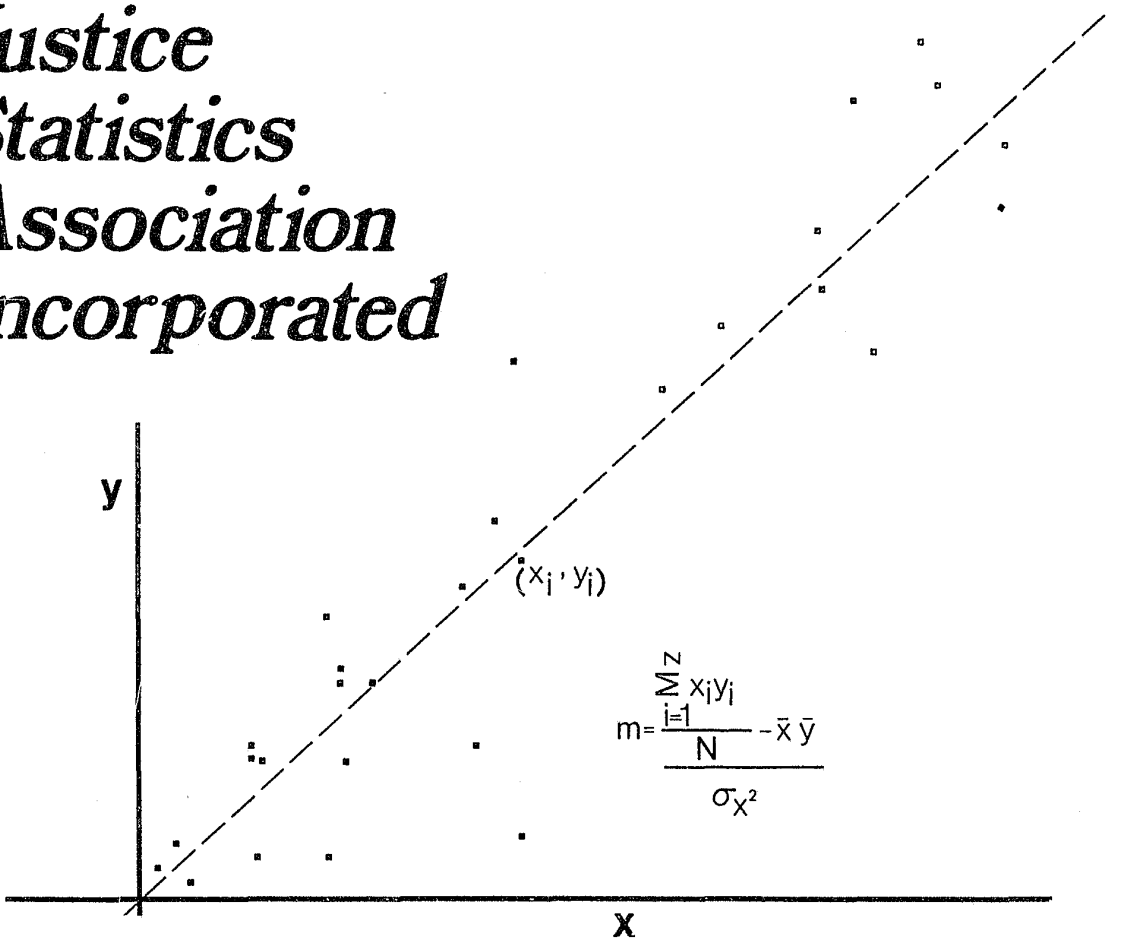
Criminal Justice Statistics Association Incorporated



Proceedings of the Spring 1978 Conference in Williamsburg

PROCEEDINGS OF THE

CRIMINAL JUSTICE STATISTICS ASSOCIATION, INC.

SPRING 1978 CONFERENCE IN WILLIAMSBURG

FEBRUARY 22-24, 1978

PREFACE

These proceedings are published by the Association "to promote the development and exchange of methods of criminal justice data collection, analysis and the presentation of those data".

Technical papers, methodology forums, and analysis sessions were presented at the Williamsburg meeting. I would like particularly to call your attention to the analysis sessions on status offenders and career criminals. In these sessions the combined results and experience of the Statistical Analysis Centers in the various states were examined in order to form as comprehensive a national picture of these important policy issues as possible.

In each methodology session, summaries of the work being performed by the states were presented. Publications which address both victimization and models from a needs point of view are available, however, this is the first time information about particular research developments in the various states has been presented.

The technical papers which were presented were, one again, of a high quality. I would like to add my thanks to those of the other participants for the excellent work that went into the preparation of these papers.

Inquiries about the Association should be addressed to:

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Washington, D.C. 20004

Roger L. Hall
Program Chairman

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WEDNESDAY, FEBRUARY 22, 1978

11:00 Registration - Center Room

12:00 Executive Committee Meeting - Cascades Restaurant

2:00 WELCOME Speaker - Mr. Richard N. Harris, Director
Division of Justice and Crime Prevention

KEYNOTE Speaker - Mr. Benjamin H. Renshaw, Director
Statistics Division, NCJISS

3:30 Business Meeting (Election of Officers)

Update on the Bureau of Justice Statistics - Mr. Ruffin Blaylock

7:30 Hospitality Hour - Cascades II

THURSDAY, FEBRUARY 23, 1978

8:00 Registration - Center Room

8:30 Concurrent Technical Sessions

Technical Session A - Moderator, Charles McCarty - Center Room

AUTHOR	TITLE OF PRESENTATION
Bob Lehnen	Disclosure Avoidance Policy
Ruth Perrin	Crime Rates Workbook
Steve Stack	The Effect of Income Inequality on the Rate of Homicide and Property Crime: A Test of Merton's Anomie Theory
Don Genadek	OBTS Analysis
Bill Hamm	Recidivism in a Matched Sample of Diverted Juvenile Defendants

Technical Session B - Moderator, Cindy Turnure - Cascades I

AUTHOR	TITLE OF PRESENTATION
Fred Anderson	Formula for State Aid to Localities for Law Enforcement
Tony Croce	The Use of Uniform Crime Reports in Management and Administrative Statistics
Carol Kaplan	Confidentiality of Research and Statistical Data

11:00 Lynn A. Jensen - National Courts Statistics Project

11:50 Bus to Christiana Campbell's Tavern - Motor House Lobby

12:15 Luncheon - Christiana Campbell's Tavern

1:00 Tour

4:00 Analysis Session: Career Criminals-Anthony Croce, Chairman

5:45 Analysis Session: Status Offenders-Michel Lettre, Chairman

7:30 Hospitality Hour - Cascades I

8:30 Banquet Meeting - Cascades II - Speaker, Mr. Edward McConnell, Director, National Center for State Courts, Williamsburg

FRIDAY, FEBRUARY 24, 1978

8:30 Victimization Methodology Forum - Carolyn Shettle, Moderator

PANELISTS

Al St. Louis - Texas
James Villone - South Dakota
Bob Lehnen - NCJISS
Bob Allison - New Hampshire

10:00 Criminal Justice Model Methodology Forum - Michael Devine, Moderator

PANELISTS

Stuart Hall - New Hampshire
Michel Lettre - Maryland
Ben Renshaw - NCJISS

11:30 Don Manson - The Relationship of the System Development Division to the CDS Program

12:00 Adjourn

Meeting of New Executive Committee - Cascades Restaurant

DEVELOPMENTS, PROSPECTS AND CHANGE--THE FUTURE OF STATE STATISTICAL CENTERS

by

Benjamin H. Renshaw, Director, Statistics Division
National Criminal Justice Information and Statistics Service (NCJISS)
Law Enforcement Assistance Administration

The core issue before this Association as a collectivity and before its individual members is the programmatic and financial perpetuation of state criminal justice statistical functions. We are meeting at a time of considerable uncertainty, with the final decisions on the nature of proposals for LEAA reorganization and statutory reauthorization yet to be made. But this uncertainty is not a reason, rationale, or excuse for this Association to defer confronting the substantive questions that affect your future. This is the heart of what I want to place before you today, and during the course of your meeting--various scenarious concerning the future of the collaborative and cooperative Federal--state relations which I believe must exist if there is to be genuine progress toward a national criminal justice statistics program.

Traditionally--or at least for the last two years--we have looked at prospects in the context of current developments in technology, data base expansion, new statistical series, LEAA policy, technical assistance, evaluations, and relationships of the state statistical analysis center to other elements of the Comprehensive Data Systems (CDS) program. Let me cover some of these developments at this point. As you all know, these items continue the implementation of the LEAA Program Plan for Statistics, 1977 - 1981 and are part of the effort to meet the objectives laid out in that document.

STATUS OF THE LEAA STATISTICAL PROGRAM

Two events have taken place since we met last March 8th in New Orleans--the closing of the LEAA regional offices and the move of all NCJISS staff including the returning regional system specialists (and many other LEAA functions) into the Old Post Office Building.

