Executive Summary

Information technology – the processing of information by computer – has transformed industry and government operations over the past three decades. Because of its boundless capacity to process facts, data, and information quickly, information technology is the indispensable tool of good management.

Unfortunately, the California Department of Corrections (CDC) has been unable to fully take advantage of the information revolution. CDC is a good example of the problems discussed in the Little Hoover Commission report *Better.Gov – Engineering Technology-Enhanced Government*, issued in November 2000. It is a department that has not yet transformed itself and utilized current technology to improve the efficiencies of its operation, enhance the safety for its staff and inmates, and reduce the costly litigation due to the improper treatment of inmates.

CDC lacks the leadership, understanding, and expertise to plan for technology for the department. Therefore leadership is reluctant to make the commitment and push for funding – leaving the department without the critical technology tools available that would vastly improve its operations. CDC must develop an overall strategic plan to bring the department's operations to the efficiencies that can be achieved with the appropriate use of hardware and software. The use of information technology could profoundly reduce costs associated with prison operations if CDC develops a long-term plan and training for its use.

Major CDC Problems

Until CDC leadership begins to fulfill its mandate – and develops and implements an overall strategic plan to carry out that mandate – offender management programs will be increasingly dictated by the courts, resulting in legal costs, loss of efficiency, and a general loss of confidence in the department. Moreover, cost savings potentials for the state will continue to go unrealized. Until department leaders take responsibility for addressing its problems – and proving it is capable of solving them – major problems will remain:

- CDC currently relies on two out-of-date computer systems to track inmates and carry out administrative functions. The Offender Based Information System (OBIS) and Distributed Data Processing System (DDPS) were developed at different times over the past 22 years and are technologically incompatible. Information entered and stored in one system often must be re-entered and stored in another because of technical differences.

- The vast majority of information on inmates is still kept in cumbersome paper-based files, called Central Files or C-Files. They are transferred with inmates from institution to institution throughout their confinement. Many C-Files reach a thickness of 12 inches or more.

- When a parolee is returned to custody, the C-File must be requisitioned by the reception center from the CDC archives in Sacramento. This can take up to 30 to 60 days, a period that is unacceptable. This adds to costs, as well as jeopardizes the safety of inmates and staff who do not have essential inmate information immediately available.

- Reception centers must process thousands of inmates monthly without the benefit of modern information technology to assist staff with volumes of paperwork.

- Existing OBIS software relies upon very old technology. Its database structure is considered obsolete by today's standards. As a result, many inmate release date calculations must be done manually, requiring extensive manual checks and rechecks to avoid early or late releases. Untrustworthy methods of record keeping could have a detrimental effect on prisoners waiting release, or could result in public safety concerns and litigation.

- The Department of Corrections is generally unable to exchange secure internal and external e-mail at most of its prisons. Secure communication is critical because of the sensitive nature of the prisoner information that is transmitted, such as gang affiliations, medical conditions, and inmate histories. An information technology infrastructure was partially installed throughout the prison system. It was not completed and in most prisons cannot be used.

- During the past year, some 250,000 inmates required various transportation needs – transfers between the 33 prisons, court, and medical appointments – and all were largely undertaken without the benefit of modern transportation scheduling software. Yet, inmate transportation continues to be managed without the advantage of a modern, computerized transportation system. A year ago, staff used an in-house created Excel program to produce an interim system to manage incoming data. Up until last year it was done with paper and pencil. But without adequate technology, staff operates in a highly pressurized environment to coordinate the complex weekly routing of inmate buses. Overtime is standard.

- Medical, mental health, and pharmaceutical mismanagement has led to intense criticism and litigation against the state. This has resulted in successful class action litigation against the state.

Outmoded Systems

The Commission finds that existing CDC computer systems are outmoded and incapable of using significant new technology. Today's computer systems were first installed in 1976 and 1985. The department must take steps to move its computer technology into the twenty-first century. An overall strategic plan has not been developed to improve prison operations – nor has a *technology master plan* been created as a blueprint for upgrading or replacing the existing 20-year-old system to take full advantage of newer and more cost-effective technology.

In June 2001, the State Auditor issued a report on Information Technology.[1] In this report the Auditor points to the responsibility of departments to prepare a feasibility report to justify the investment of state resources and the comprehensive analysis of its costs and benefits. Although CDC's information technology group developed a draft of a strategic information systems plan in October 2000, this Commission was not able to find the required business rationale and cost-benefit analysis to support its implementation.

[1] California State Auditor, Bureau of State Audits, *Information Technology: The State Needs to Improve the Leadership and Management of Its Information Technology Efforts* (2000-118), June 27, 2001.

During Commission meetings, CDC leadership often gave the impression of not having a clear, overall perspective of the department's direction in solving these problems. The Commission believes the department, in the past, has failed to aggressively adopt an action plan and pursue the funds needed to modernize its information technology system. This has not been a top priority of CDC leadership. However, at the staff level, the department has regularly submitted requests for funds for system improvements. But approval and financing from the Department of Information Technology and Department of Finance have not been forthcoming.

As a result, problems mount – the department's equipment is outdated and it has been denied modernization funds. And now the manufacturer of essential prison database servers, Hewlett-Packard, has announced it soon will stop selling and servicing the entire HP 3000 line of database servers used by CDC, along with their proprietary MPE operating system in December 2006. Additionally, the company notified CDC that as of October 2002 it would discontinue providing parts and timely technical support for 98 of the 115 servers. This means that CDC operations could face difficulties if the servers are not replaced with newer models.

Moreover, CDC previously spent $26 million wiring all prisons with the fiber optic cables needed to install a modernized information technology system. There was a multimillion-dollar effort to upgrade the current system in the early 1990s. But it collapsed in a contract dispute five years ago leaving this partially completed work on hold. As a result, 27 of the 33 prisons do not have a basic, communications capability, such as secure e-mail, within their own walls – and none of the prisons are able to communicate with the other institutions.

The department has struggled with the same substandard system ever since. All efforts to unearth replacement funds in the state budget have failed. In particular, a proposed master plan to develop a new system by purchasing usable prison management technology developed by other states has gone unfunded. The new system, known as the Strategic Offender Management System (SOMS), still remains on the table.

An Ideal System

An ideal information management system would consist of an integrated, consistent automated system across all prisons in the system. This single database could provide information about those offenders, inmates, and parolees to all authorized users.

Rather than today's clumsy, paper-based systems, the new information management system would be built to collect and use data on an inmate in one seamless flow. It would be used for office automation, transportation, and electronic mail, and for inmate custody and record management, parole supervision and management, health care and treatment services, administrative services, and crime victim restitution and support.

Several other states, as well as private technology firms, have developed a variety of highly regarded and relatively inexpensive software for use in prison administration. The systems are already operating successfully elsewhere. CDC last year conducted an informal market survey of commercial off-the-shelf (COTS) software systems that might work in California. The possibility that COTS products could be used to construct a new information technology system here is encouraging and must be pursued as part of an overall technology master plan proposal.

In order to maximize cost-savings potential within CDC, the Administration and the Legislature must take necessary budgetary steps to replace this outmoded technology system. This single investment in the future, based on a technology master plan, should be a top budgetary priority for the department's advocacy efforts.

Summary of Findings and Recommendations

Finding 1: Need for a Technology Master Plan

The Department of Corrections has failed to take advantage of the enormous advances in information technology that has occurred in the past decade. The department's leadership in recent years has not aggressively pursued the state funds needed to upgrade its aging system. A modernization effort five years ago through an outside contractor was a disappointing failure. CDC has since been denied funds to try again.

As a result, the ability of the department to manage its operations in a cost-effective manner has been handicapped by the volume of inmate records management that must be done either manually or on outdated computer systems**.**

RECOMMENDATIONS

- **CDC must aggressively pursue the development of a comprehensive technology master plan for building a system capable of meeting today's prison needs. The Administration must be willing to provide adequate and immediate funding to implement such a master plan.**

- **CDC must be given the resources to upgrade its obsolete information technology structure to better support prisons, parolees, inmate health care, administrative functions, and to protect the public's safety. Ultimately, this will reduce overall costs to the state.**

- **Department leadership must establish a Technology Needs Assessment Task Force, made up of well-respected, knowledgeable line people who will be responsible for analyzing the technology needs of the day-to-day activities in the prison setting. This input – a *vision* of what an ideal corrections' organization would look like – is a critical first step in developing any meaningful and useful strategic operating technology plan adopted by CDC leadership.**

Finding 2: Commercial Off-the-Shelf Software

The Department of Corrections last year conducted an informal, unfunded market survey of commercial off-the-shelf prison management software that might be purchased from other states. The results were positive. Commercial off-the-shelf (COTS) products could be used to construct a proposed new information technology system known as the Strategic Offender Management System (SOMS).

