

Executive Summary

Ninety percent of the land mass of the state of Hawaii is separated by miles of Pacific Ocean from the population center in Honolulu. Locally known as the neighbor islands, the ninety percent land mass is home to Hawaii's technologically underserved population. Hawaii's telecommunication backbone can be made available to the neighbor islands if they have the hardware and expertise to make the connection. The Juvenile Justice Information System (JJIS) will be a statewide system for juvenile justice agencies. The JJIS will track juvenile offenders through the justice system and will provide data for agency personnel to measure the outcome of juvenile programs.

This project will provide access to JJIS for the juvenile justice agencies on the neighbor islands to reduce disparities created by geography.

Background. The Department of the Attorney General (DAG) is the chief legal services agency of the State of Hawaii. As a result of legislation, the JJIS is administered by the DAG. (See Appendix A.) The DAG and participating state and county agencies involved in administering juvenile justice programs are working collaboratively to create a statewide JJIS. The participating agencies include the police departments of the four counties, the four circuits of the Family Court, the prosecutors of the four counties, and the Hawaii Youth Correctional Facility (HYCF). (See Appendix B for participating agencies.) The system will be a source of information on juvenile offenders throughout the State. The goal of the statewide JJIS is to provide the necessary information to the juvenile justice agencies to assist them in providing effective counseling, rehabilitation programs, education and other services that help juvenile offenders to become law-abiding and productive citizens.

This project serves an immediate need and proposes the use of today's technology. This project also recognizes the on-going activities of the Hawaii Telecommunications Infrastructure Modernization and Expansion (HI-TIME) project to develop a *Statewide Strategic Plan for the Office of the Governor*. We will be providing input to the process and will seek to cooperate and collaborate wherever possible.

The JJIS is a DB2/CICS/COBOL application that will be housed on the State of Hawaii, Department of Budget and Finance (B&F), Information and Communication Services Division's (ICSD) IBM 3090 mainframe. The central repository for the juvenile information is referred to as Core JJIS. Thirteen juvenile justice agencies will provide information and have access to the information in Core JJIS. Some agencies will use the JJIS directly, but most agencies will be connected through automated interfaces with their existing systems. (See Appendix C for network topology.)

Currently, technical representatives from each Oahu agency are involved in the implementation of the Honolulu component of JJIS which connects the Honolulu Police Department, the Honolulu Prosecuting Attorney, the First Circuit Family Court, and HYCF and will be completed during the fourth quarter of 1995. During the Honolulu component, none of the neighbor island agencies will be able to access the JJIS. In order to achieve a fully functional, integrated, statewide JJIS, the neighbor island agencies must have access, not only to the integrated information provided by JJIS, but to the ability to send and receive information to and from their agency systems. A statewide, integrated JJIS will provide all of its user agencies with accurate, complete, and timely information on juvenile offenders throughout the state, regardless of which island the agency is located.

What problem or need will you address in this project?

The JJIS has identified three major problems that this project addresses: the neighbor islands are underserved by the existing information infrastructure; the State funded Honolulu component will only

connect Oahu agencies; and the State lacks resources to connect the neighbor islands. This project will address the need to provide access to existing information infrastructure and to the JJIS for the neighbor island juvenile justice agencies. The neighbor islands are rural communities that are underserved by existing information infrastructure and access to integrated information systems in comparison to agencies on Oahu. The State funded Honolulu component will provide connectivity for only the Oahu agencies.

The neighbor island agencies do not have quick and comprehensive information to help juveniles who are in trouble. Access to the JJIS must be provided to the neighbor island agencies so the collaboration and sharing of information between agencies can take place. It is only through universal access that a complete and statewide sharing of information can occur.

Why is this an important problem, and why does your project fit the TIIAP?

This project fits the TIIAP because it provides access to existing information infrastructure to underserved, rural neighbor island agencies in an effort to promote the sharing of vital juvenile justice information by user agencies. The intent of the statewide JJIS is to provide a mechanism whereby appropriate, relevant, accurate, complete, and timely juvenile justice information can be captured, maintained, and accessed by juvenile justice agencies throughout the State of Hawaii. This can only be achieved by providing the necessary access to information infrastructure and the willingness of participating agencies to share their data.