Whatever difficulties these two occurences have had for us, there have been new problems in our contacts with you and with other persons in your state involved with the CDS program. So let me begin with the mundane, basic information on our organization, contacts, and current way of doing business.

Current NCJISS Organization and Contacts:

The National Criminal Justice Information and Statistics Service (NCJISS) is headed by Harry Bratt, Assistant Administrator. The two major divisions of NCJISS are the Statistics Division (Benjamin H. Renshaw, Director) and the Systems Development Division (Wayne P. Holtzman, Director). There also is a Privacy and Security Staff headed by Carol G. Kaplan.

The Statistics Division consists of the National Statistical Programs Branch and the State Statistical Programs Branch. Program responsibility for the Comprehensive Data System (CDS) effort is in the State Statistical Programs Branch under Paul Sylvestre. However, the Systems Development Division handles the CCH portion of the OBTS/CCH module of CDS, and is responsible for the related OBSCIS and SJIS programs. When the LEAA Regional Offices were abolished, seven of the Regional Systems Specialists transferred to NCJISS; most of them are involved with the CDS program.

To avoid lengthy delays, it is essential that documents and correspondence be addressed properly. The following items should be sent to the Office of the Comptroller, Grants and Contracts Management Division (OC/GCMD):

1. Grant applications;
2. "Administrative" supplements to grant applications (such as SPA endorsements, A-95 clearances, etc.);
3. Narrative Progress Reports;
4. H-1 Financial Reports; and,
5. H-3 Request for Funds.

The mailing address for the foregoing items is:

OC/GCMD Control Desk
LEAA - U.S. Department of Justice
Washington, D.C. 20531

The following items should be sent to NCJISS, preferably addressed to the individual project monitor. (NCJISS project monitors are listed on Attachment "A"). However, correspondence will reach the proper person promptly if it is addressed to Harry Bratt, Assistant Administrator, or (inadvertently) to the wrong member of the NCJISS staff.

1. Requests for grant adjustments (including requests for time extensions or budget changes, submittal of documents in response to Special Conditions, etc.).

2. Substantive revisions, programmatic or fiscal, to grant applications when they have been requested by the project monitor.

3. Inquiries and miscellaneous correspondence.

The mailing address for these items is:

Name of Person
NCJISS
LEAA - U.S. Department of Justice
Washington, D.C. 20531

Telephone numbers are also on Attachment "A". We urge you to pass this information on to others in your state that may benefit from understanding our present way of doing business.

CDS--Developments, Reassessment and Revision:

Faced with expected budget reductions in FY 1977, while additional states were qualifying for CDS grants, NCJISS sponsored in mid-June, 1977, a seminar of state and local officials as well as other criminal justice data "experts". Many state representatives participated. The purpose of this conference was to assess the progress under the CDS program and alternative future developments, and to make recommendations to NCJISS on program revisions which would make optimum use of the available funds in order to achieve the aims of the original program.

The consensus of the group was that the program should be continued with minimum changes, but with flexibility to respond to budget cutbacks by reducing the number of recipients or modifying programs. It was agreed that we should loosen the ties between OBTS and CCH so that states which had difficulty with designing a single project to create both of these capabilities could opt to develop its OBTS data from other data systems such as SJIS, OBSCIS, PROMIS, or regional subject-in-process systems. We expect, of course, that states which have received grants for implementing OBTS/CCS systems would continue such developments.

The CDS guidelines are presently being revised to reflect these and other changes.

One of the provisions of the revised guidelines is that NCJISS will place a high priority on funding existing commitments--within guideline limits and assuming satisfactory progress under the prior grant. It is, therefore, not likely that a grant can be made in FY 1978 for a CCH only or OBTS only grant since all grants are likely to be continuations of projects undertaken. We expect that by fiscal year 1979, we may be able to approve OBTS or CCH grants. Approval of a CCH stand alone grant would still require that the project be designed to include complete disposition reporting systems and that criminal histories be made available to all criminal justice agencies. In addition, the state would provide assurance that OBTS data would be produced, but that this may be developed from other data bases than CCH. Emphasis will be added that the grants are for state level systems primarily for state and local use. Linkage to a national system is desirable but not a state requirement.

The other major change to be made in the CDS guidelines is to greatly strengthen the requirement for CDS action plan updates, or, as I prefer to call it, the CDS status report. There has been a long standing requirement for an annual CDS action plan update. We have found that some grant applications vary considerably in detail from the original CDS action plan with no plan update which justifies some of the details in the plan. Beyond a certain date, therefore, no CDS grant will be approved without an accepted CDS status report on file within the prior year. Such a status report would include, at a minimum:

- An inventory of existing criminal justice systems and statistical programs at the state level and local and regional systems where the city or county population exceeds 250,000;

- This inventory would include system configuration, data elements collected and interfaces between systems;

- The report would include a 5-year projection, including sequence of development efforts and rational for such sequence; and,

- Projected sources and levels of funding for each component by year including state and local funds.

For the SAC, the new guidelines will provide increased emphasis on the delivery of analytical products. The guidelines will no longer describe the function of the SAC to coordinate the development of information systems. Rather, SAC is recognized as having to coordinate with data systems. The guidelines differentiate between the various services which SAC may provide such as statistical analytical services as distinct from technical assistance in analysis, data collection or tabulation. A significant change is in the area of MAS where, instead of requiring an unspecified

annual MAS report, SAC is required to assess the needs for MAS data, develop an implementation plan and proceed with such implementation. The requirement for a SAC advisory or policy board is further clarified as is the matter of organizational location. Specifically, the state is required to indicate how the proposed location affects SAC objectivity, independence and visibility.

Another change which will be reflected in the revised guidelines concerns SAC funding. Due to budget constraints and the agency's emphasis on assumption of costs, a SAC assumption of costs policy was issued last Fall. This policy which will go into effect in FY 1979, sets the following funding levels for SACs:

	TOTAL FUNDING MAXIMUM		
1970 STATE POPULATION	GRANTS 1-3	GRANT 4	GRANT 5
More than 3,500,000	$175,000	$87,500	-0-
2,100,000 to 3,500,000	$147,500	$73,750	-0-
Less than 2,100,000	$122,000	$61,000	-0-

We recognize that some states will experience difficulty in seeking assumption of costs for SAC within a one year period. Unfortunately, we cannot change the data for its implementation. Exceptions to this policy will be granted only in extremely unusual circumstances. To determine how this assumption of costs policy will effect SAC grants to your state, please contact the LEAA/NCJISS specialist who has resresponsibility for CDS liaison to your state.

The revised SAC guidelines also contain a new limitation on victimization surveys. In SAC grant applications, applicants wishing to use grant funds to support a victimization survey will be required to discuss their plans for such surveys and the need for such data and to provide assurances that the survey will meet methodological standards for the conduct of such surveys. In addition, all SAC grants which include funds to support a victimization survey will be awarded with the condition that all the basic methodology, sampling frame and procedures, survey instruments and other facets of the effort must be submitted to LEAA, NCJISS for review and approval and that no funds shall be expended on such surveys except for pretesting until LEAA approval is rendered.

In recent years, we have observed an increase in the number of SACs conducting victimization surveys. In some instances, these surveys produced data which was also available from the National Crime Survey (NCS). While we recognize that the state level NCS data was often made available in less than a timely fashion (future efforts should remedy this situation), NCJISS cannot justify duplicative data collection. Therefore, all SACs wishing to conduct a survey must show the need for such data. In addition, we are concerned that SAC funds be used in the most efficient and effective manner. Since we hope to ensure that only high quality surveys are conducted and that SAC funds are efficiently and effectively used, we will require the application to contain assurances

that the SAC will meet all LEAA standards for such surveys. The special conditioning of all SAC grants will enable us to ensure quality and provide assistance to all states who need to gather such information. We plan to provide further assistance to states and localities who wish to conduct victimization surveys through the production of a local victim surveys handbook, to be produced in the coming year. This handbook will outline various techniques and methods which are essential to a successful survey effort.

As many of you know, we have already developed and distributed a monograph, "Local Victim Surveys--A Review of the Issues" which addresses basic issues such as sampling, interviewing, cost, efficiency and ethics. (Garafalo, Jones, Application of the National Crime Survey Victimization and Attitude Data--Analytic Report SD-JAD-2.)

While most of you may not be concerned with the UCR program, I will briefly go over the proposed changes affecting that program. In fiscal 1977 it became necessary to cut funds for this project to half the previous limits. This limit is being carried into fiscal 1978 and as best we can estimate at this time, into fiscal 1979. It is possible that as the demand for competing systems in 1980 and beyond decrease, we may be able to increase funds for UCR to permit further enhancement of UCR such as switching to an incident based system or for expansion of audit activities.

Needless to say, these new guidelines will be available for comments prior to official promulgation.

