: $2,712,000

Budget FTE: 1-3

Start: FY 2000

Project Business Objectives or Motivators: 1. In 1996 Information Technology Architecture Plan established Windows NT as the operating system of choice for KDOT. 2. Not all PC models can run Windows NT, and the agency has a large investment in order PCs. As more software products have been introduced in KDOT, fewer applications will run on older models. Systems planned for implementation in FY 2000 or in future years, require Windows NT as a minimum.

System Description and Scope: KDOT has a five-year replacement policy for PCs. This has resulted in the purchase of newer machines each year as PCs age. In most cases, the older machines have been passed down to new users. In FY 2000, however, KDOT must insure that users of the newer systems have computers that can provide the efficiencies that are expected from these systems.

This project defines the agency's commitment to replace any PC that will not adequately run Windows NT and the Microsoft office products with the current standard PC specification that KDOT has adopted. Based on KDOTs inventory of PCs, the estimated number of PCs that will need to be replaced in FY 2000 is 900. These replacements will focus on the districts, where there is the greatest need for the current technology to run systems that will soon be "rolled out" to them, such as Records and Workflow Management, an enhanced Construction Management System, GIS functionality for weather and road information, and the new FIMS/IMMS.

In addition, KDOT recommends a rollout of computing capabilities to the KDOT Sub-areas. Whether purchased new or "handed down" the PC should be a minimum specification (such as a Pentium 100) to run systems. Another part of this plan involves the need for more functionality in KDOT shops. A PC and a hand scanner for each of the 32 shops will allow the shops to be fully equipped for improvements to the Maintenance and Shop systems.

Project Status: Hardware purchases will not begin until FY 2000.

Transportation, Department of (continued)

PROJECT 13

Name: Video Conferencing

Acronym: None

Sponsor: Robert Haley, Director, Division of Administration

Contact: Patrick Tierce, Infrastructure Technology Manager

Project Cost: $278,000

Budget Cost: $250,000

Budget FTE: 1-2

Start: FY 1999

Project Business Objectives or Motivators: 1. Good communication between locations is an important concern to KDOT managers, based on recent survey results. Currently, besides the phone district, district people often travel half of the day in order to be part of a conference held in headquarters. 2. Today, there are several video conferencing options available to businesses. Agencies may want to adopt one or more, depending on their applications and use. These video conferencing technologies bring people together without interrupting their work schedules with extensive travel, and allow them to share information, documents, and computer data.

System Description and Scope: Full-featured PC-based video conferencing is available today for affordable costs. These PC-based video conferencing systems offer real-time document sharing which allows participants to see and hear each other while sharing and editing PC-based presentations or documents. The images may not support fast movement, but for conferencing they do provide smooth, crisp video images, are compatible with other video conferencing systems, and can be easily upgraded. These systems can also be used for other purposes when not in use during a conference call. The large monitor and PC can be used to give presentations or be part of a work group developing applications. The speakerphone can be used for voice only calls.

The less expensive desktop technology is becoming more popular. The desktop versions are smaller, less expensive, are easily mounted on monitors and can be readily manipulated to facilitate displaying various documents while speaking. These desktop systems are being designed to accommodate individual users and their conferencing needs.

Project Status: Some testing of desktop video conferencing has begun. A review of portable video conferencing systems will not begin until FY 2000.

Overview of the Kansas Geographic Information Systems (GIS) Initiative

The Kansas GIS Initiative was initiated in 1989 by former Governor Mike Hayden. Formation of the Kansas GIS Policy Board was included in the Governor's directive as the management and oversight portion of the GIS Initiative. The Board is charged with guiding the development and implementation of GIS technology in Kansas in a coordinated manner. Board sponsored activities and the overall GIS initiative can be subdivided into the following operational categories: GIS Policy Board, GIS Standards Task Force, Data Access and Support Center, and the State GIS Coordinator. Subsequent sections of this report address these categories by providing a summary of activities and accomplishments for Fiscal Year (FY) 1998 and program plans for FY1999 and FY 2000.

Kansas GIS Policy Board

The Kansas GIS Policy Board was re-organized in 1995 by Governor Graves' Executive Order Number 95-180. This re-organization modified the membership categories of the Board and assigned the twenty-two Board memberships as follows: Chief Information Architect (1), State Agencies (8), County and Municipal Governments (5), Regents Institutions (3), Federal Agencies (2), Private Sector Organizations (2), and Statewide Organizations (1). The Board is charged by Executive Order 95-180 to: 1) establish and maintain a Strategic Management Plan to guide the development and implementation of GIS technology for the best value and benefit of the citizens of Kansas; 2) develop and maintain policies, standards, guidelines, and strategies which emphasize cooperation and coordination among agencies, organizations and government entities in order to maximize the cost effectiveness of GIS and its value to the state; 3) establish public and private partnerships to maximize value, minimize cost, and avoid redundant activities; and 4) to coordinate, review, and provide recommendations on GIS programs and investments.

Strategic Management Plan For GIS Technology

The Board's *Strategic Management Plan for GIS Technology* (Plan) was updated in FY 97 with the assistance of staff from the Docking Institute of Public Affairs, Fort Hays State University. Docking Institute staff worked with a committee composed of representatives from the Kansas GIS Policy Board, the Board's Technical Advisory Committee, County and Municipal governments, and the private sector. Four focus group meetings, attended by over one hundred members of the Kansas GIS community, served to identify critical issues and priorities that set the direction for committee action. The shared vision of GIS in Kansas, as established in the Plan is:

> "The Kansas GIS Policy Board envisions a future where GIS is recognized as an integral and indispensable information tool for governments and businesses, serving the integrated information needs of citizens and customers, respectively. A broad contingent of GIS users will have open access to complete and accurate framework and associated databases, which have appropriate guidelines protecting individual privacy and other sensitive information.
>
> GIS will become a transparent technology that is used routinely by local and state governmental entities to archive, manage, and analyze data to support business practices and policy making. Common standards will provide the foundation that assures the efficient, steady flow of high quality data. Partnerships, within and among levels of government and private entities, will provide the basis for assigning roles and responsibilities to entities for the development and maintenance of data themes".