The importance of the JJIS lies in its ability to track juvenile offenders through the justice system throughout the state of Hawaii and its potential to divert children before they become a problem in the adult system. (See Appendix D for sample JJIS screens.) From a national perspective, the JJIS may be a model for other jurisdiction. Hawaii is at the leading edge in development of a JJIS. Responses from national organizations indicate that other states have attempted to develop a statewide JJIS but have not succeeded. Technology is not the primary problem. Other states have not been able to successfully deal with the multiplicity of jurisdictions and the issues of domain.

JJIS provides the vehicle for collaboration and information sharing through networked computing for the juvenile justice agencies in Hawaii to attack the cycle of delinquency through prevention, treatment, and rehabilitation. This will come to fruition only when all participating agencies have full access to the JJIS. The JJIS will aid in protecting the community from habitual or serious juvenile offenders and in the determination of the most effective programs for the treatment and rehabilitation of habitual offenders through the compilation of data for longitudinal research.

Access. The B&F, ICSD operates and maintains the interisland, Hawaii Wide Area Integrated Information Access Network (HAWAIIAN). HAWAIIAN provides the digital backbone for the State's telecommunications network. (See Appendix E for information on HAWAIIAN.) The telecommunications and information service providers to the participating agencies are working collaboratively to achieve the interconnectivity between individual networks and agency information systems to make a statewide, integrated JJIS a reality. The police departments and the prosecuting attorneys are serviced by the City and County of Honolulu's Department of Data Systems (DDS), while the Family Courts are serviced by the Judiciary's Telecommunications and Information Services Division (TISD). The HYCF is serviced by ICSD, as is the DAG.

Hawaii has a state-of-the-art telecommunications system but juvenile justice agencies are suffering a disparity in access to an integrated juvenile justice information system, especially in the rural areas like the neighbor islands. The Kauai Police Department, Kauai Prosecuting Attorney, and Hawaii

County Police Department have no automated information systems to track juvenile offenders and are planning to use JJIS as their operational system. The Maui Police Department, Maui Prosecuting Attorney, and Hawaii County Prosecuting Attorney have information systems which are contained within their own agencies. Access to the information on these systems is limited to agency personnel and is agency specific. The lack of computerization, coupled with limited resources for treatment and services, makes it critical to maximize the resources that are available to facilitate juvenile related services. This project will provide connectivity via the existing information infrastructure (HAWAIIAN) by installing middleware to provide store and forward capabilities and to ensure delivery of shared data to and from agency systems, 3270 terminal emulation software, local area network (LAN) components, SNA gateways, CSU/DSUs, and telecommunications lines to provide access to JJIS.

Shared Information. Currently, there is no automated way of sharing information on juveniles among Hawaii's juvenile justice agencies. This task is made even more difficult because of Hawaii's unique island geography. The JJIS will be the first statewide, integrated juvenile justice information system in the nation which includes participants from both the county and state juvenile justice agencies.

Even agencies on the same island experience difficulty in quickly putting together an accurate and complete profile of a specific juvenile. This consolidation effort could take several weeks and even months to get information between counties which could result in serious consequences. Consider this example:

Case. A 15-year old boy is taken into police custody for shoplifting in Kahului, on the island of Maui. The officer has never seen the boy before and the boy says he's never been in trouble before.

Without JJIS. It is a very busy day in the juvenile section. Maui police have no record of the boy so he is counseled and released to his mother. The juvenile was not arrested and no official record was made.

With JJIS. Maui police search the JJIS database and find that the boy has a record in Honolulu, on the island of Oahu, over the last three years which includes fighting and shoplifting. He was required to make restitution for the last shoplifting offense which occurred two months ago. Police arrest and charge the boy based on his past history. He is released to his mother's custody. JJIS automatically sends the police report to the Maui County prosecutor's office where it is reviewed for further processing. The prosecutor does not have to enter any demographic information for the boy as it is automatically forwarded from the police system. The same morning, the Second Circuit Family Court receives a list of all juveniles that were booked the previous day.

