#0151

CJIC

Criminal Justice Information Control in Santa Clara County

October 30, 1973

PRELIMINARY EVALUATION REPORT

I. INTRODUCTION

This report is in partial fulfillment of the evaluation requirement that is part of the development of Criminal Justice Information Control (CJIC), an integrated Criminal Justice Information System. Santa Clara County has completed a Phase I evaluation report in accordance with the evaluation plan dated 8/20/71. That report, although inconclusive, is part of the present document.

The project termination for the third year CJIC Grant has been extended from June 30, 1973 to December 31, 1973, primarily because of delays associated with the contract to develop the terminal interface task.

The preliminary evaluation report discusses evaluation in general, reviews and includes the Phase I report, and submits a revised plan outline for the evaluation to be submitted by the County after the conclusion of the grant. Also described is the evaluation effort of the consultant that is developing a master plan for criminal justice information systems in California. It is expected that this consultant, in the course of its project, will perform an "outside" evaluation of CJIC.

155589

2234

11. GENERAL DISCUSSION OF EVALUATION

Evaluation is both a challenge and a problem for local agencies involved in criminal justice activities supported by Federal grants. It is recognized as a necessary requirement on the part of the local agency as well as the Federal Government, in order to determine whether a program is working as planned. Yet it is not an easy task, and perhaps in the field of information systems, the methodology of evaluation is even more of a problem.[3]

An excellent handbook on evaluation is published by the Urban Institute.[1] Quotations from this reference will be used in the following discussion.

What does program evaluation mean?

"Program" refers to an activity or group of activities undertaken by a government to provide a service to the public. A program may be contained in a single agency, but often it encompasses the meshing of efforts by various parts of the government and private agencies. "Program Evaluation" is the systematic examination of specific government activities to provide information on the full range of the program's short and long term effects on citizens. While a program evaluation may include consideration of workload measures, operating procedures, or staffing, its chief focus is on measuring the program's impact or effects. Evaluation aimed solely at a program's internal procedures, staffing, and management might better be labeled management evaluations or organizational audits.

A program evaluation attempts to determine whether a program is achieving government objectives and considers both its positive and negative impacts. Consequently, the evaluation helps policy officials determine whether a program should be continued as is, expanded, modified, reduced, or eliminated. If a program is not performing as expected, the evaluation may help indicate reasons for ineffectiveness and action which might be taken to remedy the situation.[2]

_____

1. The Urban Institute: Practical Program Evaluation for State and Local Government Officials. (URI-17000) 2100 M Street, N.W., Washington, D.C. 20037. 1973 ($1.95).

2. Ibid. Pages 8,9.

Evaluation is basically a value judgment of worth. It can also be defined as a process of determining the level of success in achieving a predetermined objective. It includes three major elements:

. identification of program objectives.

. identification of the associated evaluation criteria (or "measures of effectiveness") for which data will be sought; cost is always one.

. identification of the relevant population segments or clientele groups on which the evaluation should attempt to measure impacts.[3]

How then does one measure changes that can be attributed to the program being evaluated? There may be many approaches. The Urban Institute publication describes five evaluation designs:[4]

1. Before vs. after program comparison.

2. Time trend projection of pre-program data vs. actual post-program data.

3. Comparison with jurisdictions or population segments not served by the program.

4. Controlled experimentation.

5. Comparisons of planned vs. actual performance.

These approaches will not be discussed in detail here.

Selection depends on accuracy desired, dollars available, timing of the evaluation and other factors. The following recommendations have been offered:[5]

1. Whenever possible, utilize the most precise evaluation, Design Number 4.

2. Where Design Number 4 is not feasible, use Designs 1,2, and 3 in combination.

3. Avoid using Design Number 1 alone except as a last resort.

4. Make extensive and regular use of Design Number 5 (planned vs. actual) based on setting targets for individual evaluation criteria.

_____

3. Ibid. Page 23. Chapter II gives examples of objectives and criteria.

4. Ibid. Chapter III, pp 39-70.

5. Ibid. P.69-70.

Evaluation of an information system or any program commonly uses the terms

effectiveness and efficiency, so it is useful to present definitions of these terms.

> Effectiveness can be defined as the extent a criminal justice information
> system contributes to the accomplishment of the user's missions. Effective-
> ness is measured in terms of performance. The performance criteria should
> measure the results of effort rather than the effort itself. For example,
> the fact that a large number of widgets are produced does not ensure all
> of the widgets were manufactured properly and were able to be used. A
> criminal justice information system's ultimate justification for existence
> must rest with the proof of its effectiveness in support of the user's mission.

> Efficiency can be defined as the capacity of an individual, organization,
> facility, operation or activity to produce results proportionate to
> the effort expended. Efficiency is concerned with the evaluation of
> alternatives in terms of cost in money, time and personnel. This
> raises the question, "Is there any better way for a criminal justice
> agency to achieve the same results?"

This report includes a preliminary listing of the evaluation criteria that

will be used to measure the effectiveness and efficiency of CJIC in meeting

the criminal justice information needs of the criminal justice agencies in

Santa Clara County.

III. CJIC PHASE I EVALUATION

Santa Clara County submitted a "Phase I Subject-in-Process Evaluation

Plan" in October, 1971. It was of the Design Number I, before vs. after, type.

Seven hypotheses drawn from the original objectives of CJIC were postulated.