The Plan establishes four categories of activities, or tracks, that form its organizational structure and address the critical issues identified during the focus group meetings. The four organizational tracks are: Database Track, Services Track, Management Track, and Data Availability Track. The Plan provides a road map for the GIS Initiative and identifies numerous goals and tasks to be addressed over the next three years.

Partnerships and Affiliations

The Kansas GIS Policy Board formed a cooperative relationship with the Federal Geographic Data Committee (FGDC) by becoming a Cooperating Partner of the FGDC in support of the development of the National Spatial Data Infrastructure (NSDI). This partnership is further reinforced by the Board's membership in the National States Geographic Information Council (NSGIC) and the MidAmerica Geographic Information Consortium (MAGIC). NSGIC is also a Cooperating Partner of the FGDC and provides a focal point for state perspectives on GIS issues with the FGDC. MAGIC is a regional group of GIS organizations and professionals that is also a member of NSGIC. Each of these relationships have served to help promote the development of GIS standards at the local level, to establish the Board's Data Access and Support Center (DASC) as a NSDI Clearinghouse site, and to forward the development and implementation of the NSDI.

FY 98, FY 99, and Proposed FY 2000 Kansas GIS Core Database Development

Annually, the Board sponsors and funds the development of selected GIS databases that are of broad-based importance to the Kansas GIS community. Projects implemented in FY 98 included the following: Riparian Areas Inventory, Global Positioning System (GPS) Base Station Operation; KanView World Wide Web Project at the DASC; Natural Heritage Inventory; Kansas Land Cover Update; and the Geodetic Control Densification Project. Projects under contract for FY 99 include GPS Base Station Operation; Land Cover Update; National Pollution Discharge and Elimination System (NPDES)/Waste Water Discharge Geo-referencing; and Confined Animal Feeding Operations Geo-referencing. Projects proposed for funding in FY 2000 include: GPS Base Station Operation; Kansas Land Cover Update; Soils Light Database; Geodetic Control Densification; NPDES/Waste Water Discharge Geo-referencing; and Threatened and Endangered Species database updates.

FY 98, FY 99 and Requested FY 2000 Budgets

The Board annually requests funds to sustain three essential Board sponsored activities. These include salaries/wages and operating expenses for the State GIS Coordinator, salaries/wages and operating expenses for the Data Access and Support Center, and database development projects. These activities have been funded through the State Water Plan fund in FY 98 and FY 99. Funding requests for FY 2000 include a combination of funding sources with enhancement requests for the State GIS Coordinator's salary and wages and DASC operations from the State General Fund. Budget requests for FY 98, FY 99, and FY 2000 for these activities are illustrated below.

	FY 98 SWP	FY 99 SWP	FY 2000 SWP	FY 2000 SGF
GIS Coordinator S/W	$ 53,012	$ 55,531		$ 62,285
Operating Expenses (O+E)	$ 10,000	$ 10,000		$ 17,800
DASC S/W and O+E	$ 135,000	$ 139,000	$ 147,200	$ 69,518
Database Development	$ 250,000	$ 250,000		$ 250,000
TOTAL	$ 448,012	$ 454,531	$ 415,000	$ 131,803

GIS Standards Task Force

The Kansas GIS Standards Task Force is a voluntary group of GIS professionals representing GIS stakeholder groups from throughout the state that work to promote the development and implementation of common standards for the Kansas GIS community. The Task Force is sponsored by, and affiliated with, the Kansas GIS Policy Board. Members of the Task Force represent all levels of government in Kansas, as well as, Regents Institutions, and the private sector. The Task Force has organized and held seven GIS Standards Forums over the past four years. These events are designed to bring the GIS community together and to promote broad-based consensus on various GIS standards prior to recommending these standards to the GIS Policy Board for adoption.

2-135

Kansas Geodata Compatibility Guidelines

The *Kansas Geodata Compatibility Guidelines* were developed by the GIS Standards Task Force to define a process whereby the Kansas GIS community is involved, at the grass roots level, in the development and maintenance of GIS standards. The document also provides guidance for various Standards Working Groups organized around selected geo-spatial data themes. Version 2.2 of the document was approved by the GIS community at large and the GIS Policy Board in FY 98.

GIS Standards and Thematic Standards Working Groups

During FY 98 Standards Working Groups were organized and began developing GIS standards for the following geo-spatial data themes: Addressing, Administrative Boundaries, Hydrology, Transportation, and Geodetic Control. The Cadastral/Property Ownership Standard received approval from the GIS community in August of 1997 and subsequently was approved by the GIS Policy Board and the KIRC as IT Policy #5120. GIS community endorsement of the Addressing and horizontal component of the Geodetic Control Standard was completed in August of 1998. These recommended standards will be presented for adoption by the Policy Board in FY 99. It is anticipated that recommended standards for Administrative Boundaries, Hydrology, and Transportation will be completed in either FY 99 or early in FY 2000.