RECOMMENDATIONS

- **A cost-effective Strategic Offender Management System, using commercial off-the-shelf software developed by other states, should be considered to replace current outdated systems. The considered COTS system must meet the needs of the Corrections' staff, and be capable of tracking inmates between prisons, following inmate histories, and performing specialized functions such as transportation scheduling.**

- **California would save millions of dollars in software development costs by joining a multi-state prison software development consortium and benefiting from the successful programs already implemented in other states.**

- **SOMS would offer a faster and less expensive solution to CDC's information technology crisis; but timing is critical. It would take an estimated four years to install a complete COTS system. Therefore, the Administration and the Legislature must make a commitment to fund the SOMS program as soon as possible.**

Finding 3: CDC's Reception Centers

The CDC system includes 12 reception centers to process newly committed prisoners. These centers must process thousands of inmates monthly without the benefit of modern information technology to alert staff to critical inmate classification information, and to assist staff with volumes of cumbersome paperwork.

RECOMMENDATIONS

- **Cost-effective prisoner record management and data entry software is readily available. Its purchase and implementation should be made an integral part of the department's technology needs assessment plan – one that focuses on alleviating cumbersome paperwork and eliminating outmoded inmate paper files.**

- **CDC should purchase and implement a cost-efficient COTS system that is capable of tracking an inmate's criminal background, gang affiliations, personal histories, and other information pertinent to receiving staff.**

Finding 4: Central Files (C-Files)

The vast majority of information on inmates is still kept in unwieldy paper-based files, called Central Files or C-Files. They are transferred with inmates from institution to institution throughout their confinement. Many C-Files reach a thickness of 12 inches or more. Additionally, when a parolee is returned to custody, the C-File must be requisitioned by the reception center from the CDC archives in Sacramento. This can take up to 30 to 60 days, a period that is unacceptable. This adds to costs as well as jeopardizes the safety of inmates and staff.

RECOMMENDATION

- **Eliminate unreliable paper-based C-Files by purchasing and implementing a COTS system capable of tracking an inmate in prison, on probation or parole – from initial conviction through final release – and all other information pertinent to managing the corrections' population – from psychological and medical profiles to transportation needs.**

Finding 5: Inmate Classification and Reclassification

It is critical that Corrections' staff has accurate information relating to the inmate they are getting before arrival so that they can make appropriate and timely decisions. The prisoner classification and reclassification scoring is an important, but complex, system that includes numerous factors and one that needs constant monitoring and updating. These key calculations and resulting decisions are critical to the inmate's prison life and to the safety and security of the prison environment. Yet, all are made without the benefit of modern information technology systems.

RECOMMENDATION

- **Purchase a COTS system that can be customized to track CDC's complicated and varied inmate "point" system – from tracking sentencing laws, inmate release dates, and employment records – to tracking housing needs, gang affiliations, and disciplinary action.**

Finding 6: Transportation

During the past year, some 250,000 inmates required various transportation needs – transfers between the 33 prisons, court and medical appointments – and all were largely undertaken without the benefit of modern transportation scheduling software. Some patchwork solutions were fashioned by staff in individual prisons using Excel and Access databases, but were not used between prisons. Personnel largely must resort to old-fashioned paper and pencil and cut-and-paste charts.

Implementation of an integrated and consistent automated system throughout the prison system will result in increased efficiencies of prisons, staffing and equipment, better control over prison populations in prison and in transit, and reduction, if not elimination of, overtime for the existing staff.

RECOMMENDATION

- **Cost-effective transportation scheduling software is readily available. It should be made an integral part of the department's technology needs assessment plan and should be reviewed with the goal of fully automating inmate transportation scheduling.**

Finding 7: Litigation

By not fulfilling its mandate properly, CDC has left California exposed to liability. The Courts are mandating systems implementations on an ad hoc basis as remedies for specific abuses successfully proven and alleged in specific litigation. Litigation results in huge legal costs and penalties. But the biggest consequence is it will result in more litigation over the same issues for other prisons – and more importantly, will result in Court designed systems to remedy a specific problem.

The courts have mandated specific remedies, which include the implementation of a medical records system in Pelican Bay. If the same system is not implemented in other prisons, the prison system will not only continue to suffer from piecemeal IT implementations, but also there is a strong likelihood that other litigation over the same issue will be initiated, and will be successful.

RECOMMENDATIONS

- **CDC, already under a judicial mandate to develop a medical records database for the inmates at Pelican Bay State Prison, must complete statewide conversion that will significantly improve inmate care and forestall further costly litigation.**

- **CDC should investigate and implement a comprehensive, modern criminal justice information system that would serve not only prisons, but also provide information to – state and local law enforcement, the courts, jails, and the prison parole program.**

Finding 8: LANs – the Missing Communication Link

CDC previously spent $26 million wiring all prisons with the fiber optic cables needed to install a modernized information technology system. However, the project was never completed. The Department of Finance and legislative budget committees have denied CDC subsequent budget requests for the additional $8 million required to purchase the hubs and routers needed to make the LAN connections. As a result, 27 of the 33 prisons do not have a basic communications capability, such as secure e-mail, within their own walls or with other institutions. Without computer linkage, most interoffice communication at the institutions must be done on paper. This is not only cumbersome, but also costly in time and resources. It limits the ability of the staff to communicate effectively. Additionally, the lack of LAN connections inhibits the utilization of commercial off-the-shelf software systems.

RECOMMENDATION

- **The hardware necessary to complete the Local Area Networks (LANs) should be installed. This would allow for the first time in CDC history all prisons, parole, health care, headquarters, business, and operation functions to be interconnected.**

Finding 9: Pilot Project in a Women's Prison

One of the stumbling blocks to introducing modern information technology into the CDC has been the size of the endeavor and the cost. A pilot project using the female inmate population would be manageable, less costly, and provide valuable information and experience.

RECOMMENDATION

- **As a possible first step toward fully automating inmate management, the Legislature should consider directing the CDC to establish a comprehensive pilot project program within the female inmate system. The pilot would include automation of new inmates' Central Files, medical and pharmacy records, transportation, trust accounts, work credits, and other records.**

Background

The California Department of Corrections, the largest state correctional system in the nation, is responsible for the control, care, and treatment of more than 156,000 men and women convicted of serious crimes. It also supervises 121,000 parolees.

During the past decade, the soaring growth of the inmate population has forced the department to cope with perhaps the most daunting challenge in state government. Although now in a period of modest decline, the inmate population has increased by 52,000 men and women since 1991.

Much of that growth is attributable to a profusion of tough new criminal laws, primarily the switch from indeterminate to determinate sentencing and the "three strikes" law. They caused the prison population to take off.

To accommodate this flood of new inmates, CDC built and absorbed a remarkable 12 additional prisons during the decade. At the same time, the department's annual budget skyrocketed by 94 percent, to $4.8 billion. CDC today boasts the largest number of employees in state government, 46,970 – up from 28,600 workers ten years ago.

CDC does not utilize a modern system of information management to handle inmate records, prison movement, and staff files.

There are 33 major CDC institutions, including a dedicated medical facility. In addition, the CDC system includes 12 reception centers; 38 fire and conservation camps; 34 community reentry, restitution, and drug treatment programs; 136 parole units in 73 parole offices located across the state; and four outpatient psychiatric services clinics and community correction facilities.

The Commission believes that with all of the attention paid to providing new prisons and hiring and training the thousands of additional correctional staff members to operate them, one important item was forgotten – a similar commitment to building new information technology capabilities. CDC has not developed a technology master plan for providing a modern system of information management to handle inmate records,

prison movement, and staff files. No high-tech communications exist between 27 of the 33 institutions.

Failed Upgrade

A decade ago, CDC officials set out to replace aging state prison computers with a modern information management system. The goal was to improve efficiency, cut costs, and better ensure public safety.

In late 1994, CDC awarded a $40 million contract to TRW to build a carefully designed new system. It would have provided a state-of-the-art computer network known as the Correctional Management Information System (CMIS). It would have fully automated the tracking of inmates between prisons, jails, and courts, as well as monitor where they were housed. It also was to have kept track of parole dates, inmate histories, medical and employment records, and other information.

Unfortunately, CDC's effort to modernize its information technology was a painful failure. Early in 1997, CDC lawyers went to court claiming TRW had not delivered as promised. The contract was eventually canceled and an out-of-court settlement reached, giving CDC an $18 million breach-of-contract award.

California prisons have never recovered from the loss of momentum. Little has been done since to improve existing computer systems: the mainframe Offender Based Information System installed in 1977, or the prison-based Distributed Data Processing System installed in 1986.

Unfortunately, CDC's effort to modernize its information technology was a painful failure.

Perhaps made wary by the TRW disappointment and the costly failure of several earlier information technology automation efforts elsewhere in state government, the various Administrations have failed to finance a second CDC automation effort. Or, perhaps more probable, Administrations have been made wary of committing a huge investment into a project the department has failed to justify in terms of costs and benefits. The Governor's Department of Finance has authority over departments' budget activities and must consent to any funding for new information technology projects, primarily through its specialized Technology Investment Review Unit.