In the past year, LEAA's Statistics Division has continued its support of the development of state administered Uniform Crime Reporting programs. In Fiscal Year 1977, the most recent year for which complete data is available, more than $1,280,000 was awarded to 14 states to continue development of such systems. In Fiscal Year 1978 we anticipate that 15 to 25 states will seek funds for UCR.

During the last year, LEAA contracted with an independent consultant to assess the impact of CDS funded UCR programs on both the FBI's national program and the states' abilities to use crime data for crime analysis. The contractor looked at the programs in eight states, representing a cross section of approaches to crime incident reporting. Copies of the Executive Summary are Attachment "B" to this presentation.

For the third consecutive year, LEAA provided funds so that the FBI could bring together state UCR program directors for a national conference. These conferences afford participants the opportunity to provide input and advice on the future direction of UCR. An interesting side note is that within the last year a number of states have expressed a desire to come together in regional UCR conferences. In April, 1977, such a meeting representing a number of Southern states was held in Little Rock, Arkansas. Although

this group did not seek LEAA funding for this activity, we would be receptive to the idea of giving a limited number of small grants or contracts for these kinds of meetings. LEAA is firmly committed to the notion that states should provide direction to UCR.

Several developments in the OBTS/CCH component of CDS have occurred since your last meeting. While the CCH program is not your immediate responsibility, that data base is of direct concern to you. We do not foresee any major change in the CCH program during FY 78. The policy of closer monitoring of the existing grants with funding limited to continuation grants that was adopted in FY 77, will continue through FY 78.

However, the Attorney General has appointed a committee to work up a plan for the CCH program that will meet the needs of the entire criminal justice community. This committee is comprised of representatives from the Department of Justice, the FBI, LEAA, the sub-committee on Civil and Constitutional Rights, and a private contractor (technical advisor). The preliminary draft of the plan is due for review by the Attorney General's Office no later than March 24, 1978. After the completion of the review by the Attorney General's Office a draft of the plan will be distributed to the users and contributers of the CCH data for their comments and suggestions prior to any program resolution. It is anticipated that these changes can be implemented during FY 79.

To date no decision has been released on the configuration of a national CCH program, whether the decentralized record keeping system (index concept) or partially centralized record keeping system (single state/multi-state concept).

Work is continuing on OBTS data gathering in order to publish a report. Four states, Arkansas, California, Minnesota, New Jersey were able to provide at least partial data for a pilot OBTS report. The data are being loaded by the University of Illinois for Bob Lehnen and Will Hutchins to compile a report.

OBTS reporting standards were submitted to selected states for comment. As a result the standards were modified and can be released.

We are currently having the states canvassed for their OBTS reporting capabilities. When completed, final standards will be sent to those who can report.

Monitoring and Assessment Visits During 1978:

With the increasing scrutiny being given to the CDS program, we have been directed to give highest priority in staff time and travel funds to monitoring and assessment visits. You may recall that in the Fall of 1976, NCJISS undertook a series of assessment visits to CDS grantee states. It had been planned to make rather detailed visits to about two-thirds of the CDS active states. Because of illness, diversion of staff to other projects and finally, the

closing of the regional offices, we only completed eight. Of course, these visits were in addition to the usual monitoring effort of the regional offices. We found these visits to provide an insight to the various projects that we have not acquired from the regional offices monitoring activities. We became aware of both serious problems and achievements beyond our expectations.

We expect to be able to make a formal visit to almost every state. This visit will usually be of two to four days duration, particularly when all three components are being developed. We expect to visit not only with project personnel but also with users and potential users, members of the advisory committees and with persons in general government from whom we can gain insight as to the perceived utility of the various CDS components and the outlook for state assumption of costs.

The timing of the visit will be arranged with you and the other CDS grantees. We will ask you to make appointments with others that we wish to meet. At the beginning, these visits may include up to three persons as we attempt to have the personnel formerly from the R.O.'s and those from the central office to conduct the visits in a uniform manner. After the first few months these visits normally will only involve one or two persons to a state, depending upon the complexity and number of activities to be visited. We expect to make most of this fiscal year's visits between the end of February and the end of August. Our experience indicates that in September we will be completely tied up in grant processing. In the next fiscal year, we expect to begin our visits early and have a more relaxed schedule.

If your state is on the schedule for March, you should have already been consulted about precise timing. The schedule later in the year must be considered somewhat tentative. Opportunities or crises may present themselves which may make changes in our plans necessary.

When Congress amended LEAA's enabling legislation in 1976, it emphasized the importance of auditing, monitoring, and evaluation of the LEAA program. Section 501 of the Omnibus Crime Control and Safe Streets Act (as amended) requires the LEAA Administration to develop rules and regulations to determine the impact and value of programs funded under the Act, and to determine whether such programs once implemented have achieved the goals and objectives stated in the original plan and application.

Many of these activities were the responsibility of the LEAA Regional Offices. When Attorney General Bell made the decision to close the Regional Offices at the end of September, 1976, it soon became evident that alternative strategies would have to be developed to continue monitoring, auditing, and evaluating the LEAA program. One obvious alternative is to give the LEAA Program Offices in Washington, D.C., an increased responsibility, and this has been done. For the CDS program specifically, this means that the National Criminal Justice Information and Statistics Service (NCJISS) will be

taking a much more active role than it did in the past in the monitoring and evaluation of the projects being done by individual states.

The second part of the strategy consists of an expanded role for LEAA's Office of Audit and Investigation (OAI). In the past, OAI concentrated on the financial and compliance aspects of LEAA funded programs, and it will continue to do that. In addition, it will now become involved in the programmatic aspects of projects.

The Office of Audit and Investigation has five Area Audit Offices located in Atlanta, Chicago, Denver, Sacramento, and Washington, D.C. Each of these offices has been assigned a number of program areas for review. The D.C. office has been charged with conducting a review of the CDS program. Preliminary discussions identified two possible strategies. One would have been to evaluate a particular CDS component, such as SAC or UCR. The second strategy would be to look at the entire CDS program, and attempt to evaluate its impact at the local, state, and federal levels from the perspective of whether it has achieved the goals and objectives stated in the CDS Guidelines and as enunciated in the individual state Action Plans and grant applications.

Our most recent discussions with OAI staff responsible for implementing the review have stressed the complexities inherent in assessing the CDS program, regardless of the strategy. At this time, we have been told it is virtually certain that OAI will adopt a "systems" approach. That is, it will be visiting a number of states which have developed or are in the process of developing all or most CDS components. The OAI is not yet at the stage where it can identify which states will be visited, although the thinking is that at least one state but no more than two from each of the Area Audit Office's jurisdictions would be selected. The OAI has assured us that it will coordinate these visits with NCJISS to ensure that the two offices' teams do not show up in the same state the same day. The present plan calls for the site visits to be made between May and end of August, 1978.

After a site state is visited, the OAI team will prepare a report describing its observations. This report will then be distributed to each party in the state which was contacted during the visit. After all site state reports have been completed, a national report will be written which will consist of an overview of the CDS experience and a set of recommendations to the Administration of possible program changes.

Other NCJISS/LEAA Programs of Interest to SACs:

- Baseline Data File

As you know, NCJISS has accepted responsibility for carrying out the recommendation of the National Advisory Committee on Criminal Justice Standards and Goals that called for the creation of a National Criminal Justice Baseline Data File. This project was undertaken by Will Hutchins with assistance to SACs as a key aspect.

We have already completed the design and test phase of this program and are well into the implementation phase. We are beginning to load data and to write the software to handle them. We are far enough along to lay plans for introducing the file to the field and we will need your help to do it.

We intend to conduct two training sessions. The first will consist of a two day session to test the interactive program developed for baseline on staff from Statistical Analysis Centers adjacent to Washington, D.C. We will invite the SACs to assign staff to attend the session which will be held in late June. There they will learn to use the interactive program and actually manipulate the initial data base we will have up by that time.

The second program will be held at the University of Michigan at Ann Arbor and will run for two weeks. We have made provision for twenty professional and paraprofessional positions to make up this class. Their efforts will be more technical and will require prior experience in handling statistical programs.

Funds are available to pay transportation and lodging costs for both training efforts.

For both sessions we want to restrict the classes to those persons who have responsibilities for developing or analyzing criminal justice data as part of their everyday efforts. If you are interested in these programs and have qualified staff you wish to participate, please see me or other NCJISS staff attending this meeting and we will provide you with an application. NCJISS staff will screen all applications and decide on who can be accepted for these first training efforts.

- Establishment of a Criminal Justice Data Archive

In order to make machine-readable data on crime and the criminal justice system widely available in an easy-to-use form, LEAA has established a National Criminal Justice Data Archive at the University of Michigan. The archive is designed to promote expanded use of available data in research, planning, and policymaking.

Data files and full documentation will be stored and disseminated to users on request. Data may be obtained on tape or may be accessed on-line to suit the needs of the user.