Data Access and Support Center (DASC)

The DASC has been in operation since 1991, and is awarded by contract to the Kansas Geological Survey at the University of Kansas. DASC support for users of GIS technology has grown over the years as the Kansas Core GIS database has grown and as GIS technology has been adopted more widely in Kansas. Today the DASC operates with a staff of three full time and two part-time employees. In addition to the primary services of archiving and distributing databases contained in the Kansas GIS Core Database, major projects accomplished during FY 98 at the DASC include the projects summarized below.

FGDS Clearinghouse Grant

In November of 1997, the DASC staff completed work on a FY 97 FGDC sponsored grant. The purpose of the grant was to establish the DASC Internet Home Page (http://gisdasc.kgs.ukns.edu) as a node of the NSDI Clearinghouse system. The major deliverables of the grant included: 1) Collect and publish FGDC compliant Metadata for all archived data; 2) Create spatial and keyword search capabilities of the DASC Metadata holdings; 3) Package the Kansas Core GIS Database for on-line access over the Internet; and 4) Develop a set of Internet-based forms that will aid in the collection and submission of FGDC compliant Metadata to the DASC. All of these deliverables have been successfully implemented on the DASC Internet Home Page.

KanView II Project

DASC staff developed and implemented the KanView II portion of the DASC Internet Home Page during FY 98. This project was designed to provide inter-active mapping functionality and to compliment the static display maps implemented under the preceding KanView I project. Components added during FY 98 include the Demographic Map Server, the Custom Map Server, and the Interactive Map of Kansas. The Demographic Map Server allows the user to create maps at the state level displaying demographics by county and by Kansas Senate and House districts. At the county level, maps can be created using U.S. Census Bureau tracts, block groups, and blocks as the organizing geography. The Custom Map Server and the Interactive Map of Kansas both provide the user with the ability to create custom maps while manipulating the design, components, and feature display of many of the databases contained in the Kansas GIS Core Database.

USD #500 KanCRN Grant

DASC staff began work on the Kansas Collaborative Research Network (KanCRN) grant in FY 98. This $ 4.1 million dollar grant was awarded to the Kansas City, Kansas USD #500 by the U.S. Department of Education.

KanCRN is designed to provide effective research opportunities to elementary, middle, and high school students using networking technologies. GIS technology is viewed as an important tool to KanCRN researchers. As a KanCRN partner, the DASC role in the project includes the development and installation of Internet-based interactive mapping tools on the KanCRN web server. DASC staff also collaborates with other KanCRN personnel in designing, developing, archiving, and distributing GIS databases of interest to project participants.

DASC FY 98 Data Distribution

The DASC service requests continued to increase significantly during FY 98. Requests for staff assisted database distributions increased by 11 % from FY 97 to FY 98. The total number of manually distributed files was 39,285. Internet-based anonymous file transfers showed dramatic increases during FY 98. Total files transfers include 26,828 files, or an increase of 104 % over FY 97. The total number of GIS database files distributed by the DASC in FY 98 was 66,113; or an increase of nearly 30,000 files over FY 97,

The percentage breakdown of staff assisted database requests by organizational type for FY 98 shows broad general usage of GIS products throughout the Kansas GIS users community. The FY 98 data distribution breakdown is as follows: state government entities = 29%; county government = 23%; private sector = 28%; Regents Institutions = 8%; and federal government agencies = 12%.

State GIS Coordinator

The State GIS Coordinator's work contributes on all facets of the GIS Initiative. As staff to the GIS Policy Board, the Coordinator organizes and prepares agendas for the six annual Board meetings, manages database development contracts awarded by the Board, and represents the Board's interests within the Kansas GIS community. The Coordinator chairs the Board's Technical Advisory Committee, serves on the GIS Standards Task Force, and is a member of the Board of Directors for the National States Geographic Information Council. The Coordinator represents the Policy Board in activities related to the Cooperative Partnership between the Board and the Federal Geographic Data Committee, serves as the Chairman of the MidAmerica Geographic Information System Consortium (MAGIC), and represents the Board as a member of the Information Technology Advisory Board (ITAB). Organizing and holding the annual Kansas GIS EXPO are also duties administered by the Coordinator. Finally, the Coordinator, with assistance from the DASC staff, prepares and distributes the *KANSAS GIS NEWS* twice a year.

Select Committee on Information Management

January 13, 1999

Presenters:

Don Heiman
Chief Information Technology Officer

Andy Scharf
Public Service Executive, DISC, Telecommunications

Attachment 3
SCIM 1-13-99

ISDN

(Integrated Services Digital Network)

Integrated Services digital Network (ISDN) is a set of CCITT/ITU standards for the digital transmission over ordinary telephone copper wire as well as over other media. Home and business users who install ISDN adapters (in place of their modems) can see highly graphic Web pages arriving very quickly (up to 128 Kbps). ISDN requires adapters at both ends of the transmission so your access provider also needs an ISDN adapter. ISDN is generally available from your phone company in most urban areas in the United States and Europe. ISDN is available in Kansas in all locations served by Southwestern Bell and in selected Independent areas.

ISDN is available in two levels of service: The Basic Rate Interface, ISDN-Bri, intended for the home and small enterprises or individual connections, and the ISDN-Pri, for larger users. Both rates include a number of B (bearer) channels and a D (delta) channel. The B channels carry data, voice, and other services. The D channel carries control and signaling information

The Basic Rate Interface consists of two 64 Kbps B channels and one 16 Kbps D channel. Thus, a Basic Rate user can have up to 128 Kbps service. The Primary Rate consists of 23 B channels and one 64 Kbps D channel in the united states or 30 B channels and 1 D channel in Europe.

Integrated service Digital Network in concept is the integration of both analog or voice data together with digital data over the same network.