They dealt chiefly with efficiency, e.g., "CJIC will speed the return of

arresting officers to the field."

The completed Phase I Evaluation Report is attached as Appendix A. As

stated in the conclusions of that report:

> In summary, our original evaluation approach proved to be inadequate
> as a fair appraisal of CJIC's worth. In the first place, our approach
> focused almost exclusively on CJIC's effect on day-to-day criminal
> justice operations. Little attention was paid to how well CJIC met
> the objectives of supporting comprehensive criminal justice planning,
> rapidly building up the data base and securing the early involvement
> of the users. Each of these objectives was specifically stated in
> the original grant application. Secondly, our attempt to actually
> measure CJIC's effect on day-to-day operations also proved
> inadequate.(because) 1) some of the operational benefits were achieved
> prior to collecting the "before" data, (and) 2) in several situations
> the data collection technique did not screen out extraneous variables
> and the results were distorted.

IV. APPROACH FOR FINAL EVALUATION

The CJIC Management Committee agreed that the Phase I Evaluation was not satisfactory and that another plan was required. It was recognized that, in the present "state of the art", evaluation of criminal justice information systems must be more objective and judgmental than the original plan. The Evaluation Section of the third year grant application stated:

> The original goal was to design and implement a computer-based information system which would involve all Santa Clara criminal justice agencies and would be beneficial to counties like Santa Clara. Therefore, CJIC should be evaluated on whether or not it has developed an operational system which serves the entire criminal justice environment. Evaluation should also focus on whether or not CJIC is a viable and useful system for a county like Santa Clara.

It has been proposed that "crime specific planning can provide a valuable framework for evaluation of information systems."[6] Crime specific planning is an attempt to develop strategies and tactics to overcome known crime problems and rapidly identify emerging ones. If the primary goal is crime reduction, and information is needed to determine which programs bring about the greatest benefits, then information systems can be evaluated by criteria that are related to the achievement of crime reduction. Gutekunst identifies some of the criteria as accuracy, completeness, timeliness, economy and, because of the special constraints of criminal justice, security and privacy. He concludes that "the key point that cannot be neglected is that the information system is a tool, whether computerized or not, and as such should be judged or evaluated against its usefulness and productivity in the reduction of crime."

---

6. Gutekunst, Ralph M., "Crime Specific Planning as the Framework for Evaluation of Computer Systems", Proceedings of International Symposium on Criminal Justice Information and Statistics Systems, Project SEARCH, New Orleans, La., October 3-5, 1972

This type of evaluation can be accepted as the model that should be the goal of evaluators of criminal justice information systems. It should be built into evaluations to the extent that the technology and expertise of local agencies allow.

The revised approach for evaluating CJIC is primarily a combination of Designs 1, 3 and 5 (see page 3) to be performed in-house, with extensive in-put from criminal justice user agencies. Secondarily, an outside evaluation can be expected from the work of Public Systems, Inc., in developing a statewide master plan for criminal justice information systems.

V.   EVALUATION BY PUBLIC SYSTEMS, INC.,

As part of the current contractual effort to design a Criminal

Justice Information System Master Plan for California, Public Systems,

Inc., will evaluate existing criminal justice information systems. The

following is from Part I, Phase III, of the PSI proposal dated

December 15, 1972.

> The ultimate purpose of the evaluation phase of this project is
> to determine the impact of criminal justice information systems:
> To what extent is the delivery of services facilitated by the
> systems? Where do the benefits occur? And is the effectiveness
> comparable to the cost? This will not be done on an "absolute"
> basis (i.e., how much does a system contribute to the overall
> attainment of criminal justice goals), but will be done relatively.
> That is, how well does a system function--relative to another system--
> in satisfying the information needs defined by each agency. The
> measure of "how well" includes both cost and effectiveness.

Public Systems, Inc., recognized the difficulty of evaluating criminal

justice information systems, for several reasons, including:

> The quality and costs of these systems are difficult to determine
> (or predict); hence comparisons between existing and proposed systems
> are not accurate.

> The ability to measure and record quantitative and qualitative data
> varies; hence, the assessments of the various systems vary depending
> on the indicators compared.

> User information requirements are difficult to define precisely; hence,
> system criteria are vague.

> Interagency systems, with their widely varying needs are very complex
> to assess.

The Public Systems, Inc., evaluation will consider the following criteria:

1.   Installation of the impact plan.

2.   Analysis of operational impacts over time.

3.   Analysis of attitudinal and behavioral impacts over time.

4.   Analysis of management and planning capabilities.

5.   Analysis of management decisions relative to the cost of
     criminal justice operations.

6.   Analysis of technology or equipment.

7.   Analysis of program and policy change.

8.   Evaluation of achievement.

The tasks in this evaluation phase include:

.   determine agency information needs;

.   identify the benefits of existing information systems;

.   determine which agency needs are being met by various information

    systems, and identify redundant and unnecessary efforts;

.   evaluate relative cost and effectiveness of alternative information

    systems and methods.

In a matrix, existing major systems will be measured as to effectiveness

in meeting information needs. This will be used to judge efficiency of

various systems in comparison with alternative methods of meeting information

needs, including cost comparisons.

It is our hope the Public Systems, Inc., will be successful and will provide

an "outside" objective evaluation of CJIC.