This example illustrates the unique geographic challenge facing the juvenile justice agencies in Hawaii. It is commonplace for families to send troubled youths to live with relatives on other islands in an attempt to get them away from the "criminal element" of a specific area or group of peers. JJIS provides a networked, central repository where individual agency information is consolidated through an automated store and forward interface. This consolidated information is available online to all of the participating juvenile justice agencies. Without JJIS and computer networking, the juvenile on Maui would have been counseled and released to his mother with the Maui police having no record of his past history. The police, without this knowledge, would have had no way of taking the

appropriate action based on the juvenile's past history within the timeframe of allowable detainment for juveniles.

JJIS and computer networking will allow the user agencies to get timely, accurate, and complete information on the juvenile's past history and will be able to take appropriate action, which in this case was the arrest of the juvenile. With JJIS and computer networking, over 500 juvenile justice professionals would be internetworked. Accurate, timely, and complete profiles of juvenile offenders would be available online. Data would be compiled to serve as a basis for longitudinal studies on recidivism among ethnic groups, effectiveness of programs, etc. Currently, it is too time consuming for most agencies to compile juvenile justice statistics manually.

How will you carry out the project?

Upon completion of the Honolulu component, a systematic rollout of JJIS is planned beginning with the Maui agencies, followed by the Kauai agencies, and finally the Hawaii agencies. Each agency will be brought online one at a time to ensure standardization in implementation and success at each agency before moving on to the next site. This plan eliminates externalities that introduce technical problems when bringing up multiple sites simultaneously.

The progress of the project will be monitored and controlled by the JJIS Project Coordinator working closely with the user community. (See Appendix F for the JJIS Implementation Plan.) Technical representatives from each of the participating agencies continue to work closely with the JJIS team to define the users' requirements and needs related to the project. The participation of the agencies' technical representatives is critical to the success of the project. Neighbor island agencies have committed technical resources during the implementation phase to ensure success at each site.

Some agencies have connectivity to ICSD via 9.6 leased lines or 9.6 circuits via HAWAIIAN for access to the Offender Based Tracking System/Computerized Criminal History (OBTS/CCH). OBTS/CCH is operated and maintained by the DAG's Hawaii Criminal Justice Data Center (HCJDC) and is used to track only adult offenders. The agencies will require an upgrade to increase the capacity from 9.6 kbps to 56 kbps which will provide adequate bandwidth to support access to both existing agency systems and to the JJIS. The consolidation of multiple lines from single agencies will allow the agencies to reduce the costs for individual lines and take advantage of bandwidth available on HAWAIIAN for interisland connectivity.

Maui County

To provide access for the MAUI POLICE DEPARTMENT (MPD) to JJIS, the current DEC SNA gateway capabilities will be increased to provide an additional 64 concurrent sessions. The current 9.6 kbps leased line will be upgraded to 56 kbps to support the additional traffic. It is also intended that the 56 kbps circuit be supported via the HAWAIIAN with a connection from MPD to the State Office Building in Wailuku. This will provide MPD users access to 3270 sessions where concurrent access will be available to their existing applications and the ability to hot key to JJIS. Additional components that are to be purchased consists of the middleware and messaging server to support the store and forward capabilities and application to application communications. MPD's RMS will forward juvenile offender related police data to JJIS where it is made available to other agencies to view. A connection to DDS also provides access to the National Crime Information Center (NCIC).

MPD is serviced by a DEC VAX 4000 located at the main police headquarters in Wailuku, Maui. It supports approximately 150 terminals and PCs throughout its headquarters and the four remaining police districts including the islands of Lanai and Molokai. All districts outside of Wailuku have 9.6

kbps access to the VAX. A DEC 10Base-2 Ethernet LAN services 80 PCs for applications like WordPerfect, Windows, and Paradox, and terminal emulation for computer aided dispatch (CAD) and a records management system (RMS). MPD's gateway currently supports 64 concurrent session but is at its full utilization capacity.