ISDN connectivity in Kansas, as part of the State's network, is used for several applications. Those applications are listed below but are not limited to the current list. Additional services and features will be added as this becomes the appropriate solution for future state network user needs.

1. KANWIN back-up and recovery. ISDN-Bri lines are installed at any site in the network that requires redundancy protection for the dedicated frame relay circuits that make up the KANWIN network.

2. Desktop Video conferencing. Desktop video conferencing is being used by several state agencies for Telemedicine, continuing education, and other collaborative capabilities.

3. Collaborative computing. Agencies are developing the ability to work on the same document or drawing with other users statewide.

4. Telemedicine Consulting. The KUMC is using ISDN to allow consultation between the medical center & doctors throughout Kansas. This service permits this consultation to include video connections and the sharing of data between locations.

BILL GRAVES
Governor

DAN STANLEY
Secretary of Administration

DON HEIMAN
Director of Information Systems and Communications
900 S.W. Jackson, Room 751
Landon State Office Building
Topeka, KS 66612-1275
(785) 296-3463
FAX (785) 296-1168

DEPARTMENT OF ADMINISTRATION
Division of Information Systems and Communications

MEMORANDUM

TO: Representative Morrison

FROM: Andy Scharf and Don Heiman, DISC

DATE: January 7, 1999

SUBJECT: Legislative ISDN Access Information Request

You requested information about the costs of providing ISDN-Bri switched access for the Joint Committee on Information Technology, the Select Committee on Information management, and the legislative Leadership.

ISDN basic rate services would cover the following requested services:

1. Legislators have one (1) ISDN-Bri line into their home and one line into their office;
2. Legislative staff have one ISDN-Bri line into their office;
3. All ISDN access includes Internet access; and
4. Security services including encryption, to be provided by the KBI for e-mail.

The attached spreadsheet outlines the ISDN-Bri costs for the lines in offices and homes. It includes the monthly cost of the line, the one-time hardware costs, the installation charge for an ISDN-Bri line, and the estimated cost per minute for any inter-lata calls that are made. The following information relates to these categories.

1. The lines are ISDN-Bri lines with unlimited use when calling within the same dialing area. In other words, in most cases a call from one site in the 785 area code to another site in the 785 area code will not have a cost per minute. The $200 costs associated with selected sites are the costs that would be assigned to any location that is not in Southwestern Bell Telephone's business areas. These sites would have SWB costs, along with other costs from the Independent telephone company serving the area. The $200 is an estimate.
2. The ISDN hardware cost is an estimate for the ISDN-Bri NT-1 devices. These devices are available from several providers and their costs vary. If this project is implemented, a bid would provide the lowest possible cost.
3. The installation charge is based on SWB installation charges. There could be an additional installation charge for those sites not covered by SWB.

4. As stated earlier, most calls within the same calling area have no per minute charges. However, a call between two different area codes, such as a call from a 785 to a 316 area code would have a cost per minute. Under the current state contract, this cost for an ISDN call would be the same as a KANS-A-N call at $0.1000 per minute per BRI channel used.

You also requested information about using the KBI E-Mail system. The E-Mail capability provided as part of the CJIS system is managed through KBI E-Mail server that is outside the secure CJIS network. Token access from a CJIS user is the result of authentication capabilities between the users PC and the application running on the secured CJIS network.

DISC is currently upgrading the KANWIN network's access security to add CiscoSecure services. CiscoSecure, in partnership with CRYPTOCard hardware and software tools, will provide a comparable level of authentication as the KBI system. E-Mail service can either be provided through the existing GroupWise network maintained by DISC, or through the existing GroupWise network maintained by Legislative Services. All connections between GroupWise users would be encrypted. If a higher level of encryption is desired, DISC also has the ability to provide encrypted services between all points on the state network.

Therefore, it's DISC recommendation that security services be provided through the existing KANWIN network services, and not through the KBI security system. This allows a standard solution for all users of the KANWIN network if they desire more secure authentication and encryption services, and it will maintain the high level of security required of the CJIS system.

Attached are specification sheets and other information that describes the CRYPTOCard authentication service and its relationship with CiscoSecure. The costs in the attached spreadsheet reflect the estimated cost for a secure card or token for each user of the network. This cost ($75) is based on a small number of users. As the state provides this capability to other users, these costs will most likely be reduced.

A telephone line in the Statehouse for either a Legislator or a staff member would be $20.00 per month, and a business line at home can cost between $25 and $35 per month, as compared to the ISDN-Bri cost of $90.50. As mentioned earlier there would not be a voice cost per minute for any calls made over the ISDN line as long as the call remains in the same area code. Calls across area codes would be charged at $0.10 per minute.

DISC does not have specific usage data on individual Legislators or Legislative staff. DISC only maintains a record based on station number or calling card completing the call. The Legislative Services staff has the only file that connects names to specific station numbers or calling card numbers. Therefore, it's difficult to closely compare costs between a normal telephone service, and an ISDN-Bri service. However, it appears that the costs will be comparable considering that the ISDN-Bri service will provide voice, data, and video services.

Thank you for the opportunity to respond to this request for information.