Failed Leadership

The Commission believes CDC leadership failed to make funding information technology improvements a top priority. There appears to be no constituency to modernize CDC's information technology (IT) system other than concerned CDC staff, prospective vendors, and a small number of knowledgeable legislators, legislative committees, and concerned citizens. As a result the department is still left with an old and inflexible system that relies on hardware that dates back to 1977, the year Apple Computer first introduced the personal computer.

The Commission concludes that CDC is a $4.8 billion-a-year department being run with celebrated buggy whip technology. Inmate records are still mostly kept on paper – in today's world, a very costly way of doing business. And in the case of CDC, – a very risky way of doing business. Those paper files travel with convicts from prison to prison. The same computers deemed inadequate a decade ago remain in place today – ten years older, dangerously outmoded, and technically obsolete.

Perhaps the Governor and the Legislature should view CDC as the Commission does – a department that may know how to house prisoners, but a department that lacks the expertise to manage its operations under sound business principles – giving the perception that it is totally inept in managing its business affairs.

Financial Problems

Whatever interest state leaders once had in putting up the money to modernize CDC's information technology has long since been consigned to dusty old copies of the state budget. Enthusiastically embraced in the early 1990s, the proposed IT appropriations peaked at $126 million in the 1996-97 budget and then flamed out.

. . . it has now been more than five years since any significant new funding has been provided CDC to replace its outmoded DDPS and OBIS systems.

The money was never spent. A lawsuit against TRW for failing to deliver a satisfactory replacement for DDPS and OBIS was settled with an award of $18 million to CDC. And as the year 2000 was rapidly approaching, the state turned its attention to the Y2K problem instead. The release of any new proposals was blocked when the first Y2K Executive Order was released prohibiting any agency from undertaking any new IT projects until that agency had completed its Y2K remediation plans. As a result, it has now been more than five years since any significant new funding has been provided CDC to replace its outmoded DDPS and OBIS systems.

Going back in time, it was in the 1993-94 budget that the state first seriously committed itself to replacing CDC's already aging computer systems. The budget included $11 million to hire the needed technical staff and another $1.7 million for preliminary plans and working drawings. Additional appropriations of $2 million to $3.5 million a year would follow until the signing of a $40 million contract with TRW. The ill-fated project costs would later balloon to more than $100 million.

CMIS Launched

Designated the Correctional Management Information System (CMIS), the system goal was to fully automate the tracking of inmates between prisons, jails, and courts as well as monitor where they were housed. It also was to have kept track of parole dates, inmate histories, medical and employment records, and other information.

The CMIS project was to create a single automated system that satisfied the needs of all offender systems users and serve as the hardware and software platform for all future systems. The 1997-98 budget bill promised it would "improve prison operations and department administration, primarily through replacing unwieldy and labor-intensive manual processes with a new computer-based system."

In April 1995, the department halted all ongoing modifications and enhancements to OBIS and DDPS. Instead, it was expected that TRW's new CMIS would replace both of those systems as early as December 1996. But it wasn't to be.

TRW began work on CMIS in 1995, but failed to produce an acceptable system design. After months of delays and debates on the contract with TRW, the department canceled the project and initiated legal action against TRW. The firm, in turn, counter-sued. After a settlement was reached in 1998, CDC immediately tried to restart the CMIS project. But as the year 2000 approached, the Administration made a decision to undertake a massive Y2K conformity effort instead, ending the CMIS project. The cancellation of the contract was a substantial setback to the modernization of CDC.

From that point on, funding for the long-planned effort to upgrade CDC's information technology system was frozen. It soon became apparent there was insufficient support in the Administration or the Legislature to reinitiate a similar CMIS effort. Also, legislative critics say that technology improvements were no longer pursued with the same vigor after a change in leadership occurred at CDC.

New state budgets left out proposals for improving CDC technology. Department requests for funding increases – so-called Budget Change Proposals, or BCPs – were rejected by the Department of Finance. Because those BCPs are considered confidential and are not made available to the Legislature, it is difficult to determine precisely what was actually submitted, and at what priority level, and what was rejected.

Master Plan Financing Sought

A departmental request for $18 million to fund a new CDC master plan in 2001-2002 never made it into the state budget. It would have authorized the procurement process to begin this year for the initial phase of the proposed Strategic Office Management System (SOMS). It calls for replacing the existing CDC information system with off-the-shelf prison management systems already developed in other states and available for sale.

Fiber Optic Cable

The Department of Corrections still has not achieved the LAN/WAN (Local Area Networks/Wide Area Network would allow communication within a single prison complex and between prisons) connectivity that would support modernization to the fullest extent. The contract to develop LANs and WANs for the prison system fell apart five years ago. Frustratingly, fiber optic cable worth $26 million has been installed in every prison so they could not only have LANs inside each prison, but a WAN hooking everybody up to a central database. An $8 million appeal for the routers, hubs, and switches needed to link everything up died in the Budget Conference Committee in 2001 without support from the Department of Finance.

Hewlett-Packard Dilemma

One example of CDC's lack of overall technology planning and vision is the recent dilemma posed by Hewlett-Packard (HP) which has announced that it would no longer manufacture, produce parts for, provide maintenance or service of its HP 3000 servers – the backbone of CDC's information technology system. The department currently operates 115 HP 3000s – one in each of the 33 state prisons and 73 in parole offices and the remainder in its Central Office in Sacramento. They support critical databases of inmate and parolee information and have been essential to the operation of the prisons and parole offices for the past two decades.

About half the size of an ordinary refrigerator, the servers are high-powered mini-computers that "serve" other smaller computers – display terminals without processing capabilities. In prisons, the HP 3000 servers keep track of essentially everything that is currently "trackable" – from inmate head

counts and bed assignments to visitor operations. They also make the all-important nightly data reports to CDC headquarters in Sacramento.

However, the department now faces the prospect of being left with 98 obsolete servers in prisons and parole offices later this year without access to reliable repairs or replacement parts. To avert a potential crisis, near-term budget solutions have been proposed and are under consideration by the Administration and legislative leaders.

CDC wants to buy the newer model servers to replace the older models on an interim basis. It proposes replacing, on a one-for-one basis, all of the prison and Central Office servers scheduled for obsolescence in November 2002. This one-time price tag would be $5.9 million, with continuing costs of $6.9 million. The total project cost would be $12.9 million.

It also proposed converting the parole office computer system, designated as the Interim Parole Tracking System (IPTS), to a centralized server with a reliable central database at the Teale Data Center. First year cost would be $1.3 million, with a $3.1 million annual support budget for four years, and a total cost of $14.1 million.

Backlog Addressed

This year the state must cope with a $23.6 billion budget deficit. And, at mid-year, CDC had already run up its own $277 million departmental deficit, much of it to pay for overtime and extra shifts, as well as for a $90 million pharmaceutical overrun.

However, at this writing, the CDC is optimistic about gaining favorable approval for its request for $5.9 million now, and a total of $12.9 million over the next 18 months, to replace de-supported Hewlett-Packard servers in prisons and the Central Office.

In addition, CDC proposes to replace 73 obsolete parole office servers by switching to a centralized database at the Teale Data Center in Sacramento. That project will require a one-time appropriations of $1,372,275 this year and continuing costs, over four years, of $3,187,065, for a total cost of $14,120,535.

Other Alternatives Should be Explored

The Commission believes that CDC should have anticipated the phasing out of the HP servers – it is 20-year-old technology – and should have had a plan in place for replacing these models in favor of newer ones before reaching a crisis point. Also, HP had notified the department as early as 1996 of the discontinuance and end of maintenance for the servers "in October 2002." However, at this juncture it should reconsider buying the replacement models.

The Commission questions whether California should buy outmoded hardware, or hardware that is "temporary" in nature.

- Is HP willing to guarantee a transition plan from one system to the next?

- Do these cost estimates include "transition" costs; including the cost of taking manual or computer data and translating it to any of the new systems?

- Do the costs include all training costs for the "transition" from one system to another?

Otherwise, the Commission believes the state would be throwing away money. A long-term solution, perhaps by buying into prison management software developed by other states, must be fashioned.

While CDC has proposed the purchase of newer models of the HP 3000 line that can be converted to a Unix operating system later, the Commission believes the department must be wary of buying new products that are already scheduled for obsolescence.

Hewlett-Packard was the successful bidder in providing a CDC information technology system in the early 1980s. Because its operating system is proprietary, developed and owned by one organization, HP has been deemed exempt from the state's sole source justification requirements since that time. But in light of the recent Oracle debacle, sole source contracting may be a thing of the past – giving CDC the opportunity, and the responsibility, of pursuing other vendors and seeking competing bids.

In response to this year's CDC $7.3 million emergency funding request to replace servers that are losing HP support this November, the Department of Information Technology is requiring CDC to submit "within six months, a plan for replacing the current obsolete DDPS Operating System and software platform, statewide." But as a matter of good business practice, CDC should be prepared to answer such questions as:

- If these problems are happening in CDC – what is going on in the other state agencies? And how are they handling the replacement "crisis"?

- Who is qualified to make an informed judgment – especially when there is no technological needs assessment plan in place?

- Why is the department buying something that will soon be obsolete?