In addition to providing data, the archive will offer technical services and consultation on the use of the data. Assistance in combining data elements to create custom built analysis files will be available. The user will also be able to obtain advice on appropriate software.

Periodic training courses in the use of archive resources will be offered. Training will be given in several formats to tailor the instruction to the experience of the potential user.

Currently, this project is in the initial phase of data acquisition and processing. All National Crime Survey data files will be obtained. Major national statistical series in the area of criminal justice will be included. Additionally, data collected as a part of major research and evaluation projects will be included.

By April 1, 1978, some data will be ready for dissemination and the user consultation services will begin full scale operation.

A two week training course will be offered this July as discussed earlier in the section on Baseline data.

More detailed information on archive operations may be obtained from Michael Traugott, National Criminal Justice Data Archive, ICPSI, P.O. Box 1248, Ann Arbor, Michigan 48106. (313) 763-5199.

- Provision of Expenditure and Employment Survey Data

For the third year, we are providing special tabulations of expenditure and employment data for use by state agencies. These printouts contain data for all governments that responded to the survey of FY 1976 criminal justice expenditure and employment. The format is identical to that used last year.

We initially provided these tabulations to assist the states in meeting the comprehensive plan requirements. This year some states are not required to submit all elements of the comprehensive plan because they were given multi-year approval of their plans in the past. However, we will continue to provide these tabulations and supplemental materials because many states have indicated that they are useful.

The format and content of these tabulations was developed to be responsive to the planning grant requirements. However, different format and/or data elements could be used. Please let us know if you have any suggestions to improve the utility of these materials for your use, or if you wish additional data from the survey.

- Status of the Dictionary of Criminal Justice Data Terminology

In April of 1977 we published the first edition of the "Dictionary of Criminal Justice Data Terminology". The purpose of this dictionary is to provide standardized definitions for data collection and exchange. At the present time it is frequently impossible to compare statistics for various jurisdictions because various terms and definitions are used.

It is our hope that as more and more states adopt uniform definitions we will approach our ultimate goal of comparable data.

The first edition was produced by SEARCH Group, Inc. under an LEAA grant. SEARCH used a committee made up of criminal justice experts from all components of the system and from all levels of government. The terms and definitions in the first edition were the result of the committee's experience and best judgment as to which terms were most important and could be defined within the grant period.

In October of 1977, LEAA awarded a grant to SEARCH Group, Inc. to produce a second edition. This edition will be considerably larger than the first, and will change first edition definitions that user comments indicate need revision.

It is very important that the second edition have the benefit of as many comments as possible. If you have not already sent comments to me, please do so and I will transmit them to the SEARCH project staff. I have brought along some copies for those of you who do not have one in your office. If anyone wishes additional copies, please give me your mailing address and the number of copies desired, and I will have them sent to you.

I do want to emphasize that LEAA has no intention of attempting to mandate use of the Dictionary definitions. However, our hope is that various jurisdictions will voluntarily adopt the definitions whenever and wherever this is possible. For this reason, it is important that we have the input from as many different sources as possible to maximize the ease with which you can use the definitions.

New Data Series and Reports of Direct Interest to SACs:

Among the new statistical efforts initiated under the LEAA Program Plan for Statistics, two--the first national report of state court statistics since 1946, and a report presenting a comparison of the transaction statistics of fourteen cities involved in the Prosecutor's Management Information System--will be released in the coming months. Both are data series that SACs should review.

Annual Report of State Court Statistics. Under a grant to the National Center for State Courts, this report and a comprehensive body of materials on state court statistics and the systems from which they are derived have been produced. The first report provides calendar year of data for 1975; the 1976 report is under development and a 1977 report is provided for in the second year grant to the National Center.

The first annual report presents available data from 50 states for state appellate courts, trial courts of general jurisdiction, and those courts of limited jurisdiction which provide trials in felony criminal matters. As this series evolves we will try and meet such problems as variations in court structure, variations in subject matter jurisdiction, definitional problems including the critical unit of court processing, and incomplete and inaccurate data. But an excellent start has been made, and within another year we should have three data points on cases pending, filed, and disposed at the state level with increased understanding of the dimensions of the backlog problem.

There is also an up-to-date description of the organization, jurisdiction, staffing, and caseload statistics presented by state.

PROMIS Cross-City Report. Through the Institute for Law and Social Research, a major report is being prepared presenting and analyzing the transaction statistics of 14 cities that have implemented the PROMIS system including New Orleans, Los Angeles, Detroit, Salt Lake City, Cobb County, Ga., Indianapolis, New York, and the District of Columbia. Such data as disposition of criminal cases from arrest, victim-defendant relationship for various offenses, rejections at screening, dispositions by plea, sentences of incarceration, length of time for case processing, impact of career criminal reports will be included.

The report makes the fascinating point that the same factors that Felix Frankfurter and Roscoe Pound found impacting the administration of justice in Cleveland in 1922 and other jurisdictions in the 1920's and early 1930's are still the norm--the most common disposition is outright dismissal, there is lack of cooperation in producing evidence, and there is a serious problem in obtaining and sustaining the cooperation of witnesses.

Technical Assistance and Training:

NCJISS currently has several technical assistance and training efforts of interest to SACs. While these efforts are conducted through LEAA offices other than the Statistics Division, further information may be obtained through the Statistics Division.

Technical Assistance for Information Systems. The Systems Development Division of NCJISS has developed specifications to provide technical assistance (TA) for automated information systems. A major part of this effort will be geared toward providing TA for the planning, development, implementation and operation of OBTS/CCH. Assistance will be available to state level agencies for such services as: (1) initial OBTS/CCH planning including alternative design and data acquisition; (2) identification of other OBTS/CCH systems which are suitable for transfer; (3) determining the requirements of interfacing systems such as NCIC/CCH and other national reporting; (4) forecasting cost requirements; and (5) preparing educational materials concerning the OBTS/CCH concept, its development and applications.

This TA package will also include other assistance to state and local operating agencies in such areas as hardware and software selection, project planning development, and information systems state-of-the-art concepts and characteristics.

The Request for Proposals has been issued and the services should be available in the summer or fall of 1978. Information will be provided to the State Planning Agencies on the specifics of the contract and the services to be provided.

SEARCH Clearinghouse and Technical Assistance Project. This ongoing effort with SEARCH Group, Inc. provides:

1. Computerized Directory of Automated Criminal Justice Information Systems which permits SGI to match requirements of agencies planning CJIS development to capabilities of operational system; and,

2. TA for the transfer of information systems including;

   - Requirements analysis
   - Grant application and RFP preparation
   - Proposal and project evaluation
   - Contractor liaison
   - Project management

The clearinghouse is providing the widest variety of assistance. They will provide where necessary referrals to other resources such as:

National Center for State Courts (NCSC);
Institute for Law and Social Research (INSLAW);
International Association of Chiefs of Police (IACP); and,
Jet Propulsion Laboratory (JPL).

The National Center for State Courts provides technical assistance to court managers nationwide in the areas of microfilm, business equipment, audio/visual devices and electronic data processing (EDP) hardware, Seminars, slide presentations, publications, and on-site technical assistance are provided.

INSLAW furnishes technical assistance to prosecutors and court officials interested in the Prosecutors Management Information System (PROMIS). Three versions of PROMIS are available: computerized (for both large-scale and mini-computers), semiautomated and manual.

IACP, through a joint effort with the Bureau of the Census, has developed a guidelines manual and generalized computer software to support the generation and maintenance of a geographic file for law enforcement. The computer software, documentation, and technical assistance is available to agencies involved in the development of GBF files for law enforcement.

Technical Assistance in Communications. LEAA is developing a comprehensive plan for providing technical assistance in a variety of areas related to communications. JPL has been awarded an eighteen month grant to deliver communications technical assistance at the state and local levels. This assistance will include, but not be limited to computer-aided dispatch, mobile digital communications automatic vehicle location, and improved command, control and communications applications.

Additional sources of communications technical assistance are being considered.

Privacy & Security National Coordination & TA Project. This project concerned with aiding the states in achieving compliance with LEAA Privacy and Security Regulations includes:

1. Six issues of a privacy newsletter issued beginning in March, 1978;

2. A national seminar on Privacy and Security implementation to be held in the Fall of 1978;

3. Two policy workshops to be held for 25-30 invited participants - the first addressing "Media Access to Criminal History Information" - to be held at the end of March, 1978; and,

4. An expansion of the SEARCH privacy and security index to incorporate implementation procedures of the states.

Any questions regarding information systems or communications systems technical assistance should be directed to Al Ash in NCJISS, phone (202) 376-2616, or John Landgren at SEARCH Group, Inc., phone (916) 392-2550.