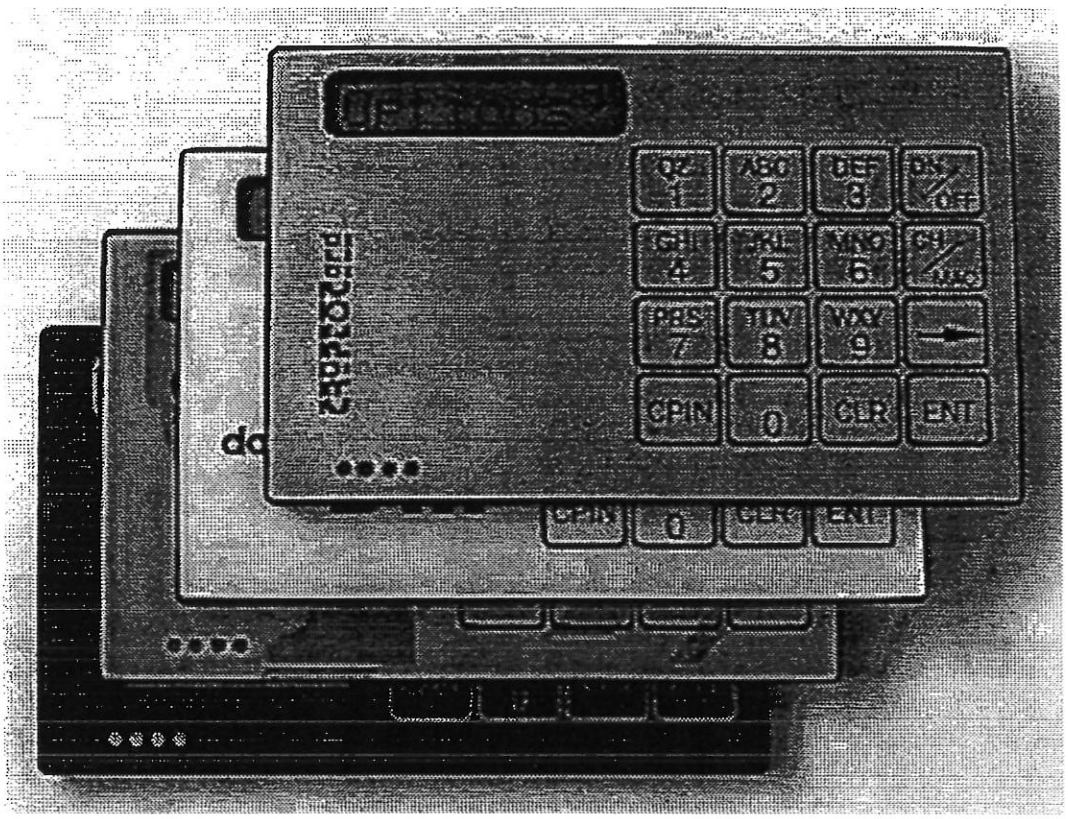
LEGISLATIVE ISDN COSTS

	A	B	C	D	E	F	G
1			MONTHLY	ONE-TIME	ONE-TIME	ISDN	ONE-TIME
2			ISDN CKT	ISDN	ISDN	INTER-LATA	SECURE
3	ACCESS		CIRCUIT	HARDWARE	INSTALL	COST PER MIN	ACCESS
4	USER	CITY	COST	COST	COST	PER BRI	COST
5							
6	LEGISLATIVE MEMBER - Home	Lakin	$200.00	$180.00	$250.00	$0.1000	$75
7	LEGISLATIVE MEMBER - Home	Wichita	$90.57	$180.00	$250.00	$0.1000	$75
8	LEGISLATIVE MEMBER - Home	Wichita	$90.57	$180.00	$250.00	$0.1000	$75
9	LEGISLATIVE MEMBER - Home	Colby	$90.57	$180.00	$250.00	$0.1000	$75
10	LEGISLATIVE MEMBER - Home	Hanston	$200.00	$180.00	$250.00	$0.1000	$75
11	LEGISLATIVE MEMBER - Home	Oakley	$90.57	$180.00	$250.00	$0.1000	$75
12	LEGISLATIVE MEMBER - Home	Wichita	$90.57	$180.00	$250.00	$0.1000	$75
13	LEGISLATIVE MEMBER - Home	Liberal	$90.57	$180.00	$250.00	$0.1000	$75
14	LEGISLATIVE MEMBER - Home	Pretty Prairie	$200.00	$180.00	$250.00	$0.1000	$75
15	LEGISLATIVE MEMBER - Home	Brewster.	$200.00	$180.00	$250.00	$0.1000	$75
16	LEGISLATIVE MEMBER - Home	Wichita	$90.57	$180.00	$250.00	$0.1000	$75
17	LEGISLATIVE MEMBER - Home	Wichita	$90.57	$180.00	$250.00	$0.1000	$75
18	LEGISLATIVE MEMBER - Home	Topeka	$90.57	$180.00	$250.00	$0.1000	$75
19	LEGISLATIVE MEMBER - Home	Healy	$200.00	$180.00	$250.00	$0.1000	$75
20	LEGISLATIVE MEMBER - Home	Manhattan	$90.57	$180.00	$250.00	$0.1000	$75
21	LEGISLATIVE MEMBER - Home	Topeka	$90.57	$180.00	$250.00	$0.1000	$75
22	LEGISLATIVE MEMBER - Home	Herington	$200.00	$180.00	$250.00	$0.1000	$75
23							
24	LEGISLATIVE MEMBER - Office	Topeka	$90.57	$180.00	$250.00	$0.1000	$75
25	LEGISLATIVE MEMBER - Office	Topeka	$90.57	$180.00	$250.00	$0.1000	$75
26	LEGISLATIVE MEMBER - Office	Topeka	$90.57	$180.00	$250.00	$0.1000	$75
27	LEGISLATIVE MEMBER - Office	Topeka	$90.57	$180.00	$250.00	$0.1000	$75
28	LEGISLATIVE MEMBER - Office	Topeka	$90.57	$180.00	$250.00	$0.1000	$75
29	LEGISLATIVE MEMBER - Office	Topeka	$90.57	$180.00	$250.00	$0.1000	$75
30	LEGISLATIVE MEMBER - Office	Topeka	$90.57	$180.00	$250.00	$0.1000	$75
31	LEGISLATIVE MEMBER - Office	Topeka	$90.57	$180.00	$250.00	$0.1000	$75
32	LEGISLATIVE MEMBER - Office	Topeka	$90.57	$180.00	$250.00	$0.1000	$75
33	LEGISLATIVE MEMBER - Office	Topeka	$90.57	$180.00	$250.00	$0.1000	$75
34	LEGISLATIVE MEMBER - Office	Topeka	$90.57	$180.00	$250.00	$0.1000	$75
35	LEGISLATIVE MEMBER - Office	Topeka	$90.57	$180.00	$250.00	$0.1000	$75
36	LEGISLATIVE MEMBER - Office	Topeka	$90.57	$180.00	$250.00	$0.1000	$75
37	LEGISLATIVE MEMBER - Office	Topeka	$90.57	$180.00	$250.00	$0.1000	$75
38	LEGISLATIVE MEMBER - Office	Topeka	$90.57	$180.00	$250.00	$0.1000	$75
39	LEGISLATIVE MEMBER - Office	Topeka	$90.57	$180.00	$250.00	$0.1000	$75
40	LEGISLATIVE MEMBER - Office	Topeka	$90.57	$180.00	$250.00	$0.1000	$75
41							
42	LEGISLATIVE STAFF	Topeka	$90.57	$180.00	$250.00	$0.1000	$75
43	LEGISLATIVE STAFF	Topeka	$90.57	$180.00	$250.00	$0.1000	$75
44	LEGISLATIVE STAFF	Topeka	$90.57	$180.00	$250.00	$0.1000	$75
45							
46							
47	**TOTALS**		$4,007.67	$6,660.00	$9,250.00		