VI. REVISED PLAN FOR FINAL EVALUATION

The final evaluation report to be completed after termination of
the grant period in early 1974 has the following components:

1. Before vs. after program comparison

This activity has been completed, with the limited results
described. The Phase I Evaluation Report will be revised if
additional relevant data become available.

2. Comparisons with jurisdictions not served

Data from the CJIC agencies will be compared with data from the
two small Police Departments who have not been active participants
in the system, this far. CJIC also will be compared with model
"Offender Based Transaction Statistics" systems developed by
project SEARCH.

3. Comparisons of planned vs. actual performance

Actual post-implementation results will be compared with initial
objectives and targets. This involves measurement of results
according to a detailed list of evaluation criteria.

4. Outside evaluation by Public Systems, inc.

There has been no change in the objectives originally established when CJIC
was conceived in 1970. The main dual-objectives are restated with
supporting objectives in this single statement:

CJIC IS AN INTER-GOVERNMENTAL INFORMATION SYSTEM THAT WILL
IMPROVE DAILY CRIMINAL JUSTICE OPERATIONS AND SUPPORT COMPREHENSIVE
CRIMINAL JUSTICE PLANNING BY USING MODERN DATA PROCESSING TECHNOLOGY
AND ADMINISTRATIVE TECHNIQUES, WITH SUPPORTING OBJECTIVES TO PROMOTE
SYSTEM TRANSFERABILITY, ESTABLISH AND MAINTAIN EFFECTIVE RELATIONS
AMONG CRIMINAL JUSTICE AGENCIES, PROVIDE IMPROVED MANAGEMENT SKILLS
AND TOOLS, SUPPORT RELATED CRIMINAL JUSTICE PROJECTS THAT REQUIRE
OR SHARE CJIC DATA, AND SAFEGUARD SECURITY AND PRIVACY.

Evaluation criteria have been established, as shown in the attached table.
Objectives are listed in the left hand column, with key words underlined.
The center column presents evaluation criteria for each objective.
Clientele or user groups are shown in the right hand column. These
criteria will be expanded and revised somewhat as questionnaires and
other documents are developed.

The County Executive has primary responsibility for completion of this
evaluation. Most of the in-put must and will come from the user agencies.
The County Data Processing Center staff will not have a major role,
since its work will be evaluated. Also, the emphasis is not whether
there is an efficient computer system (although this will be considered)
but whether CJIC is an effective and efficient information system serving
criminal justice agencies.

Table 1.

EVALUATION CRITERIA FOR CRIMINAL JUSTICE INFORMATION CONTROL (CJIC)

Objectives	Evaluation Criteria	Clientele (User) Groups
CJIC is an integrated inter-governmental information system	INTEGRATED SYSTEM 1. Meaning of integration 2. How CJIC is integrated system 3. Understanding of Criminal Justice Process	All Criminal Justice Agencies in Santa Clara County
	INTER-GOVERNMENTAL 1. Criteria for evaluation of inter-govt. info systems, from Intergovernmental Board on Electronic Data Processing (Appendix B) 2. Percent of agency participation, and CJIC compliance with IGBEDP criteria	All C.J.Agencies State and Federal Governments
	COMPLETENESS 1. Data bases included 2. Inter-faces with other criminal justice systems 3. Data not included	All C.J. Agencies Other County, State and Federal Governments
that will improve daily criminal justice operations	OPERATIONS 1. Agencies using daily 2. Manual systems replaced or supplemented 3. Agency perceptions of improvements 4. Comparison with non-participants	All C.J. Agencies Gilroy and Morgan Hill Police Departments
	ACCURACY AND TIMELINESS 1. Audits and checks used 2. Number of errors detected 3. Percent of system downtime, response times	All C.J. Agencies County Data Processing
and		

Table I.

Page 2 of 3

EVALUATION CRITERIA FOR CRIMINAL JUSTICE INFORMATION CONTROL (CJIC)

Objectives	Evaluation Criteria	Clientele (User)Groups
support comprehensive criminal justice planning	PLANNING 1. Use by participants 2. Use by non-participants (e.g. C.J.Pilot Program) 3. Requests for reports, special studies	All C.J. Agencies Other C.J.related groups
by using modern data processing technology and administrative techniques	TECHNOLOGY 1. Hardware and software used 2. Accessibility to data base 3. Development of administrative techniques COST 1. System cost and sharing ratios 2. User costs and County costs 3. Development vs. operational cost 4. Efficiency of system vs. alternatives	All C.J. Agencies County D.P. Center All C.J. Agencies County Govt.
with supporting objectives to promote system transferability	TRANSFERABILITY 1. Ease of transfer 2. Number of actual transfers & savings if available 3. Activities to explain system to other agencies	Other Counties and Cities

Objectives	Evaluation Criteria	Clientele (User) Groups
establish and maintain effective relations among C.J. agencies,	INVOLVEMENT 1. Number of agencies involved 2. How system managed 3. Meetings attended by users 4. Agency perception of involvement.	All C.J. Agencies
provide improved management skills and tools,	MANAGEMENT TOOLS 1. Tools available 2. Usage by agencies 3. Perception of value by agencies	All C.J. Agencies
support related C.J.projects that require or share CJIC data	SUPPORT OF OTHER PROJECTS 1. Number of related projects supported 2. Perception of value by other projects 3. Potential support in future	C.J. Agencies Other C.J.related Groups
and safeguard security and privacy	SECURITY AND PRIVACY 1. Actions taken,e.g.Code of Ethics 2. Procedures used, security measures 3. Number of complaints/inquiries	All C.J. Agencies Citizens