To provide access for the MAUI PROSECUTING ATTORNEY (MPA) to JJIS, a SNA gateway and terminal emulation software will be connected to MPA's existing LAN to provide 16 concurrent 3270 sessions to the MPA users. MPA has access to ICSD via a 14.2 kbps leased line to the State Office Building in Wailuku, which provides a 9.6 kbps circuit to ICSD via the HAWAIIAN for access to OBTS/CCH. It is planned to upgrade this leased line and the HAWAIIAN circuit to 56 kbps to accommodate the additional traffic of JJIS.

MPA is serviced by a Wang VS/100 via a Novell Netware 3.1 Ethernet LAN. Applications that are accessible via the LAN include TELESIS (adult case tracking), CASE, Windows, Paradox, and Word. Approximately 35 users at the Prosecutor's Office will require access to JJIS. MPA will be a user of Core JJIS providing prosecutor related charge information.

Kauai County

To provide access for the KAUAI POLICE DEPARTMENT (KPD) to JJIS, a SNA gateway and terminal emulation software will be installed to KPD's existing LAN to provide up to 16 concurrent 3270 sessions to the KPD users. Currently, KPD has no access to ICSD. It is intended to utilize a 56 kbps circuit via HAWAIIAN. The ICSD connection will also provide access to OBTS/CCH. KPD is also connected to DDS via a 9.6 kbps leased line. This provides access to the NCIC.

KPD currently has a LAN supporting approximately 15 workstations. The KPD LAN is tied into the County's IBM AS/400. KPD currently tracks their juvenile offenders using a paper-based index card filing system. KPD will be a user of Core JJIS and provide police related data.

To provide access for the KAUAI PROSECUTING ATTORNEY (KPA) to JJIS, a SNA gateway and terminal emulation software will be installed to KPA's existing LAN to provide up to 16 concurrent 3270 sessions to the KPA users. It is planned to utilize a HAWAIIAN circuit of 56 kbps. The ICSD connection will also consolidate access to OBTS/CCH.

KPA has a LAN connecting approximately 20 PCs. It currently has a 9.6 kbps circuit to ICSD via HAWAIIAN for access of OBTS/CCH. KPA will be a user of Core JJIS and provide prosecutor related data.

Hawaii County

To provide access for the HAWAII COUNTY POLICE DEPARTMENT (HCPD) to JJIS, a LAN, a SNA gateway, and terminal emulation software will be installed to provide 16 concurrent 3270 sessions to the HCPD users. It is planned to consolidate the 9.6 kbps lines to the State Office Building in Hilo to a 56 kbps circuit via HAWAIIAN.

HCPD is serviced by a Wang VS/7010 which is located in the main police station in Hilo and supports approximately 80 workstations. HCPD maintains three applications written in COBOL which are the Police Information System, Traffic Accident and Citation System, and Gas, Oil, and Mileage System. HCPD has access to the NCIC through DDS and OBTS/CCH through ICSD. Two 9.6 kbps leased lines to the State Office Building in Hilo provide connectivity to ICSD via HAWAIIAN while a multi-drop leased 9.6 kbps line provides access to DDS. HCPD will be a user

of Core JJIS and provide police related data.

To provide access for the **HAWAII COUNTY PROSECUTING ATTORNEY (HCPA)** to JJIS, SNA gateway capabilities will be provided to support 16 concurrent sessions utilizing an existing connection to ICSD. The current 9.6 kbps leased lines would be consolidated and upgraded to a 56 kbps circuit via HAWAIIAN to support the additional traffic. 3270 sessions will be provided where concurrent access to their existing applications and the ability to hot key to JJIS will be available. Components that will be required are the middleware and messaging server to support the store and forward capabilities and application to application communications. HCPA's FACTS will forward prosecutor charge related data to JJIS. The connection to DDS also provides access to the NCIC.