LEGSECUREACCESS

1/11/99, 2:18 PM

CRYPTOCard RB-1 Token



Get Acrobat Reader Get This Product's Data Sheet in Acrobat Format

By equiping authorized users with something unique (the CRYPTOCard Token), something known only to the users (Personal Identification Numbers [PINs]), and an encryption process that employs completely random passwords and secure algorithms, legitimate users can quickly and securely log-on to computers and networks without the risk of ever repeating a password.

CRYPTOCard's DES-based RB-1 Token is a credit card size, self-powered, portable password generator that requires no special readers.

RB-1 Features

- **Self Contained**. Keypad, LCD, internal power and microprocessor allow use independent of separate reader/writer.
- **Extended Life**. Low cost, dual redundant and **easily replaced batteries** provide enhanced product life.
- **Highly Portable**. Credit card size, rugged, lightweight, and exportable.
- **Highly Secure**. DES encryption keys are known only to client issuing office where Tokens are initialized.
- **Versatile**. May contain up to 3 keys for access to 3 different systems. The RB-1 has a broad range of **initialization options** from which the client's issuing authority may choose.
- **Tamper Proof**. Token automatically erases keys and PIN data based on customer-determined number of incorrect entry attempts. Encryption keys and user PINs cannot be extracted from Tokens, or deduced from transaction data.

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- **Custom Covers.** Tokens may be printed with custom colors, logos and graphics.
- **Initializer.** Tokens may be initialized in large volumes from a computerized data base using CRYPTOCard's RB-1 Token Initializer. Tokens may also be initialized manually from the token keypad.

QuickLog Mode

CRYPTOCard's RB-1 Token System Offers Unbeatable Access Control Security with Ease of Use

To optimize customer choice, CRYPTOCard offers both a Challenge-Response and a simplified Event-Synchronous mode called "QuickLog". CRYPTOCard's QuickLog mode, while losing none of the superior security level advantages inherent in a method that generates completely random passwords, offers the added utility of a simplified log-on process (reduced keystroke) that makes it as convenient to use as a time-synchronous approach.

Click here for a comparison between CRYPTOCard's QuickLog Mode of operation and time-based approaches.

RB-1 Specifications

Size (HWD)	2.125" x 3.375" x0.15" 54mm x 86.7mm x 3.8mm
Batteries	2, Lithium Coin Cells (CR2016) user replaceable without loss of data; available in all electronic stores.
Battery Life	3-4 Years on a set of replaceable batteries.
Number of Keys	1-3
Encryption Method	DES (CBC Mode)
Initialization	by Customer
Display	8 dot matrix characters

Token Initializer

CRYPTOCard's RB-1 token may be initialized manually via its keypad. This is a useful feature for initializing a small number of units. However, we recommend that organizations administering 100 or more tokens purchase our Token Initializer. For more detailed information on the initializer,click here.

CRYPTOCard Software Tokens

"CRYPTOCard authentication solutions including CRYPTOCard Software Tokens provide high security at the lowest cost per seat in the industry."

Get Acrobat Reader Get This Product's Data Sheet in Acrobat Format

World' First Java™ software tokens for strong user authentication!

CRYPTOCard AT-1 Software Token

The CRYPTOCard AT-1 applet token is downloaded from a server for each use and runs on most web browsers. There is essentially no deployment step as there is with other types of tokens. This makes the AT-1 token the easiest to manage of any token on the market. Encryption technology is used to ensure security without impeding it's ease-of-use. AT-1 Software Tokens, like all other CRYPTOCard tokens, are managed from CRYPTOAdmin. The AT-1 enables the protection of websites in conjunction with third party applications for Apache, Netscape and Microsoft webservers. CRYPTOAdmin includes an AT-1 server module which operates alongside the CRYPTOAdmin server and a proxy server for multiple web server protection. Solutions offering granularity and flexibility to the security of individual web pages are available.

