

# **ATTACHMENT "A"**

## **County of Sacramento, CA Integrated Justice Information Systems (IJIS) Project Benchmarking Survey Consolidated Summary June 29, 2001**

### **Overview:**

During February and March of 2001, Sacramento County conducted a benchmarking survey with approximately 80 public jurisdictions including various counties within California and additional justice information integration contacts (obtained from Search) throughout the United States. The purpose of the benchmarking survey was to document best practices related to the information technology and overall project strategies utilized to implement system-wide justice integration. Major benchmark areas included: project scope, project strategies, organizational structure utilized, funding sources, project costs and anticipated cost savings, as well as any lessons learned. A comprehensive electronic benchmarking survey was e-mailed to each contact along with a fact sheet that outlined basic information concerning the IJIS Project.

A total of 19 completed surveys were returned. Nine (9) responses were from county jurisdictions, including eight (8) California counties. The remaining 10 responses were from various state organizations.

### **Additional Information:**

Please contact Brian Richards, IJIS Project Manager, at (916) 874-7832 or [richardsb@saccounty.net](mailto:richardsb@saccounty.net), if you desire additional information regarding the results of the benchmarking survey or the IJIS Project in general.

### **Consolidated Summary:**

Listed below is a summary of the responses received for each survey question. The number of responses is listed next to each question. Please note that not every responding organization answered each question.

## SCOPE

### A) Please provide a brief overview of your project including the goals and objectives. (19 responses)

The various respondents listed multiple goals and objectives. Therefore, this will not add up to 19 responses. Among the most prevalent were:

- To integrate the systems/data/procedures and improve data sharing: 7 (37%)
- To improve the timeliness and/or accuracy of data: 4 (21%)
- To eliminate/reduce redundant data: 4 (21%)
- To improve services to public agencies and the public, and/or to improve workflow: 2 (11%)
- To improve cost effectiveness: 2 (11%)
- To improve ad-hoc reporting capabilities: 1 (5%)
- To improve case tracking: 1 (5%)
- To build an infrastructure: 1 (5%)
- Network/communications, data sharing and distribution, security and privacy, education and outreach, and project management and administration: 1 (5%)

### B) Please list the participating agencies. (18 responses)

There was a great variety of participating agencies listed from each respondent. The most common were:

- Courts: 17 (94%)
- District Attorney/Attorney General: 16 (89%)
- Law Enforcement (Local, County or State-wide): 16 (89%)
- Probation/Parole: 12 (67%)
- Public Defender/Indigent Defense: 11 (61%)
- Department of Corrections: 7 (38%)
- Social service-related agencies: 5 (28%)
- Public Safety: 3 (17%)
- Dept. of Welfare/Welfare Fraud: 2 (11%)
- Office of Budget: 2 (11%)

Other responses included (mentioned once):

- All governmental agencies that use criminal history for licensing or employment purposes
- Child Support Enforcement
- Collections
- Community-based Organizations
- Coroner
- Dept. of Transportation
- Fire
- Governor's Office
- Highway Patrol
- Input from private stakeholders such as Gun Dealers, Private Employers, and the Media
- Inspector General
- NCIC Provider
- Offender Programs and Treatment
- Office of Information Technology
- Office of Juvenile Affairs

**C) What jurisdiction does your project scope cover (i.e. all criminal justice related agencies within Sacramento County, etc.)? (17 responses)**

- All criminal justice agencies – 13 (76%)
- Only participating agencies – 2 (12%)
- All traffic case related agencies – 1 (6%)
- All offenders sentenced to adult institutions or to state probation, or on parole from adult institutions – 1 (6%)

**D) What is the estimated population of the jurisdiction being addressed by your project? (16 responses)**

- Under 500,000 – 3 (19%)
- 500,000 – 999,999 – 5 (31%)
- 1 million – 1,999,999 – 0 (0%)
- 2 million – 2,999,999 - 3 (19%)
- 3 million and Over – 5 (31%)

