Case Study Series

A REPORT OF THE NATIONAL TASK FORCE ON COURT AUTOMATION AND INTEGRATION

Delaware Criminal Justice Information System
The Evolution of Integration

By Amir Holmes, SEARCH

Delaware was the first State to implement an integrated criminal justice information system (CJIS) that supported electronic sharing of criminal justice information among the criminal justice community. While Delaware CJIS has been in existence since 1990, it is constantly changing to meet the needs of system participants — State and local police, the Attorney General's Office, the Public Defender's Office, the Courts (Justice of the Peace Courts, Courts of Common Pleas, Family Courts and Superior Courts), and the Department of Correction.[1]

In 1982, the Delaware State Legislature passed Title 11, Chapter 86, §8603, thereby creating the Delaware Justice Information System (DELJIS) Board of Managers (hereafter referred to as The Board), which was tasked with establishing "policy for the development, implementation and operation of comprehensive data systems in support of the agencies and courts of the criminal justice system of the State." The Board has met on a monthly basis since its inception and has overseen the development of Delaware's integrated Criminal Justice Information System (CJIS). In addition, a State agency, known as DELJIS, was formed to oversee the day-to-day operations of the CJIS.

According to Larry Webster, Director of the State Administrative Office of the Courts, Delaware's small geographical size and limited number of local agencies facilitated the integration of justice information systems because "every added agency adds exponentially [to the challenges of integrating justice information systems]." Delaware has only three counties — Kent, Sussex and New Castle. The State has no county prosecutors; the State Attorney General's Office handles all local prosecutions. Similarly, there are no local jails in the State; all detention facilities are part of the State Department of Correction. Finally, there are no county courts in Delaware; all courts are part of the State system. With these factors in its favor, the Delaware criminal justice community was poised to electronically share information by the end of the 1980s.

Laying the Foundation[2]

In 1984, an informal group of top decisionmakers directed a team of criminal justice agency representatives to define the information needs of the criminal justice community and to prepare an Information Systems Plan (ISP) for meeting those needs. The *Information Systems Plan of the Criminal Justice System of the State of Delaware* was released for dissemination on May 15, 1984. The ISP concluded that "there is a tremendous need for data sharing within the criminal justice process."[3] The ISP provided the impetus for subsequent efforts to integrate the criminal justice community in Delaware, but it would still take some time before implementation of an integrated CJIS was realized.

At the beginning of 1989, five separate databases were operating at the State level without the ability to link to one another:

1) Law enforcement operated the Computerized Criminal History (CCH) database;

2) Uniform Crime Reporting (UCR)

information was being collected on a separate database;

3) The Department of Correction (DOC) operated a system to handle inmate tracking;

4) The courts operated the Disposition Reporting System, which was used primarily by Justice of the Peace (JP) courts (this case-tracking system collected data and provided a name index of defendants who had been before the JP courts); and

5) The Judicial Information Center (JIC) operated a system to serve the Courts of Common Pleas (CCP), Superior Courts, Wilmington Municipal Court,[4] and Family Courts.[5]

The first episode of information sharing occurred in 1989 when the DOC system was integrated with law enforcement's CCH; this enabled the incorporation of criminal identification data into the DOC database. With this integration, the DOC began to use the charges and identification portions of CCH, but CCH was not enhanced as a

result of this one-sided linkage.

The courts' Disposition Reporting System merged with CCH in 1990. The linkage, which occurred in the Spring that year, resulted in the formal creation of CJIS. This merger gave CJIS participants access to more charge, disposition, arrest and identification data. The State Attorney General's Office (AG) and Public Defender's Office (PD), meanwhile, were not entering information into CJIS, but were able to access data through CJIS as needed.

From this point, DELJIS oversaw the development of additional system components. In 1991, the Automated Warrant System was implemented, which allowed law enforcement officers to enter complaint data and create warrants on-line. Officers could now immediately check for the existence of warrants through CJIS. At first, it was difficult to get the law enforcement community to use the system properly, and officers needed additional training.[6] The turning point came when Troop Two of the Delaware State Police was sold on the benefits of the system. Once they endorsed the system, others followed, and eventually the law enforcement community was completely supportive of the Automated Warrant System.

At the same time, the AG component was being developed. This component was added in 1992, enabling the sharing of indictment information with CJIS users. In 1990 – 1991, the Dual Data Entry Elimination Project was implemented; it ensured greater data quality by facilitating batch data transfers between CJIS and the JIC system. In 1991 – 1992, DELJIS built a comprehensive case management system for the JP courts. This system took care of all magistrate case processing — even accounting functions.

On October 23, 1993, JIC upgraded its infrastructure and began to provide more extensive batch data transfers to CJIS. Key interfaces, however, were not

working properly at the outset. By January 1995, the programming issues were resolved, but case number mismatches were still occurring on cases that were in existence before that time. Cases entered into the system after January 1995, however, were properly linked in the JIC and CJIS databases.