- Why not seize the opportunity to go to a system that is not proprietary?

- Has CDC talked to other vendors? Did it price out other alternatives?

- What other options are being considered?

However, CDC may determine that it would be foolhardy not to purchase newer HP models to replace the older models. The lack of foresight and a long-range technology plan may have boxed them into a corner – costing taxpayers millions of dollars. But at this point, a decision of this magnitude – seeking funds to keep the department in a technology "holding pattern" – cannot be made until all other options have been explored. CDC must consult with other departments and private business that may also be in this predicament. Additionally, they should consult with experts in the IT field to review the current situation – and be able to credibly defend the course of action they ultimately choose.

The Commission strongly recommends that CDC leadership take full control of the department's business reins – and no longer be forced into decisions of which they do not know the consequences.

Outmoded Technology

CDC's management responsibilities are among the most far-ranging and difficult in state government. In addition, law enforcement agencies depend upon CDC to provide timely and exact information on offenders. It is, therefore, essential that CDC have a modern and efficient information technology system at its disposal. Such is not the case.

Instead, state prisons must rely on outmoded, and often untrustworthy, methods of record keeping. These methods include the Central Files (C-Files), which are bulky, paper-based files kept on every inmate and must be updated and moved with offenders throughout their confinement – and two antiquated computer systems – the Distributed Data Processing System (DDPS) and the Offender Based Information System (OBIS).

Both OBIS and the DDPS were initially developed in response to legislative mandates and have been subsequently altered to comply with later statutes.

It is the DDPS system that is now jeopardized by the Hewlett-Packard decision to discontinue production of CDC's current servers and replacement parts and discontinue timely technical support.

OBIS and DDPS are essential to CDC's operation of prison programs and offender tracking. Unfortunately, because these systems were to be replaced by a modernized system known as the Correctional Management Information System (CMIS)**,** modifications and upgrades on OBIS and DDPS were halted in April 1995.

A more detailed description of CDC's current record-keeping systems follows.

DISTRIBUTED DATA PROCESSING SYSTEM

The Distributed Data Processing System was first put into service in 1985. It is the primary system used in the institutions for custody-related offender information. It operates on 42 HP 3000 servers located inside each of the 33 prisons and in the CDC Central Office.

The DDPS contains such inmate data as housing and bed cell numbers. It assists staff with inmate counts and is used within each institution to track inmate location. It keeps up with inmate classifications, privileges such as eligibility for canteen draws, visitors, job assignments, and infectious disease information.

Nightly, each prison sends that day's inmate information to the CDC Data Center in Sacramento, where it is accrued to move records between prisons and update statewide files.

Failure to locate essential information could result in staff or offender injury, in-appropriate housing decisions, or illegal incarcerations and releases.

CDC officials have complained in past budget requests that the HP computers are no longer capable of responding to increasingly greater demands for information retrieval. Staff members need quicker access during disciplinary incidents, medical emergencies, legal challenges, and offender transfers. Failure to locate essential information could result in staff or offender injury, inappropriate housing decisions, or illegal incarcerations and releases.

When the CMIS project was undertaken in 1994, the HP 3000 servers were already considered old technology. With the 1998 collapse of TRW's effort to fully automate CDC department records, the department was left with the same outdated servers it still uses today. The servers run on Hewlett-Packard's proprietary MPE operating system, which will no longer be maintained in even newer server models after 2006.

"Dead End" Technology

Following the 1998 contract collapse, Logicon, Inc. – an information technology oversight firm employed by the state – described the MPE system as "dead-end" technology and warned that it might be difficult to find people willing and able to work with it. This has been borne out.

Logicon wrote, "The existing DDPS architecture is old and outdated. This creates problems with staffing and maintainability. CDC must strive toward developing a more scaleable and maintainable system based upon newer technology to replace DDPS." Logicon noted that there appeared to be very little long-range planning related to replacing the DDPS system.

The outmoded and overloaded HP 3000 computers remain the mainstays of record keeping at 33 prisons and in 73 parole offices. As noted, these servers now are not only outmoded, but are out of production and facing a maintenance cutoff.

Critical Delays

CDC officials fear repair delays could cause catastrophic problems, particularly in connection with its essential practice of counting all prisoners six times a day.

Department officials fear repair delays could cause major problems, particularly in connection with CDC's essential practice of counting all prisoners six times a day. The institutions must know where all prisoners are at all times – in their cells, the prison yard, seeing a doctor, or being transported somewhere.

With computers, counts take about 25 minutes. But if the computers are out of service for more than two hours, prisoner counts must be done manually. Then, according to CDC officials, the six-counts-a-day regimen generally would have to be abandoned and the prisons locked down to avoid escapes. Lockdowns create the potential for serious inmate disturbances.

Another major concern if the servers were to go down has to do with prisoner transportation at reception centers. Inmates couldn't be transferred out of the reception centers until the servers were operational again. Inmate backups could occur and buses arriving full of newly arriving inmates from county jails would have to be turned back for lack of bed space.

OFFENDER BASED INFORMATION SYSTEM

Offender Based Information System (OBIS) is the primary system used for maintaining prisoner information – including a prisoner's sentence, housing location, and time served. The OBIS database resides on mainframe computers located at the Stephen P. Teale Data Center in Sacramento.

First put into service in 1977, OBIS was designed to automate legal and sentencing information. It maintains information on inmates from their commitment through parole and discharge, keeping records on their criminal offenses, movement within the prison system, and personal descriptive data.

OBIS contains holds, wants, detainers, and parole violator information. It is relied upon by the prison case records staff, four regional parole offices, and Central Office staff. OBIS calculates prisoner sentences and release dates, then tracks parolees. It is the source CDC relies upon to project inmate populations and plan for new prison construction.

Unlike the aged HP 3000 servers used in prisons and parole offices, the mainframe that OBIS runs on at Teale is a very modern piece of hardware. Teale upgrades its mainframe equipment on a regular basis.

Each night, selected information from the 33 prisons is transmitted across a CDC data network to the CDC Aerojet Data Center in Sacramento. At the Data Center, the inmate information from the individual institutions is accumulated on a larger computer. These files are relied upon in moving records between institutions and performing statewide reporting.

. . . the entire system has been disrupted in the past by such minor mistakes as incorrectly coding inmate identification numbers.

CDC staff at institutions throughout the state access and update OBIS daily. Additional OBIS processing and management reporting is done by staff at the CDC Central Office.

Crash Concerns

There are concerns over potentially serious consequences if the OBIS system should crash for any length of time. CDC officials say the entire system has been disrupted in the past by such minor mistakes as incorrectly coding inmate identification numbers. Were it to crash, CDC would have to do manual calculations on offender release dates and Board of Prison Terms hearings, in addition to the manual calculations they currently perform for major changes in sentencing laws. Manual processing produces delays that can lead to late offender releases and subsequent litigation. In a crash, the 4,000 to 5,000 C-Files located at each institution would have to be reviewed on a daily basis – a practical impossibility.

OBIS maintains CDC's 24-hour "wanted person" system. It catalogs the 20,000 parolees and 400 escapees at-large at any given time, keeping track of the exact number and how long they have been out. That information would suddenly be unavailable to the public in a serious system breakdown.

Public safety requires CDC offender information to be accurate and timely. CDC already spends countless hours manually auditing release dates in order to minimize errors. Incorrect release dates contained in OBIS can result in early or late inmate releases that jeopardize public safety and may lead to costly litigation. For example, if a person seeking a restraining order is given an incorrect release date, the restraining order may not be issued in time to prevent the released offender from contacting the fearful party.

Also, CDC is mandated by law to provide notification prior to release of certain offenders to law enforcement agencies. An OBIS mistake could result in an offender being released without the required notices, causing a risk to public safety.

Without OBIS, CDC could not operate its offender programs, adequately project population trends and housing needs, or provide necessary data to the Department of Finance and the Legislature.

IPTS AND OTHERS

A third offender management system, the Interim Parolee Tracking System (IPTS), was developed in the 1990s. Parole agents in 73 parole offices throughout the state maintain the IPTS system for parolee tracking.

. . . the current HP hardware and MPE operating system are "obsolete and unsupportable" and are "putting the critical statewide IPTS system in jeopardy."

It uses 73 HP 3000 servers in 73 parole offices to maintain such parolee information as their locations, parole agents, physical description, residence address, jobs, vehicles, conditions of parole, parole violations, and aliases.

CDC wants to drop the soon-to-be-abandoned parole office HP 3000 servers next year and replace them with a centralized database in the Teale Data Center. While some current HP 3000 servers would be kept for spare parts, the remainder would be discarded or could be sold for spare parts.

The Department of Information Technology (DOIT) has approved CDC's feasibility report, noting that the current Hewlett-Packard hardware and MPE operating system are "obsolete and unsupportable" and are "putting the critical statewide IPTS system in jeopardy."

According to DOIT, the project is expected to take 18 months to complete at a one-time cost of $1,372,275 and a continuing cost, over four fiscal years, of $3,187,065 – for a total cost of $14,120,535.