HCPA is serviced by a Wang VS/7010 at the Hilo office and a Wang VS/65 in the Kona office and supports approximately 90 PCs and workstations. File servers are connected into the Wang network while Macintosh computers are connected by an Appletalk network. HCPA is currently in the process of upgrading its LAN to a 10Base-T Ethernet architecture which will allow for the interconnectivity between the different platforms. Current adult and juvenile tracking is performed using the Wang-based File Access Case Tracking System (FACTS) developed by APPX Software, Inc. The Hilo and Kona offices are directly connected via 2 leased 9.6 kbps lines. Access to OBTS/CCH is provided by a leased 9.6 kbps line to the State Office Building in Hilo and a 9.6 kbps circuit via HAWAIIAN to ICSD.

The Family Courts (2nd, 3rd, and 5th Circuits)

The Family Courts are divided into circuits that correspond to the counties which they service. The 2nd Circuit services Maui County, the 3rd Circuit services Hawaii County, and the 5th Circuit services Kauai County. The Family Courts are connected via the HAWAIIAN and use the Juvenile and Statistical Information System (JUSTIS) which will be connected to an automated interface that will store and forward juvenile offender related data. The JUSTIS interface is being installed as part of the Honolulu component as JUSTIS is a centralized system housed at TISD.

What are your qualifications and who are your partners?

The JJIS is truly a collaborative effort between user agencies to share information to better their efforts in the area of juvenile justice as is evidenced by the commitment of over 14 years by the participating agencies. Representatives of the user agencies work closely with the JJIS staff to resolve technical and policy issues related to the JJIS and its implementation and operation. It is only through the cooperation and involvement of the users agencies that the JJIS will be a success.

Juvenile Justice Information Committee. Hawaii's JJIS is proceeding because the development of the system is being guided by its users. Policy for the JJIS is established by the Juvenile Justice Information Committee (JJIC) whose members are the heads of the juvenile justice agencies. The JJIC, with a clear vision of the potential benefit to the children of Hawaii, has set aside territorial concerns of individual agencies and is wholly committed to the JJIS. (See Appendix G for JJIC members.)

Juvenile Justice Technical Subcommittee. As a subcommittee of the JJIC, the Technical Subcommittee is made up of technical staff from each of the participating agencies. This subcommittee is responsible for resolving technical issues that may arise during the planning, analysis, design, implementation, and operation of the JJIS. (See Appendix H for members.)

Participating Agencies. The participating agencies are committed to the success of the JJIS as is

evidenced by their dedication to the JJIC, its subcommittees, user groups, and testimony to the Legislature in support of the JJIS. (See Appendix I for testimony to the State Legislature.) The responsibilities of the agencies are to cooperate with the JJIS project team, to make the appropriate personnel available on request, to provide technical assistance and resources, to review test results of the project in a timely fashion, and to attend the meetings of the JJIC and its subcommittees. They have provided the direction and requirements of the project since its inception. The users from the participating agencies have provided input on data elements, screen design and functionality, and policies and procedures for the sharing of data between agencies. The user agencies will be actively involved with the implementation, testing, and final acceptance of the JJIS.

Telecommunications and Information Services Providers. The telecommunications and information services providers of the state and counties have made a commitment to provide resources to make the access to the existing information infrastructure and the interconnectivity between agency systems a success. These agencies include ICSD, TISD, and DDS.

JJIS Staff. The JJIS staff is responsible for the development of the JJIS. The JJIS staff works closely with the users to define their requirements and needs. The JJIS staff is also responsible for the coordination of the project. (See Appendix J for background on the JJIS staff.)

Who will benefit from the project?

Public. The JJIS will aid in the identification of repeat or habitual offenders who may be threats to public safety. The JJIS will be a tool that the juvenile justice agencies can use in the fight against juvenile crime in the state of Hawaii. The identification of juveniles who may be repeat offenders but have moved to another island will aid the juvenile justice agencies in taking the appropriate action based on a juvenile's past criminal history. With a statewide, integrated JJIS, a juvenile offender's history will be available online to all participating agencies. Armed with this information, juvenile justice agencies will be able to attack juvenile delinquency and assist the juveniles who need help in making themselves responsible and productive citizens. Legislators and the general public will be able to get a better picture of the juvenile justice problems through statistical research and reports.