On April 22, 1996, the JIC provided the CCP and Superior Courts with an improved Case Management System (CMS). One of the immediate benefits of CMS implementation was the ability to electronically recall warrants through use of the CJIS database. In October 1997, the JIC database moved onto the same mainframe (IBM ES 9000) as the CJIS database. By April 1999, court users were finally able to access information from the CJIS database without logging out of the JIC database, creating a virtually seamless interface between the two databases.

Since 1982, $8 million in State and Federal grants has been spent on CJIS enhancements. The Federal grants, which came from the U.S. Department of Justice, were awarded under these programs: the National Criminal History Improvement Program (NCHIP), the Edward Byrne Memorial State and Local Law Enforcement Assistance Program, and COPSMORE.

System Strengths

Sharing of Criminal History, Warrant and Case Information

CJIS facilitates the electronic sharing of information among all participant agencies. Specifically, case information, from initial contact to case-closing events, is available to CJIS participants. For example, warrant and incarceration information is available to CJIS participants instantly; court dispositions are electronically transmitted to the State Bureau of Identification (SBI); and Protection From Abuse Orders, created on-line in Family Court, are available to all CJIS participants in real-time.

Such extensive information sharing

has significantly enhanced system capabilities. CJIS has supported information exchanges that have proven invaluable to Delaware's criminal justice

One of the main reasons for the JP court system's functional success is that DELJIS staff spent considerable time with system users assessing their needs.

electronically populates the Wanted Person File and the Department of Motor Vehicles (DMV) is automatically notified of the warrant and queued to suspend the defendant's license.

Defendants may pay their fines via mail, telephone or in person at any JP court. They may also go to any JP court for their arraignments because information is shared among all JP courts. Once payments are made, warrants are recalled. This automated process is extremely important because it ensures that warrants are current, which helps avoid a situation in which a defendant is falsely arrested on a warrant that should have been recalled.

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community. Users are able to determine the status of a case instantly, which greatly enhances the ability to process criminal cases efficiently. Law enforcement's instant access to criminal history, warrant and protection order information has been a critical component of system success. Public safety has been greatly enhanced by the efficient exchange of such background information.

JP Courts' System

One particularly strong aspect of CJIS involves the case management system used by the Justice of the Peace courts, which handle traffic and ordinance violations, some misdemeanors, warrant processing and intake. In most cases, JP courts are the first courts of contact in the State; more serious misdemeanors and felony cases originate in the JP courts, and are later moved to CCP and Superior Courts for adjudication.

When asked about the JP courts' automated case management system, Larry Sipple, Management Analyst for the JP courts, said, "It's one of the best systems in the country; head and shoulders above most others." At this time, the JP courts' system works so well that its staff would not change anything functionally; it takes care of all their case management needs. They would, however, like to improve the "look-and-feel" of the system by implementing a Graphical User Interface (GUI) front-end.

In addition, users were trained in their environment, so that they could learn how to use the system efficiently. A major component of the JP court system is the Automated Voluntary Assessment Center, which processes traffic tickets and fine payments. When police agencies issue a traffic ticket, data are loaded electronically into the JP courts' system. If a defendant fails to make payments within 21 days of the offense, the court sends the defendant a notice informing him that his license will be suspended and a warrant will be issued for his arrest. In addition, if a defendant falls behind on paying fines, an arrest warrant is issued. The system then

Extensive Use of Videophones

Since JP courts handle first appearances, they use videophones to conduct video arraignments. The use of videophones saves the State a great deal of money because it avoids the need to transport in-custody defendants to and from court. It costs an average of $83 to move a prisoner between correctional facilities and courts in Delaware; by using the videophones for video arraignments, the State estimates that it

An example of a videophone used in Delaware. By using the videophones for video arraignments, the State estimates that it saves at least $1 million a year.

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saves at least $1 million a year.

The State uses 27 large videophone units and 55 PC-based videophone units.[7] They are available in almost all police barracks, in all AG and PD offices, and in all criminal courts. In addition, they are available in all prisons and several social service centers (for court-ordered visitation purposes).

One of the main reasons for the JP court system's functional success is that DELJIS staff spent considerable time with system users assessing their needs. In addition, users were trained in their environment, so that they could learn how to use the system efficiently.

The State purchased these video-phones using $1.5 million in grant funding received from the federal Edward Byrne Memorial State and Local Law Enforcement Assistance Program. In addition, the State adds $1 to every defendant's fine, which generates $14,000 per month in income and pays for the phone lines and maintenance costs. In Delaware, videophones are used for many purposes. In addition to being used for video arraignments and bail hearings, they are also used for warrant approval so police officers do not have to travel to the courthouse; the PD and AG Offices use them for teleconferencing; and courts have used them extensively for administrative purposes, as well as for trials so witnesses could testify from as far away as Australia and Israel.

System Weaknesses

Need to Improve Data Quality

While CJIS has been operating well for most of the 1990s, there is room for improvement. There are instances in which data quality is compromised. For example, when the JP court issues a warrant with charges attached, the AG may modify the charges and seek a grand jury indictment on the new charges. When the defendant is indicted, an arrest warrant may be issued to bring the defendant to court (known as a Rule Nine Warrant). When the defendant is returned to JP court, however, the court is unable to use its case management system to determine the specific charges filed by the AG's Office because its system does not link to those charges, which are on file in CJIS.