In addition to the three major systems, CDC employees, out of growing frustration, have developed more than 40 smaller personal computer-based applications within the prisons; however, they are not shared with other prison locations.

FINDINGS AND RECOMMENDATIONS

In order to improve the overall management of its prison operations and to maximize cost-savings potential within CDC, the department should take the actions described in the following chapters:

Chapter 1: Technology Master Plan

Chapter 2: Commercial Off-the-Shelf Systems

Chapter 3: Reception Centers

Chapter 4: Central Files (C-Files)

Chapter 5: Inmate Classification and Reclassification

Chapter 6: Transportation

Chapter 7: Litigation

Chapter 8: LANs – the Missing Communication Link

Technology Master Plan

Finding 1: The Need for a Technology Master Plan

CDC has failed to take advantage of the enormous advances in information technology that has occurred in the past decade. The department's past and present leadership has not established an overall plan for integrating modern technology into its system, nor has it aggressively pursued the state funds needed to upgrade its aging system.

As a result, the ability of the department to manage its operations in a cost-effective and efficient manner has been handicapped by the amount of inmate record management that must be done manually or on outdated computer systems.

The California Department of Corrections has lagged behind in efforts to modernize its administration and inmate records processing and management. As a consequence, it is still saddled with many disparate systems that store, process, and track offender information. The department's past and present leadership has not aggressively pursued the state funds needed to move the system forward. Nor has it justified that such an enormous investment of state resources will provide cost-savings benefits and more efficient operations in the long run.

A modernization effort beginning in 1995 through an outside contractor was a disappointing failure. CDC has since been denied funds to try again. As a result, the ability of the department to manage its operations in a cost-effective manner has been handicapped by the volume of inmate records management for the nation's largest incarcerated population that must be done either manually or on outdated computer systems**.**

CDC is in urgent need of technology as a critical tool to improve its operations. An up-to-date information technology system linking all prisons and streamlining record management is the most important component that is necessary to carry out the goals set forth in any overall technology master plan.

A Technology Needs Assessment Task Force

As a first step towards reaching an overall plan, the Commission recommends that CDC establish a technology needs assessment analysis task force. It is important that the department recognize the expertise and experience of its on-site personnel and afford them the opportunity of establishing a *vision* of what an ideal corrections' organization would look like – how they would want it to operate. To create this vision, CDC's director and prison wardens should select a team of people, representing all of the line functions, to develop such a plan. The people selected should be top-notch people who are well respected by their peers and bosses – people who have, or have had, hands-on experience in a prison setting. This input is critical in developing any meaningful and useful strategic operating technology plan.

The vision task force should spend a lot of time meeting with the people in line operations, talking with them and obtaining their point of view as to how an ideal corrections "business" should function. The purpose for these meetings is not only to obtain good ideas, but also to demonstrate top management's desire in having the line people participate in the process. Input from management, including the wardens, also needs to be obtained.

Once the vision team formalizes its needs assessment, the director and wardens must approve and adopt it – and then must personally champion the plan if it is to be ultimately implemented. It is important to understand where the department is going – there must be hope and assurance that there are going to be improvements in working conditions and that the team ideas will be incorporated in the overall operating plans.

Defining the Plan

Once the technology assessment analysis plan is established, then a second team must be formed that will determine the means of carrying out the plan goals. These individuals also need to be top-notch people who are respected for their knowledge of the department's workflow. This team will work closely with the people in information technology but will control the end product. In addition, they need to interface with

other organizations to ensure an integrated approach. The team needs to answer the question: What methodology and discipline is the department going to use to make sure that the end product will reduce the paperwork, ease the workload, increase the safety, and be easy to use, as well as more cost effective?

This team will determine how the system is to function, what the inputs and outputs are, what the program software and hardware should look like, and the order of development – giving a sense of order to the overall implementation plan. The group will be responsible for providing data justifying the need for each project on the basis of safety for personnel and inmates and cost-effectiveness.

Since a discipline and methodology is required for establishing definition requirements, an individual with technical experience in software development and installation should lead this team. But, this team will not develop software or determine the type or kinds of hardware to be used.

Identifying and Purchasing Appropriate COTS

Once the definition requirements are determined, the information technology group should determine what commercially-off-the-shelf (COTS) exists that can fulfill the requirements. The IT staff will also determine what software modules need to be developed so that the COTS can be integrated with existing systems:

1. Prototype screens should be used before implementation of any software.

2. Beta testing of the software with a small group in parallel with the existing work operations is necessary to work out all of the bugs before its application to the entire department.

RECOMMENDATIONS

- **CDC leadership must finalize and implement an overall technology master plan to utilize technology for improving the management and effectiveness of its operations -- a strategic plan that will demonstrate the cost and safety benefit of its implementation to the Administration and Legislature.**

- **CDC must recognize the expertise and experience of its on-site personnel and afford them the opportunity of establishing a *vision* of what an ideal corrections organization would look like – how staff would want it to operate. As a first step forward, CDC's director and prison wardens should select a team of people, representing all of the line functions, to develop such a plan.**

- **The strategic plan should identify and prioritize the modernization of technology systems required by the Administration and inmate records management for the prisons. Compatibility and integration with other justice systems and training of staff should be a key priority.**

- **CDC leadership must designate the technology master plan a top priority for its advocacy efforts and aggressively pursue the resources needed to implement its findings and recommendations.**

- **The Administration must be willing to provide the one-time capital investment needed to purchase and implement CDC's outmoded technology system.**

COTS: Off-the-Shelf Solution

Finding 2: Commercial Off-the-Shelf Systems

The Department of Corrections last year conducted an informal, unfunded market survey of commercial off-the-shelf prison management software that might be purchased from other states. The results were positive. COTS goods could be used to construct CDC's proposed new information technology system known as the Strategic Offender Management System (SOMS).

The Department of Corrections in 2001 examined the feasibility of purchasing modern, already developed prison management software from other states. It would be used to construct a new information technology system known as the Strategic Offender Management System, or SOMS. It would replace the existing CDC information systems, OBIS, DDPS and IPTS, and provide automated support for prisons, parolees, inmate health care, and administrative functions.

. . . successful prison information technology products in use elsewhere can be imported and tailored to California's specific needs at a fraction of the cost of starting from scratch.

SOMS would be a potentially less expensive, possible solution to CDC's information technology crisis, using prison management software systems now up and running in other states. The premise is that the problems of prison management are basically similar everywhere, only on a larger scale in California. And that successful prison information technology products in use elsewhere can be imported and tailored to California's specific needs at a fraction of the cost of starting from scratch.

Such products exist and are sold by a consortium of states at a relatively minimal price – on the condition that new consortium members share future software development successes of their own. The already developed information management systems are referred to as Commercial Off-the-Shelf systems, or COTS.

An informal market survey of what is available was undertaken in January 2001. Software and technology providers were invited to display the sorts of systems they offer. They were also asked for cost estimates. Eighteen potential vendors

presented demonstrations of their COTS systems to CDC's Information Systems Division.

At the time, CDC had no formal approval or budget for the SOMS project. Therefore, no conclusions or recommendations reached during the market survey have been made public. But CDC planned to recommend an acquisition strategy and begin coordinating necessary steps to win budget approval. The system would operate centrally, possibly out of the Teale Data Center. It would be installed in phases, depending upon availability of funds and priorities. It would run parallel with OBIS for a time.

Two of the most prominently mentioned possibilities are a Western consortium, initially developed by the Utah Department of Corrections which has expanded to include participation by New Mexico, Colorado, and Alaska; and an Eastern consortium, based in Massachusetts and Delaware.

Utah Beginnings

Kim Thompson, special projects manager for the Utah Department of Corrections, explained that Utah initiated the project in lieu of a major overhaul of its information management system. The result has been the development of O-TRACK, an integrated system "that deals with every aspect of offender management, from the moment they enter the system, to the moment they leave."[2] Although Utah's prison system and inmate population is much smaller than California's, it is an example of a successful project implemented in phases and developed for just $7 million.

"O-TRACK is used by 2,000 Department of Corrections employees and tracks 20,000 offenders in and out of the state's nine major correctional facilities," Thompson said. "In prison, the system tracks such varied activities as cell assignments, disciplinary action, transportation needs, visitation, hard-copy files, safety investigations, sex offenses, and even the amount of money an inmate has for candy and cigarettes."

"Outside of prison, parole and probation officers use the very same system to keep tabs on home visits, violations, address

[2] Kim Thompson, Special Projects Manager, DOC Bureau of Information Technology, Informix Magazine, Spring 2000.

changes, police agency contacts, and court dates," she said. "And, in the field, caseworkers access the system from local police stations or even from connected laptops in their cars for instant information and updates."[3]

Reports that used to take an hour now take minutes. Their statistics show that pre-sentence investigators' work has been cut by 30% and productivity has increased by 40%. "O-TRACK has replaced manual files – hundreds of pages long . . ."[4]

New Mexico COTS

New Mexico's version of O-TRACK is the Criminal Management Information System (CMIS). It was first developed by the state of Utah and customized to meet the needs of New Mexico's corrections' system. This is a good example of what California can do – purchase currently available software and tailor it. New Mexico's CMIS allows corrections officers in any of that state's eight prisons, as well as probation and parole officers, to access a comprehensive inmate profile that includes information such as criminal records, psychological and personal profile, distinguishing marks, work assignments, gang affiliations, and restrictions. This system is also capable of tracking potential problem areas such as sex-offender or informant status, martial-arts expertise, gang affiliation, or escape risk. This instantly available critical inmate information is a far superior answer to the current paper files that follow the inmates from one destination to the next.