Data Analysis Training:

As many of you are aware, over a year ago, NCJISS in conjunction with the Office of Planning and Management sponsored the development and delivery of a training course in data analysis. Based on an evaluation and other related inputs, the data analysis course was revised and tested and is now being offered through the five criminal justice training centers supported by the Office of Operations Support of LEAA. The revised version of the analysis course is characterized as introductory and is targeted to an audience which is not highly sophisticated in statistics and/or criminal justice. The course concentrates on analysis and the process of analysis in the context of planning. A total of approximately 15 offerings will be available during the next year, three at each of the five centers. A brochure about the training centers is attached. For further information concerning the data analysis training or other courses offered by the training centers, contact your State Planning Agency or the Training Centers.

PERPETUATION OF STATE STATISTICAL FUNCTIONS-- SCRAMBLING IN THE FUTURE

With the collage of informational items presented, we can now return to the central issue of perpetuation of state statistical functions, the hard business of scrambling for survival in a future clouded by uncertainties concerning LEAA reorganization and statutory reauthorization.

I want to cover this in two contexts--first, the extreme significance which SACs should give to the Office of Federal Statistical Policy and Standards efforts known as Federal-State Cooperative Systems of Data Collection, and second, some entirely personal observations on criteria for examination of proposals for a Bureau of Justice Statistics.

Federal-State Cooperative Systems of Data Collection. The November, 1976 Statistical Reporter provides the most comprehensive explanation of such systems. Such systems are defined as follows:

> The Federal-State Cooperative Systems of Data Collection include those federally initiated or sponsored statistical programs in which State and Federal agencies participate in the collection, processing or utilization of nationally standardized statistics. The cooperative systems are undertaken for the mutual benefit of the participants, involved multiple states, and contain data of a recurrent nature which is intended to have broad applicability.

Impetus for the development of these systems, the article notes, has come from three factors:

- Congress through legislation, and the executive agencies through program efforts, have increasingly emphasized the responsibility and the role of State agencies in the treatment of national problems;

- The Federal government has an increased interest in improving and extending statistical measures of the status of subnational economies; the composition and characteristics of the population; and the nature, scope, and effects of programs designed to promote the general welfare of the nation and its people; and,

- Federal and State governments alike have recognized the need to work jointly on information collection and production activities to reduce respondent burden and to improve the scope, uniformity, and quality of statistical data in the most economical and efficient manner. (Emphasis added.)

Policy recommendations contained in the article deal directly with Federal responsibilities. Overall they are to include policies with respect to:

- the degree to which the cooperative systems should focus on data production in contrast to data utilization;

- the extent to which non-Federal needs for State and local area data should be incorporated, and the associated costs for their production and use under-written, by the Federal government; and,

- the appropriate division of labor and costs among cooperative program participants at the Federal, State, and local levels.

Federal agencies sponsoring cooperative systems must be concerned with:

- the design of data bases required to meet Federal statistical reporting requirements;

- the development and dissemination of data standards and definitions of terminology to ensure inter-State comparability;

- the sponsorship of seminars and training sessions necessary to ensure the consistent application of the data system;

- the provision of matching funds to support systems development and operation to the States willing to meet the federally prescribed requirements and standards; and,

- the development of specialized analyses and reports to ensure that the data provided by the States will be of maximum use to the producers.

Perhaps most important, the LEAA CDS program--as defined circa late 1976--is listed as one of seven examples of the agencies programs included.

Discussion of Federal-State cooperative programs surfaced again in the April 1977 Statistical Reporter in the vitally important context of the President's Reporting Burden Reduction Program. As spelled out in a memorandum to the Heads of Executive Departs and Establishments dated February 17, 1977, dealing with Guidelines for Reducing Public Reporting, the following language appears:

- Statistical Surveys or reports. No statistical program which collects information annually or

more frequently shall be designed to produce geographic detail below national totals for the United States unless:

(a) the information is required by law more frequently than would be provided by a census and

(b) cannot be obtained from existing administrative records or

(c) the data collection is an integral part of a specific Federal-State cooperative program or of a specific Federal-local government cooperative program.

This Presidential mandate certainly makes clear the importance of (1) an explicit statutory mandate for any statistical program or series and (2) the importance of such collection being done in the context of a joint Federal-State effort.

Most recently in the January 1978 Statistical Reporter--in an article dealing with the demand for regional and local area statistics--some principles and innovative approaches are laid out. I won't attempt to summarize either because this article should be read and discussed by every individual and office in this room; however, some of the views presented lead naturally into observations on the critique of the proposals for a Bureau of Justice Statistics.

The first principle enunciated deals with Federal support for data collection and concludes that an appropriate division of governmental responsibility will lead to the Federal side providing financial and technical assistance to subnational areas when they are being held responsible for data collection. Among the "innovative approaches" discussed include synthetic estimates for small area data, the development of central statistical coordinating units in State governments, and a Federal Survey Consultation Services. With relation to the State statistical entities, their purpose would be as follows:

> "...to undertake development of standards for State statistical procedures, to encourage collaboration among State agencies in the use and development of State statistics and in using Federal statistics, and to provide a focal point for contact between the State and Federal statistical policymakers"

While no decision has been made to implement this approach, it is under "active consideration".

This development gives your Association the opportunity to address the macro issue of perpetuation of your State criminal justice statistical functions on the high ground of overall national statistical policy rather than solely self-serving preservation.

Observations on a Bureau of Justice Statistics:

As the prior discussion suggests, proposals for a Bureau of Criminal Justice Statistics must be examined in the context of several criteria strongly related to the success of national statistical programs.

A few of these criteria are the following:

Explanation Concerning the Intergovernmental Division of Labor. Are the cooperative functions and activities which each level of government has for continuous and proposed statistical systems and series precisely explained?

Statement of Federal Statistical Priorities. Is there a statutory or other statement of the need for specific statistical series that mandates collection and analyses--with frequency, timeliness and other questions addressed?

Commitment of Federal Support for State Statistical Activities in Which There is A Federal Interest. Is there a statement in the responsibilities of such a Bureau to provide financial and technical assistance when sub-national data is required?

Delineation of Audit Function. Is the nature of the Bureau's audit function on a continuum of compliance to technical improvements adequately explained?

The Immediate Future of SACs--Need for Support of SPAs:

I am certain you are all aware of the FY 79 reduction in Part B monies--the funds which support the staff and activities of the State planning agencies. James Gregg, our Acting Administrator, has asked me to emphasize our desire that during this period the SACs provide maximum service to the State planning function in your State.

The Sacramento Audit Office under Joe Mulvey, will be conducting a review of the planning process in various SPAs. Specific attention will be given to the elements of crime analysis, resources, problem analysis, criminal justice standards with the need to assure that sufficient SPA resources are committed to assure an "implementable" plan. It is our hope and desire that SACs will make the maximum possible contribution to development of such a plan.

ATTACHMENT "A"

NCJISS PROGRAM AND PROJECT MONITORS

CDS PROGRAM: SAC AND UCR MODULES AND OBTS PORTION OF OBTS/CCH:

Paul Sylvestre, Program Manager (202) 376-2574

Herbert Koppel (202) 376-2574		Marianne Zawitz (202) 376-2574	
Maine	Pennsylvania	North Carolina	Mississippi
New Hampshire	Maryland	South Carolina	Tennessee
Vermont	Delaware	Georgia	Kentucky
Massachusetts	Virginia	Florida	Alabama
Rhode Island	West Virginia		
Connecticut	D.C.		
New York	Puerto Rico		
New Jersey			

Floyd Bankson (202) 376-2574		John Jones (202) 376-2574	
Ohio	Iowa	North Dakota	Idaho
Indiana	Missouri	South Dakota	Nevada
Michigan	Nebraska	Montana	Washington
Wisconsin	Kansas	Wyoming	Oregon
Illinois		Colorado	California
Minnesota		Utah	Alaska
		Arizona	Hawaii

Paul White (202) 376-2574	
Arkansas	Texas
Louisiana	New Mexico
Oklahoma	

CDS PROGRAM: CCH PORTION OF OBTS/CCH MODULE:

Donald Manson (All States) (202) 376-2570

OBSCIS PROGRAM:

Bernard Shipley, Program Manager (202) 376-2616
Ronald Thies

SJIS PROGRAM:

Arthur Fuldner, Program Manager (202) 376-2620

TECHNICAL ASSISTANCE (SYSTEMS), APPROVAL FOR ACQUISITION OF DIGITAL EQUIPMENT:

Alvin Ash (202) 376-2616

INFORMATION ON NATIONAL STATISTICS PROGRAMS:

Charles Kindermann (202) 376-2622

ATTACHMENT "B"

AN EVALUATION OF THE IMPACT OF LEAA FUNDING FOR DEVELOPMENT OF STATE UNIFORM CRIME REPORTING PROGRAMS

Donna F. Brown

October, 1977

Prepared For

The National Criminal Justice
Information and Statistics Service
Law Enforcement Assistance Administration
United States Department of Justice

ABSTRACT

A study was conducted to assess the impact of LEAA funding on state and national Uniform Crime Reporting (UCR) programs to identify problems in developing and operating these programs and to develop recommendations about the nature of LEAA's future support of the UCR program.