In addition, the AG's Office creates separate case files when cases move from JP courts to CCP, so there are often duplicate charges related to the same case (charges that originate out of the JP court and charges associated with the AG case files). In 1998, 17,000 – 18,000 records had to be corrected due to duplicate data entry.[8]

In the Superior Courts, the current process of producing sentencing orders is very time-consuming. In addition, due to the lack of standardization, different courts often produce sentencing orders in different ways. In some courts, clerks type information onto their sentencing orders but fail to enter data into the system; this, of course, leads to data inaccuracies. The same problem arises in the context of violation of probation orders.

Court clerks complain that incarceration, bail and charging information is unreliable due to data entry problems. The AG's Office sends charges over that do not include subsections; this leaves court clerks to guess at the proper subsection to enter, and results in unreliable data maintained in the system. To add to the confusion, charges entered into the JIC database do not always transfer into the CJIS database and vice versa (the problem arises in up to 10 percent of cases). Also, when the AG's Office generates *Nolle Prosequi* [9] documents, this action incorrectly overrides Superior Court dispositions in CJIS. System users are unsure if this is a result of improper data entry or system shortcomings.

The CMS used by Superior Courts, meanwhile, has caused a problem with capias/warrant information — the system does not flag such information electronically. Thus, in some instances, court staff must look up warrants manually. Information maintained in CMS and CJIS is not always consistent and clerks cannot rely on one database more than the other. Moreover, the AG's case-tracking system may contain data that conflict with both the CMS and CJIS databases. Again, some of these problems are due to system shortcomings and some are due to data entry issues, but it is often difficult to determine whether the system or the users are at fault. Variations in data entry from court to court make it difficult to pinpoint system inefficiencies.

Need to Enhance Systemwide Participation

In spite of the extraordinary capabilities of the CJIS, there are key information exchange points at which necessary information is not shared among CJIS entities. For example, JP courts cannot log into CJIS to search for CCP/Superior Court information, and while JP courts schedule initial hearings in CCP/Superior Courts, they do not have access to subsequent court dates set in those courts. Similarly, juvenile case information maintained by the

Family Court is not being shared through CJIS, even though there is no statutory proscription against such information sharing. Moreover, CJIS does not link to noncriminal justice information because it was never designed to do so; therefore, a good deal of relevant information is unavailable to system users. For example, Family Court cases dealing with matters such as termination of parental rights are not entered into CJIS, even though they may impact criminal matters.

A related problem involves the lack of real-time information sharing with agencies that should be actively participating in CJIS. For example, the Probation and Parole Department maintains a wealth of information that is not available to CJIS participants because the Probation and Parole Department operates a stand-alone system. Violations of probation, as an example, are handled primarily via paperwork (75 percent paper trail), and it is very difficult to pull information on a person's probation/parole status because probation/parole information is not linked to CJIS.

In addition, the New Castle County Police (the second largest police agency in Delaware) built its own information system, and 8 months passed before data could be transferred to the State and national systems. Today, this system communicates with CJIS via tape, but is unable to support real-time sharing of information.

The Department of Services for Children, Youth and Their Families (DSCYF), which operates the Division of Youth Rehabilitative Services and Division of Family Services, has not shared much information with CJIS. By late 1999, DSCYF will begin receiving batch data transfers from CJIS, but will not be sending information electronically to CJIS. Several years ago, DSCYF received grant funding to develop its system, which operates via an Oracle database, Sequel Server and GUI screens. The goal is to develop real-

Delaware's integrated justice oversight committee is the DELJIS Board of Managers. The Board is comprised of representatives from the participating CJIS entities; in addition, representatives of the State Legislature sit on the Board as non-voting members, and a representative of the State Budget Office is invited to participate in the meetings.

time information exchanges with CJIS.