County of Santa Clara	BY R. Braddock		SECTION	
General Services Agency: Data Processing Center	T. Condron APPROVAL		REVISION	PAGE
	APPROVAL		DATE	

———— TO: California Council on Criminal Justice
———— FROM: Tom Condron, Technical Coordinator
———— CJIC Phase I Evaluation Report

1.0 Introduction

2.0 Conclusions

3.0 Recommendations

4.0 Appendix

1736 REV. 10/70

CJIC - PHASE I EVALUATION REPORT

1. Introduction

CJIC Phase 1 had two primary goals:

1) to improve daily Criminal Justice Operations
2) to support comprehensive Criminal Justice Planning

Secondary objectives were a rapid buildup of the database and the early operational involvement of all users.

As an integral part of designing and implementing the basic subject-in-process system, we were required to develop a vehicle for evaluating the success or failure of the information system. Our evaluation plan (dated 8/20/71) focused almost exclusively on measuring the operational improvements in participating criminal justice agencies that could be attributed to CJIC. We attempted to gather "before and after" data in seven specific areas to test the hypothesis that CJIC improves daily criminal justice operations.

2. Conclusions

Our detailed findings for each of the seven areas are included in the Appendix to this report. In summary, our original evaluation approach proved to be inadequate as a fair appraisal of CJIC's worth. In the first place, our approach focused almost exclusively on CJIC's effect on day-to-day criminal justice operations. Little attention was paid to how well CJIC met the objectives of supporting comprehensive criminal justice planning, rapidly building up the database and securing the early involvement of the users. Each of these objectives was specifically stated in the original grant application. Secondly, our attempt to actually measure CJIC's effect on day-to-day operations also proved inadequate.

The following factors contributed to the inadequacy of our evaluation:

1) some of the operational benefits were achieved prior to collecting the "before" data.

2). in several situations, the data collection technique did not screen out extraneous variables and the results were distorted.

In summary, based on the "hard" or "objective" data that we collected, one cannot tell whether or not CJIC is a success. So, the question remains, "How well has CJIC accomplished what it proposed to accomplish?"

One way of approaching this question is to focus on the other objectives which were outlined in the grant application. One objective was the rapid buildup of a database which would be useful to support both operational and planning needs. CJIC has successfully met this objective. As of December 31, 1972, detailed data on over 42,000 bookings, 48,000 court cases, and 144,000 defendants had been accumulated. Significantly more information has been accumulated now. This information is available within seconds to qualified CJIC users. Since all data is updated on-line, the information is also up-to-date.

Another objective was the early operational involvement of the users. CJIC has met this objective. There are eleven police departments in Santa Clara County, nine participate actively in CJIC. The two departments which do not yet participate are the smallest and most remote in the county. The following table (Based on 1971 Criminal Justice Planning Board data) indicates the extent to which local police agencies are involved in CJIC.

	All PD's	CJIC Participants	% of Total
Staff	1,322	1,289	98%
Budget	$24,833,000	$24,376,000	98%
Population	1,064,700	1,045,600	98%

There are seven courts in Santa Clara - one Superior Court, five Municipal courts, and one justice court. All participate in CJIC except the justice court. The proportion of the judicial community which actively participates in CJIC is illustrated by the data in the following table:

	All Courts	CJIC Participants	% of Total
Judges	44	43	98%
Total Expenditures	$4,300,000	$4,207,000	98%

Thus, virtually the entire police and judicial community participates in CJIC. All of the other county criminal justice agencies (Sheriff, District Attorney, Public Defender and Adult Probation) are participants.

Realizing that developing information systems is a very expensive matter, attention was paid to developing a system which could be transferred to other counties. CJIC has succeeded in achieving this objective. Alameda County, California, has already transferred significant portions of CJIC at the program level, and it is committed to a complete transfer by June, 1974. Many thousands of dollars in development cost have thus been saved. Orange County is also using portions of CJIC for its Criminal Justice Information System.

CJIC has also begun to succeed in achieving the objective of supporting comprehensive criminal justice planning. Two examples will illustrate CJIC's potential in the area of criminal justice planning. LEAA has established eight demonstration or pilot sites throughout the United States to develop, test, and implement innovative, rational programs which reduce crime and improve the administration of justice. The first of these Pilot Programs was established in San Jose in May of 1970. CJIC staff has worked closely with Pilot Program staff from the outset. CJIC has provided extensive data for two Pilot Program projects -- the Pretrial Jail Population Control Model and Profile 1970.

Jail overcrowding is a significant problem in Santa Clara County. The Population Control Model's primary objective is to provide an operational management tool for controlling the population in a jail facility.

Profile 1970 is a document containing extensive demographic and criminal justice information about Santa Clara County. CJIC was the source of extensive data concerning arrests made by all police departments in the County. This data book will be used for planning new demonstration and community action programs, and it will also provide base-line data for evaluating the effectiveness of such programs after they are completed.