**E) Please check the justice functions that are included in your project scope. (19 responses)**

- Criminal Only – 11 (58%)
- All Case Types – 5 (26%)
- Criminal and Traffic Only – 1 (5%)
- Criminal and Civil Traffic Cases – 1 (5%)
- All Case types and adult detention, juvenile and juvenile detention – 1 (5%)

**Other case types mentioned under “OTHER” included juvenile, family court, orders of protection, domestic violence petitions, civil protection orders, and citations**

**F) How many users access your justice information system? (17 responses)**

- Under 1,000 – 5 (30%)
- 1,000 – 4,999 – 4 (24%)
- 5,000 – 10,000 – 6 (35%)
- Over 10,000 – 2 (12%)

**G) Please describe the hardware (i.e., mainframe, client/server, internet, etc.) and software (database management system, CASE tools, off the shelf solutions, etc.) associated with your:**

**EXISTING SYSTEM: (15 responses)**

- Technology: client/server, O/S: Unix, Database: Oracle, Middleware: Powerbuilder.
- Hardware: Bull mainframe, IBM AS400, RS 6000 Unix, HP 9000, IBM RISC 6000, Compac Alpha Servers, client server, internet; software: Sybase, Informix, Digital/Compaq, Microsoft SQL.
- Various mainframe and LAN based systems.
- Mainframe (IBM – IDMS).

- Legacy systems in each, including Informix, Oracle, Sybase, DB2, and FoxPro. Some are mainframes, some are client/server.
- Stand-alone systems with TCP/IP capabilities and the use of open system architectures, Internet, NIST and FBI standards are strongly encouraged.
- Unisys NX-4821, MCP/AS, UNISYS DMS II, Progeni (4GL), Cobol & Algol
- DEC Alpha Servers, DEC OSF 3.2G, Sybase, Perl, and TCT
- IBM Mainframe
- JALAN and Crimes on two AS400's
- IBM Mainframe, Datacom database, CICS, Cobol
- IBM Mainframe, MVS, CICS, relational db (CA-Datacomm/DB)
- Various file servers running either NT or Novell. They share the WAN/LAN but do not talk to each other.
- IBM mainframe with communication to law enforcement agencies DEC's, warrant system IBM AS400 and jail management system via frame relay network.
- AS/400-based, large telecommunications network of over 6,000 workstations (3,000 networked PCs and 3,000 terminals). Most applications are block-mode, with one new client-server coming up and one very limited browser-based pilot application also coming up.

**NEW INTEGRATED SYSTEM: (12 responses)**

- N-Tier, browser-based CMS for all criminal case types.
- Middleware software, future focus on converging technology
- HP 9000; Client/Server (2 tier); Sybase; Powerbuilder
- Agencies will retain legacy system but be linked through middleware System architecture is built on open Internet/Web technologies, which will share data between criminal justice agencies within the counties.
- Client/Server (W2000, AIX UNIX, Filenet, Oracle)

- HP 9000, HPUX 10.20, Informix Online Dynamic Server v7.24
- XML, SQL, Java search tools, Justice Portal
- Oracle RDBMS, may also use HP-UX operating system.
- New apps are written in VB and run on mobile and desktop PCs. Processing is done on the PC that communicates with the mainframe.
- JALAN and Crimes on two AS400's
- Unknown, may end up being just a Data Repository
- AS/400-based, large telecommunications network of over 6,000 workstations (3,000 networked PCs and 3,000 terminals), with most new applications likely to remain block-mode for several more years.