Moreover, many systems can be further specialized by using modules. For instance, many of the systems will track gang affiliations – but because of prevalent gang problems, New Mexico's Department of Corrections has taken a step further and developed a sophisticated module for its CMIS system, called the Strategic Threat Group. This software helps the department identify and validate gang members through a collection of "points" based on tattoos, behavior, associations, and correspondence. Not only does this help corrections' officials keep peace, it protects the department from inmate grievances and lawsuits when they are placed in more restrictive

[3] Kim Thompson, Special Projects Manager, DOC Bureau of Information Technology, Informix Magazine, Spring 2000.
[4] Ibid.

housing.[5] "CMIS already has gang information to a limited extent," says a spokesperson for the New Mexico Corrections Department CIO, "but this system will track every aspect of gang activity – from membership to leadership to activity."[6]

Various modules can also be designed within the main systems – such as modules to track inmate release dates and scheduling transportation.

Four-Year Project

The proposed out-of-state software employs the more standard Unix operating system, rather than the soon-to-be-obsolete MPE operating systems used in the CDC's current HP 3000 servers. It is estimated that it would take about four years for CDC to completely convert to a COTS solution. In fact, newly purchased HP servers will themselves be obsolete in 2006 – making it technically mandatory that the conversion to COTS be completed by then.

Utah owns the O-TRACK system and has been able to recoup much of its development costs by offering its program at a reduced price to other states. It has already licensed it to Alaska, Alabama, Idaho and New Mexico, saving them millions of dollars in development costs. Unofficial cost estimates for California to buy into one of the consortiums range up to $6 million. There also would be additional new equipment costs, including the $8 million needed to buy the routers, hubs, and switches required to complete the Local Area Networks (LANs) installed in prisons as part of the failed CMIS project.

Representatives of the multi-state consortium say they would welcome California into their software sharing arrangement. They envision California in the future offering valuable expertise in expanding shared software content, such as the development by California of universal medical care and pharmacy software.

[5] Eric Barkman, "Razorwired," Government and IT Policy Research Center, July 16, 2001.
[6] Ibid.

Proposed Pilot Project in a California Women's Prison

One of the stumbling blocks to introducing modern information technology into the CDC has been the size of the endeavor and the cost. A pilot project using the 8,000 female inmate population and 20,000 female parolees would be manageable, less costly, and provide valuable information and experience. This project would gather information beginning at the reception center and track female inmates throughout the prisons and parole system. Although female inmates have specific and different needs and do not move around as much, most of the record-keeping requirements are similar to the male population.

This pilot would provide CDC with the rare opportunity of identifying streamlining procedures and tailoring technology software capabilities to accomplish these goals. Any bugs in the system can be worked out well before it moves to integrate a program system-wide. The results of this project would also provide the comprehensive analysis of cost benefits to justify the investment of further state resources to the project.

RECOMMENDATIONS

- **A cost-effective Strategic Offender Management System, using commercial off-the-shelf software developed by other states should be considered to replace current outdated systems. SOMS could offer a faster and less expensive solution to CDC's information technology crisis by using prison management software systems now up and running in other states.**

- **By joining a multi-state consortium, such as the one pioneered by Utah – and taking part in their software sharing arrangement – California could save millions of dollars in software development costs.**

- **A well-designed implementation plan will involve changes in operating procedures. CDC must hire a dedicated, knowledgeable staff, which would be committed to the implementation and training necessary to fully utilize the systems. CDC should also explore hiring its own technology service and maintenance staff**

- **As a possible first step toward fully automating inmate management, the Legislature should consider directing CDC to establish a comprehensive pilot project and implementation program within the female inmate system. The pilot would include automation of new inmates' Central Files, medical and pharmacy records, transportation, trust accounts, work credits, and other records.**

Reception Center Intake Process

Finding 3: Reception Centers

The CDC system includes 12 reception centers to process newly committed prisoners. These centers must process thousands of inmates monthly without the benefit of modern information technology to alert staff to critical inmate classification information and to assist staff with volumes of cumbersome paperwork.

CDC staff must have key background information on an inmate before he or she arrives so that they can prepare appropriately. Thousands of men and women adult felons, and non-felon narcotic addicts, arrive from California's county jails each month to begin serving sentences in the state's prison system. Their incarceration begins at one of CDC's 12 reception centers.

During the past decade, CDC has operated the prison system at occupancy rates greatly exceeding original design standards. Overcrowding aside, according to the department's mandate, it must still "provide health care, housing, meals, opportunities for work, academic education, vocational training, substance abuse treatment, and other necessary treatment for California's inmate population to afford better overall inmate management and provide inmates the opportunity to successfully return to society." This is a tall order under any circumstance. But without technology information systems, keeping track of over 156,000 inmates – beginning with the all-important classification at the reception centers – seems an almost impossible undertaking.

Intake Procedures

New felons received from the counties arrive via the CDC Transportation Unit. As each new inmate enters a regional center, his or her *classification* is determined – leading to eventual placement that ensures safety of all inmates and in the appropriate level of security. A paper Central File (C-File) is compiled for each inmate including a number assigned, personal and criminal history, medical and mental health evaluation, and other factors. This paper C-File is at the core of management in

prisons. It moves with the inmate throughout incarceration, and when the inmate is released, it is archived in Sacramento.

Many procedures used at the reception centers can be streamlined by using prisoner management information technology to efficiently handle and manage data about the offender. The information records can be entered more efficiently and more accurately – ultimately reducing manpower requirements significantly. One prison that has six computers and an internally developed software program reportedly eliminated the need for three data entry typists.

Live-Scan Fingerprinting and Digital Imaging

CDC must also move towards implementing the newer prisoner identification technology in all the reception centers. Accurate, detailed physical prisoner identification is a vital prison management tool – and also a key local law enforcement and public safety tool. Instead of old-fashioned ink fingerprinting and Polaroid head shots, CDC must move to high-tech live-scan fingerprinting and digital imaging processes. Live-scan fingerprinting accurately and rapidly takes the required information and links it with the national system.

While these ID systems have been installed in several centers, few facilities have digital imaging equipment and processing. Digital imaging would allow for the traditional, but enhanced facial pictures of the inmate and also distinguishing features such as tattoos and other unique physical characteristics. The currently used Polaroid photos of the face, and written descriptions of tattoos that are at times very intricate, are recorded by hand and kept in the C-File.

However, live-scan fingerprinting and digital imaging of felons is less costly and time consuming for staff and much more accurate and accessible to all those who need the information.

Expediting the Intake Process

The correct classification that is given a prisoner at the reception center is one of the most important inmate and staff security and safety considerations handled in the intake process. This classification leads to the proper placement of the individual while serving time. Because of overcrowding and complex

factors, including a prisoner's gang affiliations, crime background, and health, accurate processing methods using established guidelines and procedures is critical. Up until this point inmates have no classification score and hence, no assigned security level. Staff depends on this initial prisoner identification until the paper C-Files are created.

Processing inmates as quickly as possible best ensures safety and reduces costs. Yet the Commission found that inmates are often held in the reception centers for 45 to 60 days or longer while they are being processed. Moreover, in the case of a returnee, the paper C-File must be requisitioned from archives in Sacramento and physically transported to the reception center. This alone can take 30 days, or more. During this time the reception center staff is operating without the pertinent information on the inmate – health, gang affiliations, mental health, and other important facts of personal history – that is necessary for them to determine appropriate placement. Or, the classification staff must rely on the prisoner for important information to be volunteered.

A Criminal Management Information System

There are a number of COTS systems currently available to manage inmate information. Utah and New Mexico both have systems that could be effectively and efficiently used to keep track of California's inmate population – and alert staff to critical information before the inmate arrives at the reception center. An ideal system would allow California corrections officers in any of the state's 33 prisons, as well as probation and parole officers, to access a comprehensive inmate profile that includes information such as criminal records, psychological and personal profile, distinguishing marks, work assignments, and restrictions. An IT system containing critical inmate information is a far superior answer to the current paper files that follow the inmates from one destination to the next.

RECOMMENDATIONS

- **Cost-effective prisoner record management and data entry software is readily available. Its purchase and implementation should be made an integral part of the department's technology needs assessment plan – one**

that focuses on alleviating cumbersome paperwork and eliminating outmoded inmate paper files.