CJIC has also supplied valuable one-time reports for County criminal justice agencies. Examples include:

- a list of suspects in a homicide case

- a list of arresting officers who may be using excessive force in making arrests

- a list of felony complaints that were filed in the wrong court jurisdiction

3. Recommendations

The CJIC evaluation must be reexecuted. A revised evaluation plan should be submitted, along with this report on the outcome of the August 21, 1971 plan. The revised evaluation scheme should include a clear statement of objectives and of evaluation criteria, such quantitative data as available, and subjective appraisals by user agencies and others.

September 13, 1973
County of Santa Clara
GSA - DP

GENERAL

CJIC Phase I evaluation was based on the collection of data involving the booking process, the check of criminal history records via radio communications, inquiry volumes to CJIC by agency and type of inquiry, the volume of telephone traffic involving case related information, the clerical time expended on CII-15 reports and the back log of CII-15 reports.

This report will take the following form:

A. For each task assigned:

- Hypothesis

- Proposed test method

- Proposed participating agencies

- Proposed procedure

- Proposed sample size

- Variations from task as proposed

- Data items collected

- Results obtained

- Comments

- Conclusions

B. Final Conclusions

CRIMINAL JUSTICE INFORMATION CONTROL SYSTEM

PHASE I SUBJECT IN PROCESS
EVALUATION

Task 1 - EVALUATION OF THE BOOKING AND IDENTIFICATION PROCESS

Hypothesis: CJIC will speed the return of arresting officers to the field. CJIC will speed identification of arrestees being booked, i.e. booking ID.

Test Method: Measure elapsed time of arresting officer and booking officer in the booking process. Measure elapsed time between booking officer's request for records check to record section on ground floor and return of given request down the pneumatic tube to the booking officer's station. Also measure the time for an officer to receive a field inquiry response from the CJIC terminal at his booking station.

Participating Agencies: Main jail of Santa Clara County Sheriff.

Procedure:
Arresting Officer: Subsequent to placing his prisoner in the shake down cell, arresting officer initializes a time control document by stamping (via timeclocks) in position number 1 his arrival time. The control document is then presented to the booking officer.

Booking Officer: Following the completed turnover of the prisoner and his property, the booking officer time stamps the control document to record arresting officer's departure. Time stamps the control document following either typing (Pre-CJIC) or printing of booking packet on terminal printer (Post-CJIC) and recording supplemental data, marking the end of his CJIC related booking activities. Time stamps copy portion of 3 x 5 ID card, form 5975, before sending to records section and after receipt from records section.

Data Processing Department: Perform time study to measure elapsed time for specific CJIC inquiry codes.

Sample Size: Measure for length of two weeks (24 hours a day).

Variations from proposed task: As proposed, this task was divided into two phases. One to capture booking information and one to capture identification information. These two phases were combined to reduce the clerical load on the participating agency in collection of data.

Data items collected: During the two week pre-CJIC and post-CJIC data collection periods, the following times were collected on each booking event:

- Arresting officer's arrival -- start of booking.

- Departure of the arresting officer

- Completion of booking

- Completion of identification

Results obtained: The following elapsed times were determined from the source data:

- Average time the arresting officer spent per booking

- Average booking time per booking

- Average time required for identification check

- Average total time per booking

Results are shown below:

	Pre-CJIC	Post-CJIC
Average arresting officer's time (Min.)	20	22
Booking time (Min.)	65	68
Identification time (Min.)	47	68
Total time (Min.)	113	136

Comments: Conclusions cannot be drawn on the above results without considering the following facts relating to the data collected:

- The post-CJIC booking sample was approximately one half the pre-CJIC sample.

- Since data was taken based on each individual booking, the arresting officer's time was duplicated in the statistics when the arresting officer brought in more than one person to be booked at any one time. Since data collection did not provide a method of determining this condition, it is quite obvious that the average time an arresting officer spent during the booking process is inaccurate to some extent. There is no way to determine the extent of this inaccuracy.

- In the pre-CJIC statistics, the time spent for identification also includes time spent on warrant search. The proportion of this time spent for each process is unknown. In post-CJIC statistics, the identification phase is included in the booking process. This means that the post-CJIC identification time is actually warrant search time. This makes it illogical to draw conclusions from a comparison of pre-CJIC and post-CJIC total booking times.

- In the CJIC systems design phase, a Pre-Booking form was developed to be completed prior to the arresting officer's initial contact with the Booking Officer. This process was designed to reduce the time an arresting officer was required to spend at the booking station prior to his return to the field. This procedure was in effect at the time pre-CJIC booking statistics were taken, and therefore, any reduction in arresting officer's time due to this process is not reflected in the final results.

Conclusion: That the final statistics as developed in the completion of this task neither proves nor disproves the original hypothesis.

Task 2 - EVALUATION OF CHECKS OF CRIMINAL HISTORY RECORD VIA RADIO
                                                    COMMUNICATIONS

Hypothesis: CJIC will speed response to field inquiries, i.e. 1029R
requests.

Test Method: Measure the elapsed time between an officer's request for
a check of criminal history record via radio communications and the
eventual response to him concerning this individual.

Participating Agencies: Santa Clara County Communications Center.

Procedure: The required data, i.e. time of subject check request and
time of response transmission, is currently recorded on form number 6869
(retention of 2 years). A representative sample will be tabulated from
historical documents and compared with post-CJIC documents.

Sample Size: Two week's activity (14 days, 24 hours).