**H) Please indicate the timeframe (i.e., 3, 6, 9 months, 1 year, etc.) for each of the phases listed below. Enter N/A if the phase listed does not apply.**

**STRATEGY PLAN DEVELOPMENT: (14 responses)**

- 6 months to 1 year: 8 (57%)
- 1 year to 2 years: 4 (29%)
- Over 2 years: 1 (7%)
- Complete, but updated every 2 years: 1 (7%)

**DESIGN/BUILD/BUY: (9 responses)**

- 6 months to 1 year: 5 (56%)
- 1 year to 2 years: 2 (22%)
- Over 2 years: 1 (11%)
- Ongoing: 1 (11%)

**TEST: (7 responses)**

- Under 6 months: 3 (43%)
- 6 months to 1 year: 3 (43%)

- 1 year to 2 years: 0 (0%)
- Over 2 years: 0 (0%)
- Ongoing: 1 (14%)

**PRODUCTION: (9 responses)**

- Under 6 months: 3 (33%)
- 6 months to 1 year: 2 (22%)
- 1 year to 2 years: 1 (11%)
- Over 2 years: 2 (22%)
- Ongoing: 1 (11%)

**I) Please indicate the date your justice integration systems project was started / Date of completion (actual or projected):**

**Estimated Time to Completion: (18 responses)**

- 2 years: 1 (5%)
- 7 years: 2 (11%)
- 9 years: 1 (5%)
- 11 years: 1 (5%)
- Unknown/No End Date: 13 (72%)

**PROJECT STRATEGY**

**A) Please check the primary technical solution utilized in your integrated justice system. (15 responses) (Some organizations checked more than one solution, therefore the total is greater than 15)**

- Total Rewrite - 5 (33%)
- Middleware Solution - 6 (40%)

- Other – 9 (60%)
  - Internet & communications based solution (XML): 2
  - Total creation of new system / no integrated systems in place: 2
  - Changes made to legacy systems to accommodate integration requirements: 1
  - Combining the development of new applications with the use of tools or developed software to enable interconnection of existing ones: 1
  - Middleware planned as the first phase, with a total rewrite later: 1
  - Purchase of existing software: 1
  - Some middleware, some rewrites, and some creation of new systems: 1

**B) Please describe the development methodology (information engineering, joint application development, etc.) that was followed in your project. (13 responses)**

- Joint Application Development (JAD)/Rapid Application Development (RAD): 8 (62%)
- Standard Analysis and Design Techniques: 2 (15%)
- Information Engineering: 2 (15%)
- Iterative Object Oriented Development Process: 1 (8%)

**C) Was data analysis done? (17 responses)**

- Yes: 16 (94%)
- Not yet done: 1 (5%)

**D) Was a relational data model created? (17 responses)**

- Yes: 7 (41%)
- No: 5 (29%)
- Not Yet Done/Under Development: 5 (29%)

**E) Please describe any written policies and procedures you incorporated to ensure the protection of justice information. (12 responses)**

- System users sign standard security notification & agreement forms. Must pass a background check: 2 (17%)
- All agencies must control their own data and comply with agreed-upon policies and procedures: 1 (8%)
- Each department has their own policy/procedure for access: 1 (8%)
- Incorporating all national requirements as well as relevant state requirements regarding collection, storing & dissemination of data, etc.: 1 (8%)
- Limits end user access to protect departmental privacy; each department shares as they are willing and able; some software contains sequestered or confidential information with additional security layers: 1 (8%)
- Memorandum of Agreement signed by the principals of all agencies: 1 (8%)
- Numerous state statutes and federal CRF's that govern access and dissemination of criminal justice records that they are required to follow: 1 (8%)
- Password, security and privileges and restricted document(s) use: 1 (8%)
- Restricted to criminal justice agencies and non-criminal justice governmental agencies who can demonstrate their need for information is greater than individual privacy concerns: 1 (8%)
- System incorporated a tight user and place-based security model based on terminal I.D.'s: 1 (8%)
- Use federal and state written policies regarding accessing and sharing data: 1 (8%)

**F) How do you plan to measure, or how did you measure, whether the project was successful or not? (14 responses)**

- Measured through user response, surveys, etc.: 5 (36%)
- Not yet addressed: 3 (21%)