The CRYPTOCard AT-1 Software Token is 100% Pure Java™ certified.

CRYPTOCard ST-1 Software Token

The CRYPTOCard ST-1 token is a Java application that runs under multiple Java Run-Time Environments (JRE's). Each user's software token is characterized by a small configuration file generated by CRYPTOCard's CRYPTOAdmin token management software. The ST-1 token emulates CRYPTOCard's RB-1 hardware token with an on-screen GUI representation which makes it intuitive and easy to use. The ST-1 has been tested on a number of platforms for which a JRE is available.

CRYPTOCard CT-1 Software Token

The CRYPTOCard CT-1 token is not a Java based token but a command line token for use in a variety of Unix based systems. The CT-1 emulates the functionality of the RB-1 hardware token. CT-1 tokens use the same type type of token configuration file as the ST-1 token for ease of deployment

CRYPTOCard Software Token Features

- Supported by CRYPTOAdmin Token Administration System. CRYPTOCard Software Tokens are fully supported by CRYPTOCard's token administration software package,

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CRYPTOAdmin. This package may also be used to administer hardware tokens.

- Operate Like CRYPTOCard RB-1 Hardware Tokens. CRYPTOCard Software Tokens Look and operate like CRYPTOCard's RB-1 hardware token. They may be used interchangeably with hardware tokens within a given computer network.
- Easy Token Distribution. AT-1 applet tokens require no end-user distribution. ST-1 and CT-1 tokens may be distributed electronically.
- Flexible and Versatile. CRYPTOCard software tokens may be initialized by system administrators with a variety of different operating options.
- Standards Based Technology. CRYPTOCard Software Tokens use the Data Encryption Standard (DES) according to the requirements of ANSI X9.9.
- Java Portability. Java based technology for the AT-1 and ST-1 Software Tokens allows cross platform compatibility on a wide range of operating systems.

CRYPTOCard Token Comparison Chart

Option	RB-1	ST-1	AT-1	CT-1	Variations
PIN Entry Feedback	●	●			Fixed PIN, No PIN Entry Feedback
	●	●			User Changeable PIN, PIN Entry Feedback
	●	●	●	●	Fixed PIN, PIN Entry Feedback
PIN Entry Attempts	●	●	●	●	Unlimited PIN Entry Attempts Allowed
	●	●			Set Limit from 1 to 7 Incorrect Attempts
Minimum PIN Length	●	●	●	●	Settable Minimum PIN Length from 3 to 8 Digits
Display Format	●	●	●	●	Hexadecimal, 8 Digits
	●	●	●	●	Hexadecimal, 7 Digit Telephone Style
	●	●	●	●	Decimal, 8 Digits
	●	●	●	●	Decimal, 7 Digit Telephone Style
Authentication Mode	●	●	●	●	Challenge-Response
	●	●	●	●	QuickLog
UserID	●				Store and Display UserID
	●	●	●	●	Don't Store and Display UserID
Activity Timeout	●				Turn Off After 30 Sec. of Inactivity
	●				Turn Off After 60 Sec. of Inactivity
Prompt Language	●	●	●	●	English
	●				French, German, Italian, Portuguese, Swedish, Spanish
Number of Keys	●	●	●	●	One Encryption Key
	●				Two or Three Encryption Keys

Platforms

CRYPTOCard Software Tokens have been tested on the following platforms. (Unix - Solaris 2.6). The AT-1 is compatible with most browsers that support Java applets.

Token	Unix	Win NT	Win 95/98	Mac	OS/2
AT-1 Java Applet Token	●	●	●	●	●
ST-1 Java Token	●	●	●	●	●
CT-1 Command Line Token	●	●	●		

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Issuing CRYPTOCard Software Tokens

CRYPTOAdmin, a prerequisite to software token use, is purchased with a license for a maximum number of software and hardware tokens. It comes with all the components necessary to generate and manage any mix of the software token types.

Using CRYPTOCard Software Tokens

When a user invokes the CRYPTOCard ST-1 or AT-1, a graphic representation similar to a CRYPTOCard hardware token appears on the user's computer screen. The software token may be operated with a mouse or via the computer keyboard. Like the RB-1 hard token, a user must enter a PIN into the token in order to operate it. Challenges and responses may be keyed in manually, or, if the system configuration permits, may be copied and pasted.

Try out CRYPTOCard ST-1 now !

You can download a 3-token trial version of the ST-1 software from our download page. Note that the CRYPTOAdmin token administration system is a pre-requisite for the ST-1 software. You may also download a trial version of CRYPTOAdmin from our download page.

- Go to download page

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The Washington News Bureau

Token Authentication and the New Security Paradigm: An Analysis of Cisco Embedded CRYPTOCard Technologies

By
Lane F. Cooper

Introduction:

As corporate America continues to migrate away from proprietary legacy systems toward more open, network-centric computing platforms, CIOs and systems administrators are grappling with how to protect mission critical information systems in a cost effective yet secure manner.

According to estimates from Stamford, Conn.-based Gartner Group, the next three years will find 55 to 60 million new users working on corporate client-server networks.

Absorbing this mass of knowledge workers into enterprise networks is creating an unprecedented opportunity for vendors of hardware token authentication--currently the technology of choice for companies who need to ensure that people who access corporate networks are who they say they are.

Authentication has traditionally been a security management activity that has been deployed independent of major security systems purchases. But as a critical mass of network users forms, momentum is building to integrate the authentication function into a more strategic and comprehensive suite of network security services. Consequently, large enterprise accounts seem increasingly interested in having vendors roll out security solutions that integrate VPN, intrusion detection, firewall, and authentication capabilities in an integrated manner.