The PD's Office also shares a modest amount of information with CJIS. In fact, the PD shares only six data fields with CJIS.[10] The PD operates its own case management system, but CJIS does not meet its data-sharing needs: co-defendant screens are not updated properly; it is difficult to determine the identity of a judge on a given case because the CJIS screens that maintain that information are hard to find; and PD caseloads are not tracked in CJIS. Therefore, the PD's Office operates its own Sequel and Access system, which employs client/server technology and has a GUI front-end. The PD system is prepared to share information in the future with CJIS via batch feeds.
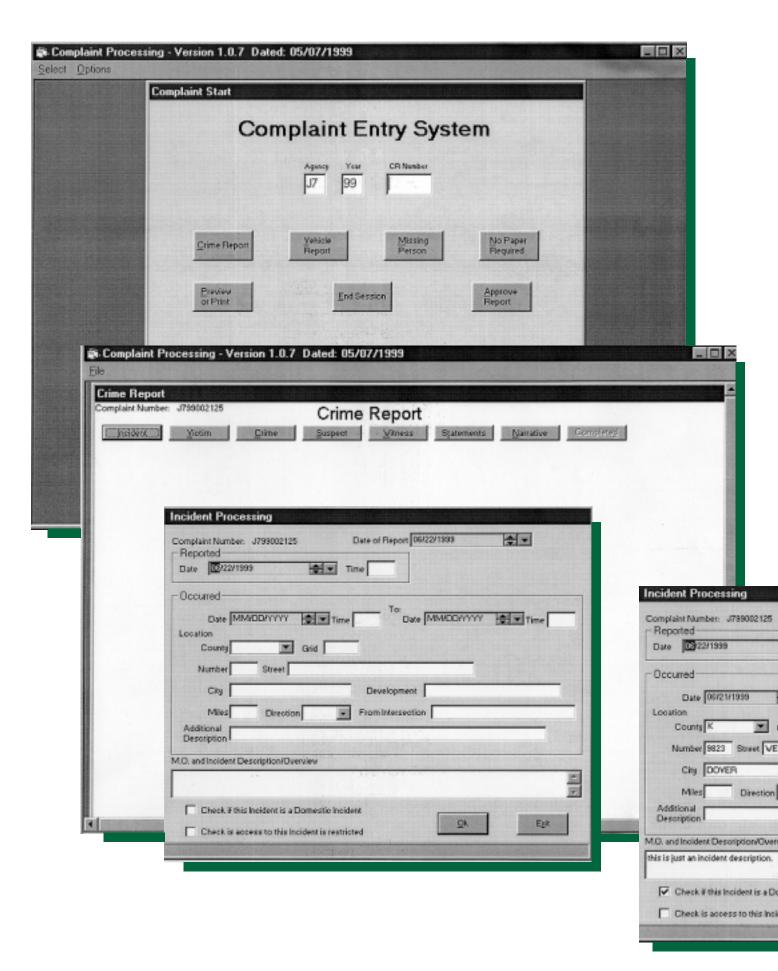
The issues mentioned here hamper system efficiency. These problems are compounded by slim resources. Also, additional training is needed to ensure that users are utilizing the system to its full potential. System users said they are dissatisfied with inadequate programming resources and a lack of help desk support to address their needs in a timely fashion.

Governance Structure

Delaware's integrated justice oversight committee is the DELJIS Board of Managers. The Board is comprised of representatives from the participating CJIS entities; in addition, representatives

of the legislature sit on the Board as non-voting members, and a representative of the State Budget Office is invited to participate in the meetings. Some of the CJIS representatives are technical staff, not policymakers, and therefore cannot speak with full authority for their respective agencies. This has posed some problems for CJIS development, and Board members are aware of the need to attain high-level support for future CJIS initiatives. Through the support of top decisionmakers, the Board will be in a better position to enhance CJIS efficiency. Board member David Deputy, who is Director of the SBI, said, "Appointing authorities need to buy into the system more ... [we should] have people on the Board who are as close to the agency authority as possible."

In other states, such as Colorado and Kansas, CJIS oversight committees, comprised of the highest level officials from each of the CJIS participant agencies, are responsible for overseeing and making major decisions regarding statewide integration efforts. They are not responsible for user-level decisionmaking. Instead, oversight committees are responsible for agreeing upon the vision for the system, providing leadership and oversight, and making major decisions about the project. Various working groups and task forces are then employed to carry out the research on and development of

Complaint Processing - Version 1.0.7 Dated: 05/07/1999

Select Options

Complaint Start

Complaint Entry System

Agency Year CR Number
J7 99

Crime Report   Vehicle Report   Missing Person   No Paper Required

Preview or Print   End Session   Approve Report

Complaint Processing - Version 1.0.7 Dated: 05/07/1999

File

Crime Report

Complaint Number: J799002125

Crime Report

Incident   Victim   Crime   Suspect   Witness   Statements   Narrative   Completed

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Incident Processing

Complaint Number: J799002125   Date of Report 05/22/1999

Reported
Date 03/22/1999   Time

Occurred
Date MM/DD/YYYY Time   To: Date MM/DD/YYYY Time
Location
County   Grid
Number   Street
City   Development
Miles   Direction   From Intersection
Additional Description

M.O. and Incident Description/Overview

☐ Check if this Incident is a Domestic Incident
☐ Check is access to this Incident is restricted

Ok   Exit

Incident Processing

Complaint Number: J799002125
Reported
Date 03/22/1999

Occurred
Date 05/21/1999
Location
County K
Number 9823 Street VE
City DOVER
Miles   Direction
Additional Description

M.O. and Incident Description/Over
this is just an incident description.

☑ Check if this Incident is a Do
☐ Check is access to this Inci

Domestic Incident

Complaint Number: J799002125

Incident Reason
- [ ] Property Dispute
- [x] Custody Dispute
- [ ] Serve PFA Order

142 Active Court Orders
- [x] Custody [x] PFA [ ] No Contact [x] Probation [ ] Other

Family Active with Division Of Family Services
- [ ] Mark for Yes Caseworker Name: _____

Has either party reported an incident with each other before?
- [ ] Mark for Yes If yes, last contact date MM/DD/YYYY

Is either party a victim/complainant in any other recent/relevant police investigation?
- [x] Mark for Yes If yes, Agency Name Dover PD

[Ok] [Exit]

Domestic Incident

Complaint Number: J799002125

- [x] Was a Violent Act Threatened or Committed?
- [ ] Was a Dual arrest made?
- [x] Were there any children present?