- Measured against goals: 1 (7%)
- Measured by its benefits, namely, improvement of service, reduction of staff in excess of 10%, simultaneous accessibility to court files by different users, reduction of errors to less than 1%, reduction of overtime by 50%, etc.: 1 (7%)
- Measured by if the access and time constraints are met: 1 (7%)
- Performance-Based Budgeting requires measurement on at least a monthly basis such things as 1) number of records maintained 2) percent of dispositions on file 3) response times to requests for criminal history record checks for licensing employment, public record and firearm purposes 4) number/percent of criminals identified in these record checks and 5) customer satisfaction with on-line data provided, including criminal history: 1 (7%)
- Measured by data quality: 1 (7%)
- No measuring done, benefits are obvious: 1 (7%)

**G) Please describe the method that was utilized to prioritize integration projects. (11 respondents listed various methods; the most common are listed below, with the amount of respondents utilizing that method listed after)**

- User Group/Committee/Executive prioritizes projects: 6 (55%)
- Projects prioritized by changes in legislation or mandated changes: 2 (18%)
- Court projects were completed first as Public Defender, Probation and District Attorney are dependent to some extent on court data: 1 (9%)
- Experience has shown that the first project should be to interface CAD systems to an electronic Incident Report; therefore the first significant event is the "call for help": 1 (9%)
- Projects prioritized by cost benefit and work flow: 1 (9%)
- Projects prioritized by potential personnel reduction/benefits to personnel and cases: 1 (9%)
- Projects prioritized by the ability to provide a timely delivery of useful applications and services: 1 (9%)

- Projects prioritized by the potential positive impact on customers: 1 (9%)

## **ORGANIZATIONAL STRUCTURE**

### **A) Who is the main sponsor/champion/director of your project? (19 responses)**

- Information Systems Dept./Director: 10 (53%)
- Law Enforcement/Chief of Police: 3 (16%)
- County Administrative Officer: 2 (11%)
- Courts: 2 (11%)
- Governor: 1 (5%)
- No sponsor: 1 (5%)

### **B) Please indicate how your project was implemented from an organizational standpoint. Please check all that apply.**

**PROJECT MANAGER:** (16 respondents indicated that they utilized a project manager as part of their organizational structure)

- Project Manager utilized (no further details given): 4 (25%)
- Project Manger was a full-time employee: 7 (44%)
- Project Manager was a part-time employee: 3 (19%)
- “Project Manager” included 2 full-time employees: 1 (6%)
- “Project Manger” included a full-time vendor staff of 6: 1 (6%)

**INTEGRATION TEAMS:** (12 respondents indicated that they utilized integration teams as part of their organizational structure)

10 Respondents listed the amount of teams utilized and the average team size:

- 1 – 3 teams: 7 (70%)
- 4 – 6 teams: 3 (30%)

Average Team Size

- Team size of 2 - 4: 4 (40%)
- Team size of 5 - 9: 4 (40%)
- Team size of 10 – 25: 2 (20%)

**PROJECT OFFICE:** (7 respondents indicated that they utilized a project office as part of their organizational structure.)

**OTHER:**

- *Key coordination provided by the IS Director and by liaison role provided by the County Office of the CIO. All committee and subcommittee work feeds to the operational Business Team and from them to the Executive Committee for approval/adoption. - 1*

**C) How many staff members are dedicated to working on your project? (15 responses)**

**Number of Dedicated Staff Members:**

- 0 – 5: 6 (40%)
- 6 – 10: 5 (33%)
- 11 – 25: 3 (20%)
- 26 or more: 1 (7%)

**Ratio of technical staff to administrative/operational staff: (9 responses)**

- 1:1 – 3 (33%)
- 1:6 – 1 (11%)
- 7:6 – 1 (11%)
- 12:14 – 1 (11%)
- 13.5:4 – 1 (11%)
- 50:7 – 1 (11%)
- 100% technical - 1 (11%)