Variations from Proposed Task: None

Data Items Collected: The message receipt time and the message answer
time were recorded for each request for a check of criminal history made
during the two sampling periods. From this source data, an average re-
sponse time, in minutes, was determined for each period.

Results Obtained:

Period	Average Message Response Time (Min.)
Pre-CJIC	8
Post-CJIC	9

Comments:

Sample Size

Pre-CJIC	769 requests
Post-CJIC	780 requests

- The samples taken included all messages for criminal history
  checks regardless of the eventual source of the needed infor-
  mation. CJIC was not the only source, and there is no way to
  determine the final source on the communications form.

- During the period the post-CJIC sample was taken, terminal
  statistics show that the County Communications terminal was
  only used for approximately 50 inquiries to the system. This
  has been, reportedly, the result of the very poor geographical
  location of the terminal and the lack of manpower for terminal
  operation.

- During the post-CJIC sampling period, most requests for CJIC
  information were routed by telephone to the Sheriff's Record
  Section where terminal inquiries were made. The number and
  identity of these requests is indeterminate.

Conclusion: That results obtained from this task neither prove nor dis-
prove the hypothesis.

Task 3 - EVALUATION OF INQUIRY USAGE BY CJIC USERS

Hypothesis: CJIC will improve information availability to all criminal justice agencies.

Test Method: Measure the inquiry volume to CJIC by agency and inquiry type.

Participating Agencies: All agencies with a CJIC terminal will have their CJIC utilization measured.

Procedure: All activity will be measured by the Data Processing Department by analyzing the teleprocessing log tape. This will require additional programming to be added to the daily processing of the TP log tape.

Sample Size: Continuous utilization reports on all inquiries.

Variations from Proposed Task: Sample size was reduced to one week's activity from October 1, 1972, through October 7, 1972. Technical problems precluded the continuous gathering of this information from CJIC "day one".

Data Items Collected: The terminal identification and inquiry code for every inquiry entered into the system by a CJIC user for a one-week period (10-1-72 to 10-7-72).

Results Obtained: Because of the volume of information contained in this report, only significant extracts will be presented here.

There was a wide variation in the total inquiries entered from each terminal. The five terminals with the highest usage were:

Terminal		Number of Inquiries
San Jose P.D. - Records	(SJ21)	2922
San Jose Muni Court	(CT01)	2801
Sheriff - Booking	(SH25)	2663
Sheriff - Records	(SH08)	2594
San Jose Muni Court	(CT04)	2579

The five terminals with the lowest usage were:

Terminal		Number of Inquiries
San Jose P.D. - Detectives Admin.	(SJ02)	2
Sheriff - Reception	(SH04)	3
Los Altos P.D.	(LA41)	8
Los Gatos P.D.	(LG42)	14
County Communications	(CC21)	15

The five inquiries with the highest usage were:

	Inquiry	Number of Inquiries
CCQU	Person Details	9162
CPQN	Basic Name Inquiry	7163
CCUD	Update Docket	4404
CPQS	Person Summary	4145
CIUC	Update Add Custody	2609

The following inquiries were used less than 50 times:

CBLC	List, Booked - Complaint Pending	2
CALR	Adult Probation Referral	29
CBLE	List, Booking Entire County	26
CBLH	List, Booking Count by Booking Agency	1
CBLP	List, Probationers Booked	29
CBLR	List, Booked, to be Arraigned	3
CBUB	Update Booking - on view or warrant arrest	28
CBUV	Switch event to correct person	20
CFLR	Public Defender Referral	3
CIAC	Add Custody	15
CICT	Calculate time	22
CPSE	Seal Event	4
CPSP	Seal Person	19
CPUA	Update Alias	32
CCLP	Court Appointments	0
CFVN	Public Defender Update	0
CIIA	Release List - Arrest Code	0
CILB	Boarders Released	0

Comments: -There are 53 terminals in operation. The data collected shows that the five high usage terminals handled about 30% of the total inquiry volume. The ten high usage terminals handled about 52% of the volume.

-Of about 50 inquiries in operation, the five highest usage inquiries account for about 61% of the volume.

Conclusions: -Although this investigation does not provide a comparison of pre-CJIC and post-CJIC work load, it does present a means to evaluate terminal and inquiry usage in the future. Should consideration of a terminal relocation or elimination be made based on volume of usage? Should a low usage inquiry be consolidated with a higher usage inquiry? Should it be eliminated as too costly to maintain?

-This type of evaluation should be made on a regular basis (monthly or quarterly) to detect changes in terminal and inquiry usage to re-evaluate system performance. The programs required have been turned over to the CJIC group for their use in the future.

Task 4 - EVALUATION OF CASE RELATED TELEPHONE TRAFFIC

Hypothesis: CJIC will reduce case related interagency telephone traffic.

Test Method: Measure the volume of case related information requests at the supplier of information rather than at the requestor of information. Manually prepared phone logs will be used for this purpose.

Participating Agencies: Santa Clara County Sheriff R & I Section, Santa Clara County Sheriff Jail Section, District Attorney's Office, Palo Alto Municipal Court, San Jose Police R & I Section.

Procedure: Logs will be prepared by the County Data Processing Department and distributed several days prior to the test periods. Logs will be placed at all phones supporting information requests from other CJIC agencies. The telephone logs will tally volumes into 7 functional categories. All telephone traffic will be logged. Calls from those agencies unclassified, private attorneys, or citizens should be tallied under "Other".