- **CDC should acquire a COTS system, such as the one implemented in the Utah and New Mexico prisons, that is capable of tracking such varied activities as: cell assignments, disciplinary action, transportation needs, visitation, safety investigations, sex offenses, and other personal information that can be implemented in California's correctional facilities.**

- **The department should expand the use of live-scan fingerprinting and digital imaging equipment into each reception center. This would save time in processing inmates, reducing paperwork, and increasing the quality of identifying features in the database such as fingerprints, photographs, and tattoos. It would also provide the parole agent with a current image of the inmate released to his caseload.**

Central Files (C-Files)

Finding 4: Central Files (C-Files)

The vast majority of information on inmates is still kept in cumbersome paper-based files, called Central Files or C-Files. They are transferred with inmates from institution to institution throughout their confinement. Many C-Files reach a thickness of 12 inches or more.

Additionally, when a parolee is returned to custody, the C-File must be requisitioned by the reception center from the CDC archives in Sacramento. This can take up to 30 to 60 days, a period that is unacceptable. This adds to costs as well as jeopardizes the safety of inmates and staff.

Personal inmate records are kept chiefly on paper, in cumbersome Central Files that travel with offenders from prison to prison. They are commonly called C-Files. The C-Files are fundamental to all data collected and stored about each California inmate. The C-Files are crucial to the work performed by case records workers, counselors, correctional officers, medical staff, the warden, and other staff members. Quick access to C-File information is often critical.

Two or more staff members frequently need the information in a C-File concurrently. With single paper files, simultaneous access is impossible. Additionally, when an offender is transferred the C-File passes through as many as four departments between the sending and receiving records offices. Locating a file during the transfer process can be difficult, resulting in delays in processing critical functions.

Another problem is manually generated errors. Staff members frequently audit each prisoner's C-File, but many errors still go unnoticed. Case records workers rely heavily on the C-File for proper calculation of release dates, credit losses, and restorations. Errors resulting from incorrect or unavailable data can lead to early release dates or prolonged and illegal imprisonment.

C-Files contain the facts upon which offender classification levels are determined. Scores are calculated to determine housing levels, privileges, and work incentive eligibility. Importantly, counselors also must identify potential inmate personal conflicts before placement. Errors or delays can lead to unsafe housing arrangements.

An inmate's behavioral history and criminal background, also recorded in C-Files, are reviewed before they are given work, education, and housing assignments. A wrong decision, resulting from lack of access to a C-File during processing, can lead to an escape risk.

" . . . Simple statistical reports can take hundreds of hours and cost thousands of dollars for a single institution."

In its 1994 budget request seeking to justify development of an integrated, computerized single system, the CDC wrote, "A majority of offender data is not stored in automated form. Information requests that need manual data require significant case records staff involvement. Each C-File must be pulled from the file room, received, logged, and returned. Simple statistical reports can take hundreds of hours and cost thousands of dollars for a single institution."

Although CDC has extensive needs for quick and accurate inmate information, automated reports on the majority of offenders do not exist. This limited reporting capability could be overcome with one integrated system. CDC staff must continue to rely on the unwieldy and vulnerable C-Files because of the state's failure to provide a computerized alternative.

RECOMMENDATION

- **Eliminate unreliable paper-based C-Files by purchasing and implementing a COTS system capable of tracking an inmate in prison, on probation or parole – from initial conviction through final release – and all other information pertinent to managing the corrections' population – from psychological and medical profiles to transportation needs.**

Inmate Classification and Reclassification

Finding 5: Inmate Classification and Reclassification

The prisoner classification and reclassification scoring is an important, but complex, system that includes numerous factors, and one that needs constant monitoring and updating. These calculations and resulting decisions are critical to the inmate's prison life and to the safety and security of the prison environment. Yet, all are made without the benefit of modern technology systems.

An inmate's complicated classification and reclassification scoring begins with the regional center intake process and follows him or her throughout custody and parole. Important decisions are made for the prisoner based upon the initial classification score, calculated by assigning points to a complicated numerical system. Newly committed inmates are evaluated and initially classified by many factors such as length of sentence, age, marital status, behavior, medical and mental health needs, employment history, gang affiliation, and other placement concerns. These are recorded on an initial classification score form. Each factor has a numeric weight. A classification specialist uses the classification score to determine housing placement along with any special considerations.

Reclassification

An inmate's classification is reevaluated throughout incarceration, and a reclassification form is completed at least annually. An inmate's score changes, over time, in response to his or her conduct. If there are no special considerations, the inmate is placed in an institution with a security level matching their classification score. Other factors influence or change each inmate's classification. An Administrative Placement or "override" may be necessary when a special need related to security, health, or program cannot be met within the security level indicated by the classification score. In this instance an inmate might be approved for transfer to a higher or lower security level. This process is most often used to ensure public safety by retaining inmates in higher security levels when they have committed violent crimes or escaped in the past.

A Complicated Scoring Process

The following examples illustrate the instances where special factors, or points, are used to make security level designation decisions:

- An inmate requiring sophisticated medical or mental health treatment must be placed in a facility where the required treatment is available.

- An inmate with a history of escape would be placed only in a prison with the necessary escape prevention design features.

- An inmate who has displayed cooperative behavior may be placed in a lower security level than indicated by his or her classification score to take advantage of a vocational program and/or a substance abuse program.

- An inmate convicted of a violent crime would not be placed in a minimum custody facility where he could simply walk away. He would always be placed in a facility that has a sufficiently secure perimeter.

Most of the variables on the reclassification score form are different from those on the Initial Classification Score Form. The recalculation may result in an increase or decrease in score in response to an inmate's positive or negative behavior. If the score changes significantly, transfer to a different security level may be required. And, this could trigger a transport to another level facility.

The Reclassification Score Form is also used when an active parolee returns to prison. This form is applied because an inmate's behavioral history during a prior incarceration is known. Inmates who have behaved well in prison tend to continue to behave well; those who misbehaved tend to misbehave again. It is important to the safety of inmates and staff to have this information readily accessible.

RECOMMENDATION

- **Purchase a COTS system that can be customized to track CDC's complicated and varied inmate "point" system – from tracking sentencing laws, inmate release dates, and employment records – to tracking housing needs, gang affiliations, and disciplinary action.**

Transportation

Finding 6: Transportation

During the past year, some 250,000 inmates needed various transportation needs – transfers between the 33 prisons, court and medical appointments – and all were largely undertaken without the benefit of modern transportation scheduling software. Some patchwork solutions were fashioned by staff using Excel and Access databases, but headquarters personnel largely must resort to old-fashioned paper and pencil and cut-and-paste charts.

Lack of an integrated transportation scheduling software system results in general cost inefficiency – including excess overtime hours for staff and inefficient deployment of buses – and poses a general risk to the inmate's safety and the public's safety.

The CDC Transportation Services Unit (TSU) is headquartered in Sacramento, where scheduling of inmate transportation for the entire state takes place once a week. There are three transportation hubs in the state coordinating the transportation of approximately 2,500-3,000 convicted offenders each week on the department's 33 buses. In addition, there are other transfers for court, medical and other purposes, bringing the total to approximately 250,000 inmates who need and use one form of department transportation annually. It is all done by without the benefit of system-wide computer processing – but with staff that accumulate numerous costly overtime hours while trying to handle a scheduling system that is highly complex and in a constant state of flux.

The rule is the transportation schedule must be completed that day, even if it means burning the midnight candles. Overtime work in the unit is a perpetual problem.

Each Tuesday morning all of the prisons call or fax to headquarters the beds they believe will be available at the various security levels. The 12 reception centers also call in information about inmates that need to be transported to prisons.

Proper placements are critical because of security, health, and to avoid litigation. Inappropriate placements could be a danger to staff, prisoners, and a liability to the state. The various security levels, medical and mental health needs, gang relationships, and

many other variables that enter into the classification process generate some of the need for inmate transport.

Information phoned or faxed from facilities is processed one day a week by a few TSU staff to develop the weekly transfer chart. Scheduling is done manually, either by pencil and paper or through physical input into an Excel spreadsheet program recently developed by a staff member. Currently there are six CDC staffers trained to carry out transportation scheduling. The process is highly complex and in a constant state of flux.

The rule is the transportation schedule must be completed that day, even if it means burning the midnight candles. Overtime work in the unit is a perpetual problem.

A major feature of the failed CMIS project was to have been automated transportation scheduling, even to the point of awarding seat assignments on buses. An automated transportation system in the Department of Corrections would unquestionably be more efficient and more effective and result in major cost reductions.

RECOMMENDATION

- **Cost-effective transportation scheduling software is readily available. It should be made an integral part of the department's technology needs assessment plan and should be reviewed with the goal of fully automating inmate transportation scheduling.**

Litigation

Finding 7: Litigation

By not fulfilling its mandate properly, CDC has left California exposed to liability – offender management programs and medical delivery programs are increasingly being dictated by the courts, resulting in huge legal costs, loss of efficiency, and a general feeling that the department is not in control of its operations.

CDC's Correctional Law Section currently reports there are over 2,400 inmate civil cases pending against the department. There are 92 over-detention cases pending, 24 are in the department, and the others have been sent directly to the Attorney General, the attorney for CDC.