**Ratio of consultants to public sector employees:** (9 responses)

- 1:5 – 1 (11%)
- 4:13.5 – 1 (11%)
- 7:10 – 1 (11%)
- 5:25-30 – 1 (11%)
- 5:57 – 1 (11%)
- 50:50 – 1 (11%)
- 100% public sector - 3 (33%)

**FUNDING SOURCES**

**A) Please indicate how your project was funded. Check all that apply. (18 respondents indicated that at least one or more of the following funding mechanisms was utilized)**

- **Shared Systems Fund (General Fund) – 10 (56%)**
- **Funded by Each of the Stakeholder Organizations - 8 (44%)**
- **Grant Funding – 10 (56%)**

**OTHER FUNDING SOURCES**

**Many other sources of funding, or additional information about answers to the category above, were mentioned. Among them were:**

- Jail Excise Tax Funding
- Public/Private Loan Program
- Funded by: 1/3 Clerk, 1/3 County, 1/3 Administrative Office of the Courts
- Stakeholder organizations fund through the CJJIS Council, the cooperative decision-making concerning the direction of grant funds,

and consistent support of the project to the Legislature, these organizations play a role in the overall funding scheme.

- Obtain National Criminal History Improvement Program (NCHIP) grants, the use of which is overseen by the CJJIS Council.
- User fee funds for criminal history and AFIS related projects.
- A combination of state and federal funds.
- The Courts and Sheriff Department provided the initial funding for the initial study.
- Integration efforts are currently funded through the normal Information systems budget, but only to the extent that sufficient funding is available. Past efforts to obtain additional specific funding for the project have not been successful.

## **PROJECT COSTS**

**A) Please list the overall project costs for each of the areas listed below: (3 responses; responses were not categorized by hardware/software/staff costs)**

- \$18.7M for the first four years
- \$25M for nine years
- \$24.7M for the first seven years

**B) Please list any projected/actual cost savings resulting from implementing your project. (6 respondents listed many different types of potential cost savings)**

- Improved accuracy of data/integrity of data: 4 (67%)
- Improved work efficiency: 4 (67%)
- Decreased need to hire additional employees: 3 (50%)
- Better ability to monitor staff workload: 1 (17%)
- Increased revenue i.e. collection of fines: 1 (17%)
- Organization didn't attempt to capture cost savings: 1 (17%)
- Process a higher workload: 1 (17%)

- Reduction in employee overtime: 1 (17%)
- Success measure related to timeliness of data, not saving money: 1 (17%)
- Viable investment per a positive net present value: 1 (17%)

## LESSONS LEARNED

### A) What were the biggest hurdles (i.e., political, technical, funding, etc.) that you faced and how did you address them? (14 Responses)

- Political: 7 (50%)
- Organizational Structure: 3 (21%)
- Technical: 2 (14%)
- Funding and Commitment: 1 (7%)
- Other: 1 (7%)

#### Highlighted Comments:

- *The major risk to the project is the difficulty of sustained inter-branch and inter-agency cooperation. Historically in New Mexico and throughout the United States, criminal justice information sharing efforts have failed because of political rather than technical reasons. It is very difficult for multiple governmental units to develop and maintain the high levels of trust and cooperation needed to accomplish this project's goals. Inevitably each participating entity will encounter circumstances in which pressing internal organizational needs create pressure to divert resources and attention from the joint information sharing effort.*
- *Funding and commitment – Funding for the project has to be made available from the core operations budget of the Information Systems organization. No additional funds have been appropriated. Because funds are not specifically allocated to the project, short term operational priorities often and successfully compete for both the limited funds and the staff and user attention that should be given to integration activities.*

**B) What are the major lessons that your organization learned while developing/implementing an integrated justice information system? (13 respondents replied to this question, naming multiple lessons; therefore, the total responses will not add up to 13)**