Sample Size: Telephone traffic should be measured for a length of one week both before and after CJIC implementation.

Variations from Proposed Task: There were only three participating agencies contributing to this task. The Santa Clara County Sheriff (R & I and Jail Section), the Palo Alto Municipal Court, and the San Jose Police Department.

Data Items Collected: Each of the above agencies kept a record of all case related calls from the following requesting agencies:

- City Police
- Sheriff Jail
- Sheriff General
- Courts
- District Attorney
- Public Defender
- Adult Probation
- Other (all other sources)

From this source data the average number of daily calls from each requesting agency to each participating agency was determined for each of the two sample periods.

Comments: -Telephone calls to be included in these samples were to be calls for "case related information". No attempt was made to determine the number of cases in existence for each sample period for which information could be requested. A wide variation between active cases during the pre-CJIC and post-CJIC sample periods would certainly affect the results for each period.

-Sample periods were not the same for each activity.

Conclusion: Since the number of calls recorded in each period cannot be related to a case load for each period, the results cannot be used to prove or disprove the hypothesis.

RESULTS OBTAINED

PARTICIPATING AGENCY	REQUESTING AGENCY															
	City Police		Sheriff Jail		Sheriff General		Court		D.A.		Public Def.		Adult Pro		Other	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
San Jose Police	100	100	0	0	5	2	0	0	0	4	0	0	10	1	20	7
Sheriff	36	35	25	57	29	112	14	28	5	9	7	12	16	30	258	5
Palo Alto Muni Court	5	3	4	6	1	0	0	1	3	5	3	0	6	2	48	2

NOTE: Numbers indicate average calls per day.

Task 5 - EVALUATION OF CII-15 FORM BACKLOG ,

Hypothesis: CJIC will speed reporting of booking dispositions, i.e. Form CII-15, to the State.

Test Method: Measure the back-log of unreported CII-15's at the courts.

Participating Agencies: The five municipal courts and superior court.

Procedure:
Municipal Courts and Superior Court: Take an inventory of 1) outstanding CII-15's total volume, and 2) list the 20 earliest dated reports outstanding (by date of disposition).

Data Processing: The CJIC system will generate figures on volume and turnaround of CII-15's once the system begins operation.

Sample Size: Consider all, not sample ("universe").

Variations from Proposed Task: The Superior Court did not participate.

Data Items Collected: Each court was requested to count the backlog of CII-15 forms on one specific day and report the number involved. They were also asked to list the disposition date of the 20 oldest unreported forms. Post-CJIC information on CII-15 forms preparation was gathered by the Data Processing Department during the production of these forms.

Results Obtained:

PRE-CJIC

Court	Survey	Backlog	Oldest Date
Los Gatos Muni	11-23-71	None	
Sunnyvale Muni	11-23-71	None	
Palo Alto Muni	11-23-71	None	
Santa Clara Muni	11-23-71	15	(10) 11-22-71
San Jose - Milpitas	12-30-71	450	(5) 11-23-71 (20) 12-13-71

POST-CJIC

All CII-15 reports are now turned out by computer. There is no way to determine how many are produced for each agency. Production of these reports is made on a bi-weekly basis. An average of 1100 CII-15 reports are produced bi-weekly.

Comments: - Backlog in all courts has now gone to zero; however, the bi-weekly production consists of reports from one day to two weeks old.

- Since present production cannot be broken down to the number produced for each court, there is no way to compare pre-CJIC and post-CJIC volumes.

- A problem did arise in the Spring of 1973 regarding the format of the Disposition Report which was generated for the FBI. Significant

programming changes were required and the estimated completion date for the revised report is October, 1973.

Conclusions: The computer production of CII-15 reports has provided steady and predictable report submission.

Task 6 - EVALUATION OF CLERICAL TIME USED TO PRODUCE CII-15 FORMS.

Hypothesis: CJIC will save clerical time in reporting dispositions to the State, i,e, CII-15 reports.

Test Method: Record monthly total hours required to prepare form CII-15's under the manual system and under the CJIC system.

Participating Agencies: All CJIC agencies will be surveyed for the number of hours spent in preparation of form CII-15.

Procedure:
Data Processing: Prepare questionnaires to be sent to all CJIC agencies (before and after CJIC implementation) asking for the number of clerical hours spent on preparation of form CII-15 and the base hourly rate for such personnel.

CJIC agencies: Fill out questionnaires and return to Data Processing for tabulation.

Data Processing: Responsible for deriving unit cost of automated preparation in CJIC.

Sample Size: Four weeks activity.

Variations from Proposed Task: All CJIC activities did not participate.

Data Items Collected:

- Total clerical hours spent preparing CII-15 forms for each activity.

- Average hourly rate of clerical personnel preparing CII-15 forms for each activity.

- Approximate credit cost of producing reports by computer.

Results Obtained:

ACTIVITY	CLERICAL HOURS IN 4-WEEK PERIOD	AVERAGE HOURLY RATE
San Jose P.D.	240	4.00
Palo Alto Muni	11	5.27
Palo Alto P.D.	5	3.20
Santa Clara Muni	4	5.27
Mountain View P.D.	20	4.39
Sunnyvale Public Safety	7	3.68
Los Gatos Muni	105	4.43
San Jose-Milpitas Judicial District	40	4.02

Note: All other activities reported they did not deal with the form or did not report at all.