Juveniles. JJIS will provide a mechanism to stop the cycle of delinquency through prevention, treatment, and rehabilitation. Programs to address delinquency will help juveniles become more responsible and productive citizens before they are stuck in the cycle and on the road to being career criminals. JJIS will facilitate in the identification the youths who need help and the most effective prevention programs and treatments that may help them. Juveniles who are in contact with the juvenile justice system will be able to get help and services early from juvenile justice personnel because of the information they have through the JJIS. Juveniles will be provided referrals to appropriate services to meet their needs, as well as be held accountable for their law violations. There will be fewer possibilities to be forgotten or neglected by the juvenile justice system.

Juvenile Justice Agencies and Their Users. The police officers, probation officers, parole officers, prosecutors, social workers, and judges who use the data in JJIS will be able to deal appropriately with juveniles that pass through their agencies. With shared information among all the juvenile justice agencies throughout the state of Hawaii, the probability of improving the juvenile justice system is very high. The JJIS will provide the first possibility of statewide tracking of juveniles through the justice system. This will be especially beneficial to the neighbor island agency personnel who have difficulty in getting complete, accurate, and timely information from other counties. The ability to take advantage of the existing information infrastructure to gain access to JJIS provides equity in access to the neighbor island agencies. The agency personnel will be able to view accurate,

complete, and timely profiles of juvenile offenders and base their actions on the juvenile offenders' past histories. First time offenders will be clearly known. Information on prior treatment and programs will be accessible to the agency personnel assigned to the juvenile. Statistical research on the success of various programs will be possible. (See Appendix K for letters of support.)

Other States. Other states will benefit from the successful completion of this project. JJIS will be the first statewide integrated juvenile justice information system that has overcome the territorial boundaries that sometimes exist between state and county agencies and has taken advantage of computer networking. Hawaii has been the beneficiary of juvenile justice agencies that have been collaborative and recognize the need for an integrated JJIS. Other states may decide to replicate Hawaii's JJIS and provide statewide, integrated juvenile justice information to their agencies.

How will you know if your project is successful?

The success of this project will be determined by the ability to access the JJIS by neighbor island agencies and the operation of the automated interfaces for neighbor island agencies with existing systems. The ability to access will be measured by the percentage of neighbor island users who can connect to the JJIS. This percentage will be based on the number of neighbor island users who were intended to have access. For the purposes of the evaluation, access is defined as the ability to successfully logon to JJIS through a 3270 session. The success of the automated interface will be measured as a percentage of transactions sent by the user agency systems that are successfully received by Core JJIS and posted to the database. The project will also be measured against the extent to which the access utilized existing information infrastructure via the HAWAIIAN. This indicator will take into account the number of connections that could have taken advantage of existing information infrastructure but did not.

Evaluation of the project will take place at the technical level by the Technical Subcommittee of the JJIC, at the agency level by the user agencies, and at the policy level by the JJIC.

The Technical Subcommittee will evaluate the project on:

- the ability to access the JJIS from their agencies;
- the effective use of existing information infrastructure;
- the ability to forward data from existing agency systems;
- the ability to store and translate forwarded data accurately in Core JJIS;
- reliability of the backup and recovery procedures;
- the preservation of confidentiality of juvenile data;
- security that prevents use by unauthorized parties.

The user agencies will evaluate the project by participating in the acceptance test. A section of the acceptance test criteria will relate to the useability, accessibility, and availability of the JJIS. Expected results of the testing will be compared to actual results and all discrepancies will be accounted for.

The JJIC will evaluate the project based on:

- the ability of JJIS to provide accurate, complete and timely information on juveniles to all participating agencies including the neighbor islands;
- the absence of negative impact on user agency system's operational performance.

The JJIS team will evaluate the project based on how well the tasks involved with the neighbor island rollout meet the schedule presented in the project plan.