Division of Family Services Notified
- [ ] Was DFS notified?   Name of Person Notified _____

Case Arrest Status
- [ ] Arrest Made [x] No Arrest Made [ ] No Crime
- [x] Suspect GOA [x] Warrant Pending [ ] Other

Risk Assessment Done?
- [x] Yes [ ] No [ ] N/A

[Ok] [Delete] [Exit]

Outstanding Court Orders

Complaint Number: J799002125

Add any additional information regarding the outstanding court orders in the area below.

THIS IS A DESCRIPTION OF THE OUTSTANDING COURT ORDERS

[Ok] [Exit]

Suspect Vehicle

If the registration information is from Delaware and is firm, just enter the number and the system will populate data from the DMV files. If it is not, enter the rest of the description data.

Registration
State [DE] Number [1234] Year [2000]

Vehicle
Year [1990] Make [HOND] Model [PRE] Style [ ]

Description
Vehicle Colors
First [ ] Second [ ] Third [ ]

[Ok] [Exit]

Additional DMV Data
VIN: JHMBA4258LC023730 Owner 1 Name: WARD S H Registration Address: 52 SELBORNE DR City: WILMINGTON, DE 198070000 County: 1

Date of Report 06/22/1999

Time 1400

Time 2300 To: Date MM/DD/YYYY Time [ ]

Grid 122122

ST UNKNOWN ST

Development FORT MITCHELL

From Intersection [ ]

View

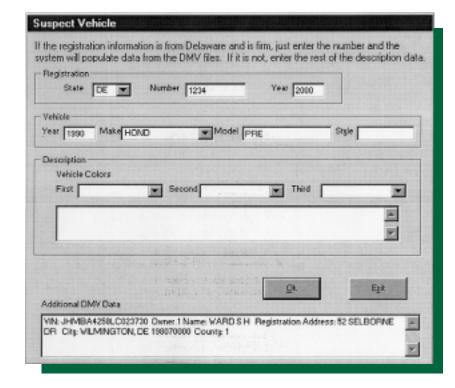Domestic Incident

dent is restricted

[Ok] [Exit]

Sample screens for the Enhanced Police Complaint System (EPC), which is a Windows-based, Visual Basic program that will allow the law enforcement community to file police reports on-line.

a variety of project-specific plans, models, policies and directions.

Both Colorado and Kansas have a variety of subcommittees in place to handle specific issues. Technical groups handle technical issues while business analysts handle process issues. In addition, "users" are integrated into groups that require an understanding of the business process. For example, Colorado's Tactical Business Group is comprised of working staff (on-line users) from each of the five State agencies involved in the State integration effort, local law enforcement, other involved agencies, and the business analyst staff person from their statewide integration project. The Technical Work Group includes technical analyst/programming staff from each of the five State agencies.

Kansas looks to various criminal justice entities for assistance on subcommittees, such as the AFIS Subcommittee, Standards/Technology Subcommittee, and Local Applications Task Forces. These subcommittees report back to the statewide oversight committee, but they are responsible for working through the user-level issues. By contrast, the DELJIS Board is responsible for addressing operational, technical *and* policy issues, which is a significant challenge.

Present and Future System Enhancements

New technologies, projects and committees are in place as of mid-1999 and/or planned for the future so that CJIS may address identified gaps and improve upon its successes. According to Ron Torgerson, DELJIS Executive Director, "If there's a way to share information, we've considered it." DELJIS and JIC personnel have worked diligently to improve the CJIS environment over the last several years,

Ron Torgerson

and the following section highlights some of the proposed system enhancements.

Automated Sentencing Order Project

The JIC is heading an effort to improve the processing of sentencing orders filed in CCP and Superior Courts. This effort, which began several years ago, is nearing implementation. The Automated Sentencing Order Project (ASOP) will be used in CCP and Superior Courts, but not JP courts. It is a Windows-based, Visual Basic program that utilizes the mainframe database and incorporates a GUI front-end. The mixing of PC and mainframe technology has been controversial because programming on the PC side had to be complemented by programming on the mainframe side; this resulted in delays and increased expenditures.

When ASOP is implemented, the following functional enhancements are anticipated: improved calendaring information (when a clerk enters a disposition, the case status, docket and tickler system will be updated); restitution (calculated fines) will automatically appear on the screen; within 30 minutes, sentencing orders will be available in court; approved orders will be available to anyone with access to CJIS or JIC; users will be able to access a defendant's criminal history, sentencing history, and warrant/capias history; flags will be restored for capias/warrants; and, in the future, the public will have access to approved orders.

Once users can access sentencing orders on ASOP, DELJIS will stop storing sentence order information on the CJIS database; the database will simply provide a pointer to the JIC database, which will store the sentence order document and provide the only access to sentence order detail. While sentence order detail will not be displayed on the CJIS database, the CJIS database will continue to display offender, charge and disposition data.