As a result of litigation, CDC is required to provide adequate medical care to all inmates who need health services. These medical and pharmacy services must be equivalent to those provided for in the community at large. Class action lawsuits have been the significant factor in improving the quality of health care and other services available to inmates. Those suits include *Plata v. CDC,* which led better health care for inmates, and *Coleman v. Wilson* pointed to the deficiencies in the prison mental health system. *Madrid v. Terhune* related to poor medical records, scheduling, tracking, and follow-up – leading the court to point to a lack of an automated system for medical records, including pharmacy, that created a barrier to health care.[7]

Moreover, CDC has spent millions complying with court orders, and it has spent enormous sums of taxpayers' dollars in lawyers' fees and for special masters that are monitoring CDC's progress to implement the courts' mandates.

[7] Senate Advisory Commission on Cost Control in State Government, *Controlling the Costs of California's Prison Pharmacy Operations*, June 2002.

Potential Problems

Unreliable methods of record keeping could have a detrimental effect on prisoners for those waiting release or could result in public safety concerns and litigation. Medical, mental health, and pharmaceutical mismanagement, although the subject of litigation, still leaves the department vulnerable to further lawsuits. Courts have mandated action in developing a medical records system in Pelican Bay, but this must be implemented system-wide. However, just automating medical records will not solve the problem – medical staff will still be unable to track the inmate as he or she moves throughout the system.

And, loss of technical support for obsolete prison and parole database servers could have serious consequences, including forced lockdowns. Locked-down prisons would be out of compliance with state law. Grievances and lawsuits, as well as inmate management problems, would almost certainly result.

Public safety requires CDC offender information to be accurate and timely. However, it can take up to 30-60 days for a returnee's C-File to catch up. And incorrect release dates contained in OBIS can result in early or late inmate releases. Each situation jeopardizes the safety of inmates and staff and may lead to costly litigation.

Also, CDC is mandated by law to provide notification prior to release of certain offenders to law enforcement agencies. An OBIS mistake could result in an offender being released without the required notices, causing a risk to public safety.

Current technology cannot keep up with major sentencing law changes, such as sentences for second or third strike offenders. Case records workers are obliged to attempt to overcome OBIS inadequacies by performing tedious manual calculations instead. Pen-and-paper computations can and do lead to mistakes.

If all pertinent data regarding each prisoner was entered into an information technology network and accessible to authorized personnel, it would improve the monitoring of offenders and prison facilities. Lawsuits are filed to protect prisoners' rights. An automated prison management system would allow CDC staff to *identify* and *anticipate* potential problem areas and do

something about them – before expensive lawsuits are filed. CDC needs to get back into the driver's seat.

RECOMMENDATIONS

- **CDC, already under a judicial mandate to develop a medical records database for the inmates at Pelican Bay State Prison, must complete statewide conversion that will significantly improve inmate care and forestall further costly litigation.**

- **CDC should investigate and implement a comprehensive, modern criminal justice information system that would serve not only prisons, but also state and local law enforcement, the courts, jails, and the prison parole program.**

LANs – The Missing Communication Link

Finding 8: LANs – the Missing Communication Link

The Department of Corrections still has not achieved the Local Area Network/Wide Area Network (LAN/WAN) connectivity that would support modernization to the fullest extent. Prison staff consistently spoke of the need for e-mail capabilities within the prison, with the other institutions, and with Sacramento as timesaving and effective means of asking and answering questions and communicating important information. This disconnect limits the ability of institution staff to communicate effectively.

This past year's request for funds died in the budget conference committee without support from the Department of Finance.

One supposed benefit of the failed CMIS project in the mid-1990s was that $26 million worth of fiber optic cables were installed in the prisons to accommodate future communication networks, called Local Area Networks, or LANs. Unfortunately, those LANs have never been connected at 27 of the 33 institutions. When the original CMIS project was canceled, the LANs were put on hold, and the fiber optic cable remains unused – and in some areas weakened.

Noting the lack of LAN/WAN capabilities within and between prisons, CDC's 1994 CMIS project proposal observed: "This disconnect limits the ability of institution staff to communicate effectively. Information is the lifeblood of an organization, and CDC is unable to provide its staff and management with the IT capabilities necessary to locate and share critical information needed to formulate solutions and make competent and strategic decisions."

Time to Consider a Wireless System?

Although wireless networking technology has great potential in many CDC applications, CDC says that for security reasons, inmate data may be transmitted only under the confidentiality protection that fiber optic cable offers. Steel plates built into prison walls generally preclude modern wireless transmissions, even if encrypted and otherwise made secure. There are compelling reasons to consider wireless technology as an alternative to standard wired networks in those areas where

there is no network presence at this time. However, according to a CDC spokesperson, "The ongoing costs of managing the wireless components of the CDC network outweigh the lower costs of implementation of such a solution. This is because of the extreme and likely risk of unauthorized access to our existing information systems, the lack of centralized identification and authentication tools, and the probability that systems purchased and installed now will not support the as yet still emerging standards."

$8 million Still Needed to Connect the Prisons

The Department of Finance and legislative budget committees have denied CDC budget requests for the additional $8 million needed to purchase the hubs and routers needed to make the LAN connections. This past year's request for funds died in the budget conference committee without support from the Department of Finance.

Without LANs, interoffice communication at the institutions is slow and cumbersome because most of it is via paper. This is costly in both time and resources. LANs could appreciably improve the situation – connecting personal computers, adding e-mail, and the sharing of documents.

Where commonplace computer technology is utilized today in the prisons, it is often because innovative staff members have developed individual programs. However, the operation of those successful smaller programs usually stops at that prison's walls. Six institutions have purchased the necessary additional equipment to put LANs into service with funds from their own budgets. Typically, they enable linkage of 20 to 50 computers and printers. There is also little or no networking between institutions – only simple e-mail messages can be sent from one warden's office to another, where connecting telephones and computers are located.

The department does have a Wide Area Network, or WAN, linking its institutions, parole offices, and CDC headquarters locations via a high-speed digital framework. It is used for nightly transmissions between institutions. But the proposed LANs would enable greater access to data and speed up the flow of information.

However, eight years later the same problems remain – but nothing has changed.

RECOMMENDATION

- **The hardware necessary to complete the Local Area Networks (LANs) should be installed without delay and before further deterioration takes place**. **This would allow for the first time in CDC history all prisons, parole, health care, headquarters, business, and operation functions to be interconnected.**

Conclusion

The California Department of Corrections is a $4.8 billion annual operation with headquarters located little more than a two-hour drive from Silicon Valley, the center of the information technology universe – yet it must make do with a disgracefully outmoded and inadequate computer system. It is not a problem that has been overlooked. A better word would probably be neglected.

A modern management information system must be a critical goal for CDC in terms of improving efficiency, reducing costs, and supporting the department's mission of public safety.

There was an effort by a forward-looking state Administration and CDC managers in the mid-1990s to build a new state-of-the-art system. But the $40 million project was a politically embarrassing failure. No Administration since has been willing to take it on. The problem has only gotten worse. There has been lack of leadership and an unwillingness to commit money.

California is where the computer chip was invented. Yet California's largest state agency must rely on database servers so old their own manufacturer refuses to make spare parts any longer. Prisoners and prisons have multiplied. Aging equipment has deteriorated. The ability of the department to manage its operations in a cost-effective manner has been seriously impacted.

. . . the CDC priority today no longer is merely to improve efficiency, as it was a decade ago, but instead to ward off catastrophic breakdowns.

Out of necessity, CDC priority today no longer is merely to improve efficiency, as it was a decade ago, but instead to ward off catastrophic breakdowns. A failure of CDC's threatened database servers could leave prison staffs scrambling to count heads manually in order to avert escapes or dangerous prison lockdowns.

Who's to blame? CDC's information technology needs have suffered from apathetic leadership at the top in recent years. Yet, below the radar, department managers directly responsible for the IT systems time and again have requested funds to replace aging equipment, to complete an unfinished

infrastructure, and to take advantage of inexpensive prison management software developed by other states.

But the requests largely have been ignored. "Budgetary constraints" have been invoked year after year by the state Administration as the reason for failing to provide funds needed to develop an up-to-date CDC information technology system. Indeed, this year the state is confronted with its most severe budget shortfall in a decade.

Nonetheless, the current Hewlett-Packard equipment crisis clearly cannot be ignored. The threat of having to cope with obsolete, yet essential, database servers is only the latest manifestation of several years of neglect of an outdated prison information technology system.

As a matter of cost effectiveness, the Administration must be willing to spend money to save money.

The Administration must produce a master plan for building an information technology system capable of meeting today's needs. The state's unprecedented commitment to building new prisons in record time should now be focused with the same zeal towards modernizing CDC's outmoded technology system.

The Governor and Legislature must either find the funds to rectify today's volatile situation, both short term and long term, or assume responsibility for any number of unknown and potentially dangerous consequences. As a matter of cost effectiveness, the Administration must be willing to spend money to save money.