By reviewing materials provided by the FBI and LEAA and visiting eight states (six with and two without UCR programs) information was gathered about the operation of each program (or proposed program), the major problems in establishing and operating each program, major achievements (or expected achievements) and the federal role in attaining these goals.

The findings were generalized to formulate conclusions and recommendations which would be relevant to the entire UCR program. It is basically a cost-effective operation which has impacted positively on the national program (e.g., improved quantity and quality of the data), the state programs (e.g., feedback to contributors and to planning groups), and to contributors of UCR data (e.g., training, technical assistance and expanded data base).

It is recommended that LEAA continue to provide seed money for program development and financial support for system improvement in operational states. The "exemplary program" approach should be adopted along with a commitment to technology transfer and zero-based budgeting.

EXECUTIVE SUMMARY

I. PURPOSE

The purpose of this study was to assess the impact of LEAA funding on the Uniform Crime Reporting (UCR) program at both the state and national levels, to identify the problems in developing and implementing state UCR programs and to develop recommendations about the nature and extent of LEAA's potential future financial support of the UCR program.

II. METHODOLOGY

To achieve the goals and objectives of this study, materials provided by the FBI and the LEAA relative to UCR and the Comprehensive Data System (CDS) program were reviewed. On-site visits were made to four pairs of states, categorized as follows:

Pair 1: A state with 400 or more reporting agencies (New Jersey) and a state with 100 or less reporting agencies (New Hampshire) to be evaluated in terms of reporting and data processing efficiency for the national system and timeliness and quality of the data feedback to local contributors.

Pair 2: A state with an incident-based system (Illinois) and a state with a traditional system (California) to be evaluated in terms of the effect each has on crime analysis and planning and on reporting efficiency.

Pairs 3 and 4: Two states with comparable population and number of agencies, one with a state UCR system and one without a state UCR system to be evaluated in terms of how the State Planning Agency (SPA) used data in satisfying the requirements of the state Comprehensive Plan for the most recent fiscal year (1977). Colorado was matched with Mississippi; Louisiana with Washington.

An informal questionnaire was devised for use during the site visits. Section A was designed to obtain general information about the state program or the proposed state program (e.g., region, state population, organizational placement of the UCR component, year operational, and like data). Section B focused on major problems related to establishing and operating the state program (or problems which would be anticipated in establishing an operating a state program). The items (e.g., personnel, budget, legislative, relations with contributors, federal requirements, facilities and equipment,

computer support and administrative) were chosen as representative of areas which could have impeded program development or operation. Section C items were designed to measure program achievements (or expected achievements). These items were chosen to evaluate pre-LEAA funding/post-LEAA funding program accomplishments in California, Illinois and New Jersey (states which initiated UCR programs independent of LEAA-CDS seed money). Evolutionary changes (i.e., first year of the state program compared with current year of the state program) were measured in Colorado, Louisiana and New Hampshire (states which began UCR programs with LEAA-CDS funds). An additional section was prepared for use in states without operational UCR programs and focused on the method of integrating UCR data in the state Comprehensive Plan.

III. RESULTS*

Based on the results of the literature review and the eight site visits, the following observations can be made relative to the impact of LEAA funding on the UCR program:

A. Impact on the National UCR Program

1. The overall quality of the data submitted to the FBI has improved.

2. With more states submitting data on magnetic tape, a positive impact on the efficiency of the national data processing effort is becoming apparent.

3. The number of law enforcement agencies participating in the UCR program and the UCR population coverage have increased dramatically.

4. While the level of FBI-UCR budget expenditures has not decreased, program enhancements at the federal level (e.g., expansion of services to the users of criminal justice information) are now possible.

5. If LEAA's state level UCR support were to cease, the FBI would continue the national program as mandated by Congress, however, the Bureau would be forced to decrease significantly the number and types of services currently offered.

*The results have been generalized from the data gathered during the site visits. The reader should not compare the states which were evaluated since the level of program development varies significantly.

B. Impact on either the Development or Improvement of State Level Programs

1. Many states would have been (or are currently) unable to develop a crime statistics collection program without federal financial support.

2. Many states would have been (or are currently) unable to implement program enhancements without federal financial support.

3. The data collection process (i.e., traditional, incident-based of hybrid) does not appear to affect the accuracy or efficiency of the submission to the national UCR program.

4. The size of the state does not impede the timely or accurate submission of UCR data. Smallness, however, is beneficial in that each contributor can be contacted more frequently and thus can receive additional technical assistance in UCR-related areas.

5. The quantity and quality of the feedback to contributors have improved significantly.

6. Audit/evaluation techniques have been made available to the field staff of many state UCR agencies. While few have had the resources to devote to an extensive audit program, many have formulated specific plans to audit UCR data.

7. Many states have developed an extensive UCR data base which is made available, in a timely fashion, for inclusion in the state's Comprehensive Plan. The importance of maintaining a state level UCR data base for planning purposes is under-scored by the fact that, prior to the development of their state's UCR program, two SPA/SAC's have attempted to collect duplicate UCR reports from individual contributors within the state. It should be noted that the level of analysis presented in the Crime Analysis Section of the Plan is generally dependent on the resources and expertise of the planning staff of the SPA or SAC rather than on the nature of the data base.

8. Withdrawal of LEAA-UCR funds would impact most severely on states which are in the preliminary or early stages of system development (those with few tangible products of success). Older, better established programs would survive loss

of LEAA financial support, but would be reduced to providing basic program services with few enhancements.

C. Impact on Contributors to the State UCR Program

1. The records systems of contributing agencies have been significantly upgraded because of increased contact with state agency field representatives.

2. The quality of the UCR data prepared by contributors has increased as has the timeliness of the submission to the state agency.

3. The nature of the feedback provided by some state programs (especially those with an incident-based or quasi incident-based system) is superior and can be used for crime analysis, managerial and operational purposes at the local level.

4. Withdrawal of LEAA support of state level UCR programs would probably result in a significant decrease in the number of reporting agencies. That the number of participating agencies increased with the initiation of the state level effort is proof that the state agency has developed a rapport with the local contributors which had been absent prior to state program intervention.

D. Problem Identification

While each state encountered unique difficulties in developing and/or operating the UCR component, several problem areas were found to be common to at least two of the eight states visited, as shown below:

	STATE							
MAJOR PROBLEM AREAS	NJ	NH	ILL	CALIF	WASH	LA	MISS	COLO
Personnel			X	X		X		
Budget/Financial		X	X		X	X	X	X
Legislative Support		X					X	
Federal Rules & Guidelines						X		X
Facilities and Equipment			X					X
Computer Support	X	X		X				X

IV. RECOMMENDATIONS

To ensure achievement of the basic CDS objectives - to assist the states in establishing an integrated criminal justice information and statistics system - but, at the same time, to maximize the effectiveness of the remaining CDS funds, it is suggested that the LEAA support of the UCR program be continued.

The basic premise remains that, although the term is difficult to define, the UCR program is essentially a cost-effective operation in that, besides significantly improving the federal collection effort, it also provides a variety of technical assistance services to contributing agencies.

Based on this premise it is recommended that LEAA:

A. Provide seed money for the development of basic UCR programs in the seven states which currently have no operational program.

B. Identify one or more successful, or exemplary UCR program(s) representing the three major reporting processes and use these as prototype programs in the development of future UCR programs and in the improvement of existing UCR programs.

C. Disallow the simultaneous implementation of all CDS components by a state.

D. Explore the feasibility of making second or third year funding contingent not only on the implementation of program enhancements, but also on specific plans for reducing operating costs.

TECHNICAL SESSION A

8:30 - THURSDAY

FEBRUARY 23, 1978

MODERATOR - CHARLES McCARTY

MANAGER, SAC

ARKANSAS

THE IMPACT OF THE BUREAU OF THE CENSUS DISCLOSURE-AVOIDANCE POLICY ON THE UTILITY OF THE NATIONAL CRIME SURVEY

by

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Washington, DC 20531

The Bureau of the Census' policy to protect the identity of respondents, sometimes referred to as "disclosure-avoidance" policy, has directly affected the utility of National Crime Survey (NCS). Because of these restrictions State and local users and members of the academic research community have encountered significant prohibitions on access to NCS public-use tapes, summary data, and related information. The paper argues for a revised policy which balances the public's need to have adequate information about the criminal justice process against concerns for the privacy of the respondent.