Delaware Automated Correction System

The Delaware Automated Correction System (DACS) project entails a major effort to revamp the present Department of Correction (DOC) system, which uses the CJIS mainframe to run its operations. The project began in April 1999 and is being facilitated by Deloitte Consulting. DACS will operate through an Oracle database and several Sun and NT Servers to allow for interfaces with the rest of the CJIS community. DACS, which will incorporate a GUI "look-and-feel," will greatly enhance efficiency of operations at the DOC and allow for information sharing with other CJIS participants through batch interfaces and on-line sharing of information. Moreover, the Probation/Parole Department will participate in DACS, and for the first time, electronically share information with the rest of the CJIS community.

DACS will be implemented in two phases. The first phase, which is the most significant, will greatly enhance DOC's ability to operate its population management functions, which include intake, booking, classification, transportation, case management and special programs. This phase is slated for implementation in April 2000. As the first phase is brought up, the second phase of the project will begin. The second phase will include enhanced functionality in supplementary areas, such as inmate accounting, visitation, commissary, inventory and warehousing, and should be operational by October 2000.

The cost of this project is estimated at $8-$10 million, and is being paid for using State general funds (technology fund). The estimated price for this new system includes the cost of enhancing the CJIS infrastructure; for example, Livescan and Mugshot units will be installed in all State correctional facilities and larger Probation/Parole offices by November 1999 (smaller Probation/Parole offices will use two-

print scanners). The use of Livescan and Mugshot technology will greatly enhance DOC operations and the quality of identification information throughout the CJIS community.

Enhanced Police Complaint System

The Enhanced Police Complaint System (EPC) is a Window-based, Visual Basic program that will allow the law enforcement community to file police reports on-line (see sample screens on pages 6-7). This system will integrate mainframe data with a PC-based GUI front-end application. It will increase functionality and have an improved "look-and-feel." Once EPC is implemented, law enforcement officers will write reports in their patrol cars and populate the mainframe with data; the AG will be able to download incident reports; jails will pick up offender data right off the incident report; suspect vehicle information will be pulled directly from the DMV database, which is on the same mainframe as CJIS and JIC; and the system will link directly to NCIC 2000.

EPC is being implemented at this time. All Delaware police agencies support the new system, and the State Police have pilot-tested it. Community agencies will implement it in the near future, pending completion of a TCP/IP network. SBI will conduct a quality control check of the reports issued by EPC and then move the data to the police complaint files, which are used for State and Federal uniform crime reporting. The State Police are working on a Mugshot server and Livescan interface so that fingerprints and mugshots will be available on the EPC screens.

Also underway is a related project designed to upgrade the Automated Warrant System, which operates via a Mainframe 3270 interface. Funding is available to upgrade the system with the same technology being used to implement EPC. This will allow EPC to provide a link to warrant information, which will be available right off the electronic complaint.

Real-Time Crime Reporting

This project will assist in the identification of criminal "hot spots" (areas where crime is likely to occur) by looking at criminal activity committed within the previous 48- to 72- hour period. Through use of this system, law enforcement agencies will be able to deploy their forces to areas most likely to require their assistance. This system will be browser-based, so that law enforcement officers will be able to access it from their patrol cars. In addition, Geographical Information Systems (GIS) technology will be used to assist officers in locating a target area. Funding is available for this project, which should be operational by late Fall 1999.

Browser-Based Rap Sheet

The browser-based rap sheet is now available to law enforcement officers. Through use of a Web browser, officers are able to access a person's criminal history over a secured Intranet (not available in their patrol units because the laptops are outside the firewall). This rap sheet will link to sentencing orders generated by ASOP.

Livescan and Mugshot Units

The DOC is expected to receive Livescan units in late 1999 for use in correctional facilities and Probation/Parole offices. The law enforcement community, meanwhile, is already making use of Livescan technology. Twenty-three FBI-compliant Livescan units have been connected to the State network and will be accessed by every law enforcement agency in the State. This was made possible by a Federal NCHIP grant of $800,000, and a State match of $800,000. In addition, a COPSMORE grant brought in another $2 million for additional Livescan and Mugshot units.

The Mugshot system is currently being installed, and training is slated to begin soon. The law enforcement community enthusiastically supports the Livescan/Mugshot systems. In fact, the Dover Police Department scrapped its independent Mugshot system in order to participate in the State system. The Mugshot system will allow witnesses to identify suspects through customized searches of the database. More money is needed to move mugshots out of specialized terminals and onto the network. As already discussed, the goal is to provide fingerprints and mugshots on the EPC screens.

Rule Nine Project

The Rule Nine Project is presently in test mode. It will ensure that the initial charges brought in JP court will be deleted real-time when staff in the AG's Office modifies charges for indictment purposes. The new charges will be sent electronically to the JP court so that warrants can be processed correctly. This project will effectively address the existing data problems associated with the indictment process.

Release Date Black Box Project

A Task Force was formed in 1998 to develop a program that will calculate credit for time served, good time and meritorious time credit so that CJIS is able to keep track of incarceration time automatically. In addition, the program will have the capacity to define a subject's release date when the subject has multiple sentencing orders in effect at any given time, including violations of probation. The Release Date Black Box Project is funded and the Task Force is currently grappling with the complex issues involved.