The approximate unit cost of the computer production of this form is 28.8 cents.

Comments:

- Since the reports on clerical time from CJIC activities reported only time and hourly rates and did not produce a record of the number of CII-15 forms produced, there is no basis of comparison of pre-CJIC and Post-CJIC unit costs.

- The unit cost of producing CII-15 forms only includes the cost of the machine time to create and print the forms. It does not include data entry or storage costs.

Conclusion: No real cost comparison can be made unless it is assumed that the pre-CJIC hours and rates produced the same volume of forms as are now being produced by CJIC. If this assumption is made, it can be shown the pre-CJIC unit cost of producing CII-15 forms was approximately 75 cents. However, there is no convincing evidence to support this assumption.

INTERGOVERNMENTAL BOARD ON ELECTRONIC DATA PROCESSING

Criteria for Evaluation of Intergovernmental Information Systems

The broad purpose of the Intergovernmental Board on Electronic Data Processing (IBEDP) is to promote and insure compatibility between information systems that cross governmental and jurisdictional lines. As one means of achieving that goal, the Board has adopted the following criteria for the evaluation of intergovernmental information systems.

Use of Criteria:

These criteria are being applied initially to those intergovernmental systems that relate to the subject matter area of community safety, i.e., law enforcement, criminal justice, traffic, courts, civil defense, mutual aid. Additional criteria have been developed as needed for application to these community safety systems. It is intended that these criteria be revised and improved in the process of their application to systems relating to other fields, for example education or public health.

The IBEDP will provide review and evaluation of individual and interrelated intergovernmental information systems with emphasis on communication, cooperation and coordination between and among the jurisdictions necessarily involved in the system.

This review will be concurrent with ongoing activities to plan, design, develop, or operate the system. Hence, there will be no cause for delay by the IBEDP review of current status.

The evaluation process will consist of comparing pertinent features of the intergovernmental information systems to stated general criteria for such systems. The stage of development (planning, design, development, testing, implementation, operation) of all or part of the intergovernmental information system will be recognized in the application of the criteria.

Criteria for System Review

1. The system must fit the description of an intergovernmental information system.

The definition of an Intergovernmental Information System as adopted by the IBEDP is: broadly stated, a network which provides for current or planned transfer of information to or from separate governmental jurisdictions; more directly, an information system, especially computer-based, which provides for data collection, storage, processing, retrieval or exchange between governmental entities.

2. The justification for the system must be clearly stated.

a. What basic need does the system meet, or intend to meet?

b. How does the system fulfill that need? (Based on the description of the system to be presented by those responsible for the system.)

3. The system must recognize and identify the extent of current or potential involvement of other jurisdictions.

a. How does the system affect other jurisdictions?

b. Is each other jurisdiction aware that it is or can be involved in the system?

c. What is the specific means by which each jurisdiction is made aware of its current or possible involvement? (Such as a specific contact, periodic notices, a written agreement, or continuing intergovernmental steering committee.)

4. The system must provide for current and anticipated future information system interface.

a. Is there a consensus among the affected entities on standards for such items as data element definition and content, message types and format, volume of traffic?

b. Are all interface problems identified, defined and documented?

c. To what extent must a balance be achieved between the needs of an individual entity and the total system for all other entities involved in the system?

5. Continuing coordination must be assured among the jurisdictions involved in the system.

a. How does the system recognize the long-term participation of all associated entities?

b. To what extent is the system agreed to and supported by the policy boards and pertinent executive agencies of the entities involved?

c. How is this agreement and support exhibited? (Has a formal joint exercise of powers agreement been considered? Would such an agreement be necessary, or would it improve the coordination?)

d. How would the "drop-out" of one or more jurisdictions affect the presently conceived system?

e. Does the system provide for a mechanism to measure and evaluate the intergovernmental effectiveness of the system?

6. The system must define and provide for the appropriate levels of data security and confidentiality.

   a. To what extent is there a requirement for security safeguards?

   b. What are the safeguards required and how are, or will, they be implemented?

7. The system must address itself to alternatives of system design and development. (e.g., to what extent has consideration been given to such alternatives as incremental development to realize an immediate functional return while gaining experience for future development?)

8. The system must provide for anticipated expansion.

   a. How does the system provide for increases in traffic volume?

   b. How does the system provide for the addition of new types of anticipated traffic?

   c. Is there a procedure for analyzing and authorizing future system change?

9. The system should address itself to the possibility and feasibility of it becoming a prototype or pilot program that could be transferred to, or expanded to, other governmental entities.

   a. How can the system be transferred without undue modification in system design or implementation?

   b. Does the system depend on complex or exotic concepts, procedures or programming languages?

10. The system should be able to accept inputs from outside sources and provide information to entities outside the system when found appropriate.

11. The system must include adequate controls by which each participating entity may allow, restrict or otherwise control the appropriate access, proper confidentiality procedures and adequate levels of performance.

12. The system should take advantage of previous or current developments by other governmental jurisdictions to avoid unnecessary duplication of effort or superfluous systems.

13. A system development project should consider the need for the development of staff capacity in user organizations to support the operation of the system.

   a. Does the system consider the importance of user organization staffing needs, policies, training, and other staffing procedures?

   b. Does the system advance the internal staff capabilities of user organizations?

END