INTRODUCTION

The National Crime Survey (NCS) is one of the largest and most significant among the Law Enforcement Assistance Administration's (LEAA) statistical programs. Since the early 1970's, LEAA has worked through interagency agreement with the Census Bureau to measure the level of criminal victimizations nationally for 6 major crime categories: rape, robbery, assault, burglary, motor vehicle theft, and larceny. The survey also collects information about the victim's characteristics, place of residence, and circumstances surrounding the incident. Because the Bureau of the Census is responsible for the collection of the data, it is required under Title 13 of the United States Code to protect the anonymity of respondents. The practices developed by the Bureau to insure the privacy of the respondent are known as "disclosure-avoidance" policy. These practices have severely hampered LEAA's efforts to improve, redesign, and expand the use of NCS. This paper summarizes the Bureau's disclosure-avoidance policy and documents specific instances where its application has had direct impact on the use of National Crime Survey data. Although NCS is composed of 4 separate surveys: (1) a national survey of households; (2) a national survey of commercial establishments; (3) a series of special surveys conducted in 26 cities between 1972 and 1975; and (4) a series of surveys of commercial establishments conducted in conjunction with the 26 city surveys, the examples discussed below pertain only to the household surveys (1 and 3) since they have received the widest public release and the most requests for applications.

DESCRIPTION OF DISCLOSURE-AVOIDANCE POLICY

The household survey, the core of the NCS program, is by any standard one of the largest and most complex sample surveys ever attempted. In FY 1977, NCS spent approximately $5.6 million to conduct about one-quarter million interviews in nearly 60,000 households across the country. The exceedingly large samples drawn by NCS are necessitated by the relatively rare occurrence of some types of incidents. Because of the large sample size, detailed analyses of selected kinds of victimizations, including the study of particular crimes (burglary), special circumstances (spouse abuse), and geographic areas (large states), are possible.

The Bureau of the Census releases NCS data through various media, including printed reports, public-use tapes, and microfilmed computer output. Although a sizable amount of information exists from the various household and commercial studies dating from the beginning of data collection in July, 1972, current disclosure-avoidance restrictions enforced by the Census Bureau have substantially restricted access to and use of NCS data in the past and provide little opportunity for improvements in utilization for the future.

Title 13 of the United States Code requires that the Bureau of the Census and its employees use information only for "...the statistical purposes for which it is supplied..." and forbids any publication whereby an individual can be identified.[1] The Bureau of the Census interprets its responsibility under Title 13 to protect the identity of the respondent as follows:

> Briefly stated, the Bureau of the Census' policy with regard to disclosure is that no record appearing on any public-use microdata file may contain geographic codes which alone, or in combination with other files, identify an area less than 250,000 population. Geographic codes include the following: regions, divisions, States, SMSA's places, defined groups of counties or tracts, or any other identifiers of specific areas; also geographic-type codes such as size-of-place, urban/rural, metropolitan, central city, urbanized area, or other residence types.[2]

In the next section, specific examples of how the Bureau of the Census' disclosure-avoidance practices have directly affected actual or potential NCS users are described in detail.

DESCRIPTION OF DISCLOSURE-AVOIDANCE POLICY

Release of State Public-Use Tapes. Current NCS public-use tapes for the national household survey do not contain State, county, or similar geographical identifiers because of Census Bureau disclosure rules, but the sample size is sufficiently large to produce summary tabulations for the larger states and SMSA's. To meet the need for State victimization data, the Census Bureau has distributed computer printout and microfilm tables containing individual State summaries to the Statistical Analysis Centers (SAC) in California, New York, Texas, Pennsylvania, Illinois, Ohio, Michigan, Florida, New Jersey, and Massachusetts. Because these extensive tabulations do not cover the full range of requests coming from the Statistical Analysis Centers, the California Bureau of Justice Statistics (CBJR) requested and received specially prepared public-use tapes containing NCS data from California for 1973 and 1974. When CBJR requested a public-use tape containing California victimization data for 1975, LEAA sought to expand the distribution of State public-use tapes to the SAC's by requesting the Census Bureau to prepare them for each of the 10 largest States. In June 1977 the Census Bureau refused the California request and notified LEAA that no State public-use tapes would be forthcoming. The Census Bureau stated that it had recently re-evaluated its position"...with regard to the release of public-use State tapes in light of the Bureau's policy which prohibits the disclosure of sample population areas under 250,000 persons." The

1. 13 USC 9.

2. US Bureau of the Census, "Statement on the Impact of Disclosure-Avoidance Techniques," memorandum (November, 1977).

Bureau noted "that it may be possible, through certain manipulations of the files in their current format, for users to identify these smaller population areas."[3]

In subsequent discussions with the Bureau, LEAA determined that the juxtaposition of the size-of-place variable and neighborhood characteristics data with the California tape might permit the identification of specific respondents. Applying its 250,000 rule, the Bureau representatives informed LEAA that State public-use tapes could only be supplied in future years if most, if not all, geographical information was removed from the national data files.

The application of disclosure-avoidance policy has severe implications for users who wish to use NCS data to make subnational estimates. It is not possible for LEAA or the Bureau of the Census to anticipate all summary tables that users might request. The release of public-use tapes clearly provides the flexibility required by these users, but various subnational applications of NCS data require different geographical variables, including State, Standard Metropolitan Statistical Area, and size-of-place codes.

The Census Bureau will not release the combination of such data because of its disclosure-avoidance rules. The State of Texas is a case illustrating this point. Because over three-quarters of its 12 million population lives in urbanized areas, the ability to identify respondents residing in Texas combined with size-of-place information (rural non-form, rural, etc.) would probably permit the user to identify residing in areas having population less than 250,000 million. Thus, LEAA is faced with a problem having no solution, since any set of two or three geographical identifiers will not meet the multiple needs of users seeking subnational estimates.

Requests for Special Tabulations. In order to offset this problem, the Bureau of the Census will provide special tabulations of NCS data. Such tabulations are subject to the same disclosure-avoidance restrictions as public-use tapes in the sense that the Bureau will not release any tabulation that produced too fine a division of the data.

There are significant difficulties inherent in the release of special tabulations, however, that severely limit the utility of the service. For one thing, the cost to the user is usually prohibitive, because each request often requires custom programming and data analysis by Bureau personnel. It would be possible to reduce these costs somewhat by planning such tabulations ahead of time, but it is nearly impossible for LEAA to anticipate the requests from the States at least two years in advance of data collection.[4]

3. Letter to Dale H. Speck and James W. Watson, California Bureau of Justice Statistics, from Stanley Greene, Bureau of the Census (June 15, 1977).

4. It requires 17 months of data collection to obtain 1 calendar year of data.

One user from Boston was quoted a cost of $5,000 to produce victimization rates for 15 Boston police districts using the 1974 Boston city survey. The user had requested that the Bureau aggregate census tracts, which can be matched with NCS files by the Census Bureau, into 15 sub-areas of the city.[5] Successive requests would have entailed additional charges. The user was not able to pay these charges and dropped the request.

A second problem with the Census Bureau producing special tabulations is that the time required is too long to meet many user's needs. In the Boston case, the estimated time for completion was at least 3 months, a delay the user judged too long.

Finally, special tabulations cannot permit exploratory analysis of the data. Many users must experiment with an application of the data to meet their particular needs, and such experimentation requires successive interaction with a data set before a final product can be defined and evaluated. Present Bureau of the Census cost and time restrictions make exploratory applications of NCS data doubtful.

Effects on Analyses of NCS Data. Several kinds of analytical problems are also directly affected by Bureau of the Census avoidance-disclosure policy. Three specific applications of NCS data--analysis of the relationship of neighborhood conditions to victimization, evaluation of the sample design, and review of Bureau of the Census NCS methodological studies--are discussed below with the purpose of illustrating how Bureau policy limits, compromises, and even prohibits the drawing of reliable conclusions about the nature of the victimization process or the validity of the data leading to these judgments.

Criminal victimization is a localized phenomenon subject to variations in neighborhood condi ions. The NCS public-use tapes for the national household sample contain 55 population and housing variables describing neighborhood demographic conditions associated with a victim's place of residence. Public-use tapes for the 26 city samples do not contain these variables because of Census Bureau disclosure-avoidance restrictions. As a result, important information believed to be critical to explaining the dynamics of victimization is unavailable.

These variables are of potential value for explaining local variations resulting in victimization. Because the Bureau of the Census will not define its rules for aggregating enumeration district data however, there is now a serious question raised whether these 55 variables can be used for meaningful analyses. The Bureau's policy is stated as follows:

> Neighborhood characteristics are summary statistics about the immediate area of residence of the respondent, as derived from the 1970 census. If we were to make available the precise algorithim by which neighborhoods were

5. Because of disclosure-avoidance policy, no geographical identifiers are included in the 26 NCS city surveys.

> defined or were to include neighborhood characteristics in samples which identify individual cities, a user could reconstruct the same statistics from existing 1970 summary data for specific areas, match these against the neighborhood characteristics on the NCS microdata, and consequently derive for each respondent an area of residence of only a few thousand people. Obviously, this violates the Census confidentiality rule.[6]

Recent attempts to analyze neighborhood characteristics in relation to victimization have uncovered two difficulties. First, socioeconomic, demographic, and political boundaries (except possibly counties) are not used as guides in aggregating the areas. Thus, a NCS "neighborhood" may straddle a meaningful social or political boundary such as a freeway or city limit. Second, the limited amount of information about the place where the victimization occurred (not all victimizations occur at one's residence) further compromise the utility of neighborhood characteristic data.[7] Apparently, more detailed place of occurrence data would run counter to disclosure policy. In sum, any attempts to clarify the definition of "neighborhood" would run counter to the Bureau's disclosure-avoidance policy, and the data compatible with this policy are of questionable utility.