Data Quality Task Force

Delaware has received an NCHIP grant of $450,000 to create a Data Quality Task Force whose mission is "To clean up the inaccurate data in the CJIS charge and disposition files; and develop

system to maintain the quality of that data at the highest possible level."[11]

The Task Force's goals are as follows:

- Identify bad data,
- Identify the steps to fix the data,
- Implement the data fixes,
- Identify the causes of bad data,
- Identify the actions needed to assure that the data will be high quality henceforth, and
- Implement the system modifications to assure future data quality.[12]

New Environment: Mainframe as Data Warehouse

As mentioned, DSCYF and the PD's Office operate stand-alone systems. DSCYF looks up very little information held on the CJIS mainframe — about 10 percent of staff reads information from CJIS. DSCYF is preparing to receive batch data transfers from CJIS (these are not yet in real-time because the State Office of Information Services has not provided the software that would allow for real-time transfers of data). About 50 fields will be transmitted to DSCYF (such as names, addresses and personal identifiers). Any client with an SBI Number will produce information such as charges; details (arrest dates, hearing dates, etc.); victim information; and warrants that will be transmitted via batch feeds at least once a day. These batch transfers will help test information-sharing needs for eventual real-time, on-line transfers. Similarly, a State-funded Public Defender Integration Project, which will allow for batch data transfers between the PD's Office and CJIS, is underway.

The DOC and the AG's Office plan to implement Oracle databases to handle their case management needs. The DOC, AG and PD have all committed to sharing information through CJIS. The eventual goal is for information sharing to occur in real-time through development of data-sharing standards and direct connections to the existing

mainframe. In that way, the mainframe would serve as a data warehouse linking the separate agency databases.

According to Ron Torgerson, "The mainframe system will be moving to PCs over time, and the mainframe will just exist as a data source — applications will be processed at the PC level." In addition, data standards will be developed in order to facilitate a new generation of data sharing. Also, an SQL server will be set up for data mining so that police agencies will have the ability to run data analyses (English language searches). This will alleviate DELJIS's burden of running reports for all law enforcement agencies, but they will still run reports for less sophisticated users. Finally, DELJIS will use NCHIP funds to improve the "look-and-feel" of Delaware's Sex Offender Registry, which currently runs on a 3270 application; as with other projects, the Registry will utilize a Visual Basic, GUI front-end.

Another system enhancement will involve the Family Court, which planned to implement CMS (the CCP/Superior Court Management System) in late Summer 1999.[13] When this occurs, the AG's Office will have information on any individual who interacts with Family Court, whether that individual is a defendant or a participant in a given case. In addition, future enhancements will allow the AG to use the system to request a subpoena in Family Court (currently, AG staff uses the telephone to request subpoenas). Since CMS was designed for Superior Court, it will have to be modified in order to fit Family Court needs.

Lessons Learned

While many States and local jurisdictions are considering projects to integrate justice information systems, Delaware was the first State to implement an integrated criminal justice system. Therefore, there was no one to look to for guidance when CJIS first came on-line. Now, when jurisdictions

seek to integrate justice information systems, they look to others that have been down that path to learn from past successes and avoid past mishaps.

Through discussions with various members of the CJIS community, distinct "lessons" were emphasized and re-emphasized. Participants in Delaware's CJIS effort want to convey these points:

People, not technology, present the biggest obstacles to integrated justice.

Technology is not the obstacle to integrating justice information systems. Clearly, the real difficulty is attaining the necessary leadership, commitment and cooperation of key representatives of the criminal justice community. Often, people in different agencies have different ideas of how projects should move forward; they have different personal and political agendas, and they are more focused on their own agency needs than on the system as a whole. Moreover, the justice community suffers from a general distrust among its members. While many want to benefit from enhanced information sharing, they are hesitant to give up control of their information.

Before CJIS took shape in Delaware, system developers assumed that people would cooperate. They learned that such an assumption was flawed. As a result of this experience, Ken Allen, Information Resource Manager of the State Administrative Office of the Courts (AOC), suggests that courts and criminal justice agencies enter into formal agreements at the policy and operational levels as a means to ensure cooperation. These agreements must clearly define each participant's responsibilities so that everyone is clear on what is expected of their respective agencies. If possible, these agreements should account for changes in administration because people leave and new people take over.

Such changes can damage momentum achieved through initial cooperation.

Top-Level commitment is essential.

When discussing cooperation, all CJIS participants agree that top-level commitment is essential to success of the integration effort. As Larry Webster commented, "Concerned, engaged leadership is necessary." Without the support of agency heads, there is no way to move projects along in a coordinated, efficient manner. There is no quick and easy way to ensure top-level support. According to Mike McLaughlin, Deputy Director of the AOC, "Legislation won't do it; developing personal relationships and commitment over time is the answer."

User involvement is critical.