As the demand for these systems manifests itself more clearly, vendors are rushing in with integrated solutions that are based on broadly accepted industry standards, and that are bundled with popular communications infrastructure platforms. This, say analysts, will challenge security vendors who have deployed less open, proprietary offerings.

These are the major forces behind the recent decision by San Jose, Calif.-based Cisco Systems, Inc., to incorporate Toronto, Ontario-based CRYPTOCard's token administration and authentication software into its CiscoSecure offering.

...Impact Analysis # 1: Vendors

Given the market forces outlined above, analysts generally agree that Cisco has been looking for ways to round out its increasingly popular security offerings. Jude O'Reilley, an analyst with the Gartner Group points out that while Cisco has been aggressively building a multi-faceted suite of security products, it has, until this announcement, not focused closely on hardware authentication tokens.

> "This has left them vulnerable to some of the one-stop security shops that have emerged--like Network Associates and Secure Computing--who have found strong acceptance for their integrated authentication, firewall, intrusion detection and VPN services. By bundling CRYPTOCard's product, Cisco emerges as a stronger player with a better story to tell the enterprise market."

The announcement carries even more profound implications for CRYPTOCard, which has positioned itself as the David to Bedford, Mass.-based Security Dynamics Inc.'s Goliath in the fight

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for corporate security mind share. O'Reilley estimates that SDI currently owns between 70 and 80 percent of the hardware token authentication market. But the move by CRYPTOCard could encroach on SDI's territory.

According to Ted Julian, an analyst with Cambridge, Mass.-based Forrester Research, by bundling CRYPTOCard's offering with CiscoSecure, the company gets access to an unmatched distribution channel in one fell swoop.

> "Cisco is far and away the leader in their business. By placing the CRYPTOCard software on the CD in a pretty complete form, all of the people who buy the CiscoSecure product will at least be presented with the opportunity to use CRYPTOCard's product. That is a big deal. Getting that exposure is a big step for CRYPTOCard."

Julian points out that CRYPTOCard and Cisco are not alone in forming product alliances. SDI, for instance, has teamed up with Redwood City, Calif.-based Check Point Software's VPN offering to leverage the installed base of the two players.

It is, however, generally believed that CRYPTOCard's exposure to Cisco's customer and prospect base will give the token authentication vendor a shot in the arm. As Julian puts it:

> "As well as Check Point has done, it is not Cisco."

Moreover, according to O'Reilley, there is some dissatisfaction in the marketplace with

Security Dynamic's pricing/leasing structure.

For these people, he says, CRYPTOCard offers a migration strategy for companies that are waiting for the X.509 digital certificate standard to mature. Many companies are looking forward to seeing Smart Card products with embedded digital certificates. But most analysts don't expect this market to be viable for two to three years. In the meantime, analysts agree that standards-based hardware token technology in general, and CRYPTOCard's offer in particular, serves as an effective migration path to the emergence of commercial digital certificate products and services.

...Impact Analysis # 2: Enterprise Users

Anything that makes it easier for enterprise users to use authentication techniques that supplement or corroborate password access is good news for the corporate IS community, says Forrester's Julian.

> "There is an interest in eliminating passwords altogether, because they are so cumbersome. Research that we have done with Fortune 1000 companies has told us that anywhere between 20-60 percent of their help-desk time is spent on password related issues. Not only do passwords have security concerns associated with them, they are also just plain expensive."

The bulk of password related help-desk efforts revolve around forgotten codes. IT managers are consequently searching for ways to eliminate--or at least reduce--password only-based systems. Thus, hardware tokens can play a key role in either enhancing productivity or increasing savings in a significant fashion.

In the County of Santa Clara, the local government authorities have standardized on CRYPTOCard's technology to support their growing number of remote access users. According to Steve Williams, network adminstrator with the Santa Clara Valley Medical Center, the county has moved away from dial-back authentication systems when it was determined that these systems could be "spoofed."

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"We like the idea of having a one time password so that if someone does intercept a transmission during a remote access session, the password cannot be used again. CRYPTOCard ended up being the low cost hardware authentication token option. Regardless of what they say about government spending, we still try to keep costs down."

...About the Author:

The founding principal of The Washington News Bureau, Lane F. Cooper brings an in-depth knowledge of the advanced technology marketplace backed by over a decade of experience in business journalism. The Washington News Bureau is a news and feature reporting service for national and international trade publishers. To contact call 202/833-9738 or e-mail: WashBureau@aol.com

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CISCO SYSTEMS

CiscoSecure ACS

Platform	Version	Notes
For Unix (Solaris)	2.0 and higher	The CRYPTOCard server is included with this and subsequent versions of CiscoSecure. All you have to do is configure it.
For Windows NT	2.0	To use CRYPTOCard authentication with this version of CiscoSecure, you need to install our server first. Then you can configure it.
For Windows NT	2.1	The CRYPTOCard server is included with this version of CiscoSecure. All you have to do is configure it.

Compatibility Quick Reference

Embedded

Platform	Supported Tokens	Notes
CRYPTOAdmin	RB-1 ST-1	Use CRYPTOAdmin for token management. • Install it on the Unix platform. • Install it on the Windows NT platform. CiscoSecure for NT supports the full

	ST-1	challenge-response and QuickLog modes with TACACS+ or RADIUS authentication. QuickLog mode ONLY is supported when RADIUS is used on the Unix version of CiscoSecure.

"How To.."

"Troubleshooting"