- Better use of Project Management Strategies: 8 (62%)
- Use of an Established Governance Structure to Manage the Project: 7 (54%)
- Need for Increased Staffing: 2 (15%)
- Usage of a Shared Funding Strategy: 2 (15%)
- Use of a Development Methodology: 1 (8%)
- Utilization of Open Standards: 1 (8%)

**Highlighted Comments:**

- *One of the keys to success was to form working committees at the department management level and at the line staff level. This has greatly increased cooperation among the departments and helps reinforce the idea that everybody is working within a single system, of which the automation portion is just one piece.*
- *You must have a full time project manager/coordinator that works with the various agencies. This project manager must be able to understand the various criminal justice projects to gain the respect of the various agency participants. You must meet on a regular schedule, set up one year in advance.*
- *The major lesson that should have been learned but which seems to elude most within the county is 1) the need for long range planning for the system 2) the need to develop using a strict development methodology to capture the business rules*
- *A long term executive commitment (funds and staff) should be made. This commitment has to be isolated from shorter-term operational issues. Formal sponsorships and support at the executive level are crucial. Extensive user involvement (they need to give the project as much tie as the technical staff) is mandatory if expectations are to be fulfilled. Formal project management has to be implemented.*

**C) What would you do differently? (9 Respondents listed multiple things they would do differently)**

- Improve Collaboration Amongst Stakeholders: 4 (44%)
- Establish an Executive Level Champion: 3 (33%)
- Allocate More Staffing: 2 (22%)
- Make Better Use of Technology to Share Data: 2 (22%)
- Utilize Law Enforcement as Lead Agency: 2 (22%)

**Highlighted Comments:**

- *Work harder for a single charismatic sponsor to withstand political pressures, and be able to be involved long term.*
- *While any number of decisions along the way could be second-guessed, the project has been and continues to be very successful. Perhaps the biggest shortcoming is few outside of the County's justice system recognize the power and value of the integrated justice system. It may have been best to have an advocate within the County Administrator's office fully aware of the value of the system.*
- *We developed each department separately and then shared inquiry and later integrated them. They were afraid of integration at first. If we did it again we would push much harder to integrate as part of the initial implementation so that all the procedures would be the same across the five systems.*
- *Try to ensure that technical staff grew as the size of CJIS grew. This would allow projects to be delivered in a timelier manner.*
- *A long term executive commitment (funds and staff) should be made. This commitment has to be isolated from shorter-term operational issues. Formal sponsorships and support at the executive level are crucial. Extensive user involvement (they need to give the project as much tie as the technical staff) is mandatory if expectations are to be fulfilled. Formal project management has to be implemented.*

**D) Please rate the perceived success of your project from 1 to 10 (1 = poor, 10 = excellent) according to your stakeholders. Please answer one of the options listed below depending on your current project stage. (12 Responses Total – first number is the score, second number is the amount of responses who gave that score)**

**Either:**

**Project has been fully implemented: (3 Responses)**

- 7-10: 1 (33%)
- 8: 1 (33%)
- 10: 1 (33%)

**Or:**

**Project is in progress: (9 Responses)**

- 3: 1 (11%)
- 6: 2 (22%)
- 8: 5 (55%)
- 9: 1 (11%)

**Any additional comments that you feel may be of use to us: (3 Responses)**

- *Be careful when a new department head comes on board. The priorities and momentum may change dramatically.*
- *All users buying in and supporting the project is critical. If you have at least one department that wants to go its own way; number one, your system is not truly integrated from start to finish, number two, the other users are having to do extra work to keep integrated; and three, there may be information that the non-CJIS department has that is vital to another department and no one knows it.*
- *Integration will require significant changes to the business processes within an organization. It will also require substantial investments in both staff time and technology. This investment will not only be initial, but also ongoing. To be successful it is essential that integration efforts are not just supported, but more importantly, aggressively pursued by those at the highest levels of the organization. It must be one of Executive Management's most 'burning issues'. Finally, this vision must be sustainable over a long period of time. In all likelihood, there is no real end to integration efforts.*