System planners have to ensure that stakeholders buy into the new system. As previously noted, the New Castle Police Department installed a computer system that was unable to communicate with CJIS, and is unable to share data in real-time to this day. When users fail to participate, the system suffers due to a loss of essential data. Once data are lost or corrupted, users can no longer rely on the system for complete and accurate information. David Deputy suggests, "Make sure you get a core group who believes in the system, so that management has enough faith to promote the usage." This bottom-up approach presents another way to attain high-level support.

Users must be trained properly.

The most technologically advanced system will not operate efficiently unless the users know how to use it properly. In Delaware, some of the problems being addressed may be a result of improper training, not system gaps. Several CJIS participants suggested that training

> # "…Integration is not an event, it's a journey."
>
> — Mike McLaughlin
> Deputy Director, Administrative Office of the Courts

should occur in the users' natural environment, not the classroom. Users in the JP courts were trained in their natural environment, and they flourished. It is difficult to simulate real-world issues in the classroom. As Debora Foor, Deputy Prothonotary of New Castle County, put it, "You can never predict all the bugs you're going to encounter until you're handling the data." Larry Webster suggests that training should incorporate both the classroom and the natural environment by using "a training facility for initial training on new systems and major upgrades, and [handling] updates and minor release training on site." This combination allows users to attain real-world experience while receiving effective and efficient education.

Planning must be intense and comprehensive.

Ken Allen assessed the current situation in Delaware and suggested that policymakers form a committee to oversee the following process:

• Define business relationships,

• Objectively look at strengths and weaknesses of the system,

• Define data ownership and data quality issues,

• Step back and re-engineer,

• Build cooperative agreements among the criminal justice community, and

• Build new automated systems.

Mr. Allen makes the point that system developers "can't look to technology to solve business problems."

They have to go through the difficult steps listed above to truly build an effective and efficient integrated justice system. In addition, he believes that the planning process should encourage the coordinated use of technology among the criminal justice community, whenever possible, so that technical solutions are simplified rather than complicated. Finally, Mr. Allen suggests that system integrators undertake a series of smaller projects rather than one large project that addresses a wide range of issues. These smaller projects are more manageable and provide the short-term results that are often needed to maintain project momentum and enthusiasm for future efforts.

While comprehensive planning is required, jurisdictions must move projects along and get system components implemented in a reasonable amount of time. Delaware has learned a great deal by implementing specific projects and assessing their impact on overall system efficiency. Ed Pollard, Family Court Administrator, made the point that "some things have to be up and running before you can tell that work needs to be done to improve efficiency."

Finally, Larry Webster observes that a great deal of work must go into designing the system before the system is actually built. He points out that it takes more work to modify software once it is in use than to design it properly in the first place. On a related issue, Mr. Webster suggests that data-sharing business rules should be clearly established before system implementation. System participants must be able

to turn to "standard transaction and data descriptions that everyone agrees to" in order to ensure proper information exchange. These business rules must be published and "no one should change these without communicating and getting approval from everyone else."

Conclusion

Delaware has been working on integrating CJIS for a long time, and the system is constantly being improved. For State and local jurisdictions that are heading down the path to integrated justice, there are important lessons to learn from Delaware's experience. The challenges ahead will be plentiful, but so will the rewards. Mike McLaughlin summed it up best: "Wins can be few and far between, but they're worth it … . Integration is not an event, it's a journey."

ENDNOTES

[1] The Department of Services for Children, Youth and Their Families (DSCYF) is also considered a CJIS participant, but it operates a stand-alone system and shares very little information with CJIS at this time. DSCYF is beginning to view information via batch data transfers and hopes to implement real-time data exchanges in the near future.

[2] This section addresses some of the major events that shaped the development of CJIS over the years. It is not intended to describe all of the projects that have been implemented in recent years. For more detail regarding specific projects that are planned or currently underway, see the section on Present and Future System Enhancements on page 8.

[3] Information Systems Plan, Executive Summary, at page vii.

[4] The Municipal Court was phased out of the Delaware court system in 1998.

[5] The Judicial Information Center (JIC) was established in the early 1980s in order to develop court case management systems. The JIC is currently staffed by 27 employees and provides network and PC support to the Delaware court community (other than the JP courts, which are supported by DELJIS). The JIC is the primary liaison between the judicial system and DELJIS.

[6] Prior to implementation of the Automated Warrant System, law enforcement officers were only able to create warrant forms through text/processor applications. After system implementation, law enforcement officers continued to produce forms without data content, thereby failing to take advantage of system enhancements.

[7] Large units are older, more expensive videophones that utilize 27- to 32- inch monitors and a remote- controlled camera; at the time these were purchased, PC units did not exist. PC units are the newer, smaller models; they are far less expensive and operate as PCs as well as videophones.

[8] Approximately 282,000 cases were filed in 1998.

[9] Prosecution is dropped with the ability to file charges at a later date.

[10] The six data fields are PD case number, eligibility, referring court, PD assigned, case referral date and case opening date.

[11] Verbiage taken from DELJIS Planning Retreat (May 27-28, 1999) documentation.

[12] Ibid.

[13] At this time, CMS does not provide for the integration of financial management with court case management, but according to Larry Webster, such integration of information would be of great value to the judicial branch.