The complexity of the NCS sample design combined with the failure properly to document it creates additional problems for users of public-use tapes. Restrictions arising from Census Bureau disclosure-avoidance practices have prevented the creation of sufficient documentation (a) to evaluate the sample design and (b) to construct suitably reweighted sample frequencies for multivariate statistical analysis. A series of weights and adjustment procedures are now applied to the raw data to adjust for differential probabilities of including various household locations in the survey and to reduce bias and variance of sample estimators. These adjustments are made according to independent estimates of the current population in 72 age-sex-race categories. Although such adjustments are routine practice for surveys of this complexity, Stephen Fienberg observes that "Census has removed from public scrutiny many of the actual defects of the sample design when it is actually implemented. Since all aggregate counts have essentially the same totals for various (72 age-sex-race) categories we can never tell when a given sample is badly off the mark, and in what directions."[8]

6. See footnote 2.

7. US Bureau of the Census, "Current Status of Project Entitled, Evaluation of 'Neighborhood Characteristics Data' and their Applicability to the National Crime Survey," memorandum (September 7, 1977).

8. Stephen E. Fienberg, "Victimization and the National Crime Survey: Problems of Design and Analysis," University of Minnesota, Department of Applied Statistics, Technical Report No. 291 (June, 1977).

Without such documentation the NCS sampling procedures are not subject to general review and to improvements suggested by professionals outside the Bureau of the Census. Users seeking to analyze NCS data for the purposes of understanding victimization must conduct their analyses without an informed estimate of the sampling errors associated with their statistics.

A National Academy of Sciences report Surveying Crime recommended that LEAA conduct extensive methodological studies for the purpose of redesigning and improving the survey.[9] One of the central validating strategies for making methodological decisions about the NCS design has been the "reverse records check" methodology. This methodology, which involves interviews with known victims of crime to test alternate questionnaire designs and recall periods, was used in Washington, D.C., Baltimore, Maryland, and San Jose, California to validate the original survey design and questionnaire. The Bureau has refused to release such studies "...because of the obvious risk of identifying individual respondents selected originally from public records, or records accessible by persons other than Census employees."[10] The implication of such a policy is that any methodological studies based on identifiable sub-populations, such as known crime victims, or from areas with total populations less than 250,000 would not be subject to scrutiny by the scientific community. As a result, LEAA cannot obtain independent evaluations of many NCS methodological studies.

PROTECTING THE RESPONDENT

There are competing needs posed by these examples. On one hand, there is the public need to have useful information on criminal justice matters. On the other hand, there is the legitimate right of the citizen to keep information about himself private. The present disclosure-avoidance practices of the Bureau of the Census impose a result on LEAA that is unilateral in direction and has not been subject to either serious discussion or accommodation. There has been no attempt by the Bureau to balance the needs of the NCS program against the respondents' interests.

It is important to observe here that the "250,000 population" rule is not specified in Title 13 but rather represents a standard that has evolved within the Bureau. Furthermore, the rule is not based on a program of empirical investigation designed to establish whether a less restrictive rule can prevent disclosure. Finally, one of the justifications for this policy has been the need to obtain respondent cooperation, but the Bureau has conducted no studies that

9. National Research Council, Surveying Crime, Washington, D.C.: National Academy of Sciences, 1976.

10. See footnote 2.

demonstrate that respondent cooperation in victimization surveys is dependent on the nature of privacy guarantees.

The Bureau's disclosure-avoidance practices affect many data series other than NCS, and a recently completed report prepared by a subcommittee of the Federal Committee on Statistical Methodology urges an alternative approach to disclosure-avoidance that seeks to balance the rights of privacy of the respondent against the need to provide useful statistical information to the public.[11] Present Bureau policy errs in the direction of protecting the individual at the expense of sponsors and users obtaining access to important statistical information.

LEAA is far from insensitive to the needs to protect individual respondents from identification. The Agency has articulated confidentiality standards for the release of statistical information collected by LEAA-funded projects, as required under Section 524(a) of the Omnibus Crime Control and Safe Streets Act of 1968, as amended. These standards require users of LEAA-funded data to take steps such that information cannot be "reasonably interpreted as referring to a particular private person."[12] The concept of "reasonableness" includes the evaluation of such factors as the size of the statistical universe, the availability of public records that could be combined with research data to reveal an individual's identity, or the uniqueness of a respondent's attributes.[13] LEAA now applies these standards of confidentiality to other data archived at its Criminal Justice Data Archive located at the University of Michigan, but the Agency had had no opportunity to apply them to data collected through inter-agency agreement with the Census Bureau.

The present Bureau of the Census policy has placed the future of continued NCS data collection in doubt. In July 1977 LEAA considered suspending NCS data collection and subsequently agreed to continue data collection through June 1978. Although several factors such as budget reductions played a role in these decisions, one of the principal reasons for the Agency considering this action was the Bureau of the Census' past application of disclosure-avoidance policy to the NCS data series. Whatever the future of NCS data collection, the net effect of Census Bureau practices is to prevent and seriously restrict LEAA's efforts to expand the use of the National Crime Survey for State and local users and to evaluate research designed to improve the survey.

11. Federal Committee on Statistical Methodology, Subcommittee on Disclosure-Avoidance Techniques, "Report on Statistical Disclosure and Disclosure-Avoidance Techniques, Working Paper No. 2," (U.S. Department of Commerce, Office of Federal Statistical Policy and Standards, forthcoming).

12. Federal Register, Vol. 41, No. 242 (Wednesday, December 15, 1976), 54846-54848.

13. Law Enforcement Assistance Administration, "Confidentiality of Research and Statistical Data," (U.S. Department of Justice, National Criminal Justice Information and Statistics Service, no date), p.9.

THE CRIME RATES WORKBOOK

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ABSTRACT

The Crime Rates Workbook, a guide to the major sources of crime incidence information for the State of Illinois, details how and what crime information is collected, organized, and presented; source limitations and deficiencies (i.e., the validity and reliability of the data from each source for deriving crime rates); comparisons of the data gathering methodologies of different sources, and the consequences of those differences for the data gathered; and directions for obtaining data from each source. An encyclopedia of crime types and terms one might encounter in crime data sources provides a quick reference tool indicating which sources contain data on each crime, and which source will provide the most realistic estimate of a particular crime rate. The Workbook emphasizes the utility for planning purposes of information on local crime rates and trends. Techniques for computing rates and trends with crime incidence data are described.

EXECUTIVE SUMMARY

The CRIME RATES WORKBOOK is a reference manual. In two hundred pages it lists in great detail what data are available from the major sources of crime data in Illinois. This executive summary will briefly relate the decisions which prompted the publication of this book, the needs it was designed to fill, and the contents of each section of the Workbook.

PURPOSE:

The Illinois Statistical Analysis Center (SAC) was formed to improve the accessibility of justice system data to state, regional and local government agencies. The need for SAC is confirmed almost daily by requests from those agencies for crime data. SAC clients ask about particular aspects of crime, for example, "How many violent crimes involve alcohol?"; or they ask for specific information on crime levels, for example, "How many burglaries were there in my area last year?"

In answering these questions the SAC staff decided that two courses of action were possible. Staff members receiving requests could search data sources and do any required data reduction themselves, delivering to the requestor only the summarized, direct answer to the question; or they could acquaint data requestors with the data sources, involving the requestors in the search for the appropriate source and in the decisions inherent in data reduction. For the following reasons, the latter course was seen as more honest and farsighted:

1) Data requestors are more familiar than SAC staff with the reasons why they need a specific piece of information. Any decisions regarding the best data source, given the different data collection methods and data definitions used by different sources, are better left to individuals with full knowledge of how the data are to be used. For example, police data on rapes reflect reported rapes against victims of all ages, while data from some victimization surveys cover only rapes of women over the age of twelve. Data users should be allowed to choose the most appropriate statistic for their purposes.

2) Decisions involved in choosing a data source and in data reduction always imply some restrictions on the data's interpretation. If data users are not involved in those decisions they may not be aware of them and they will be more likely to misinterpret the data. For example, one who is not aware of the differences between victimization survey data and police data might attempt a direct comparison of data from these two sources.

3) Restrictions on data manipulation and interpretation resulting from data collecting methods are sometimes quite complex and subtle. Sampling techniques and weighting of survey data, for example, are difficult to explain adequately and yet quickly. The possibilities for error in communicating these subtleties are great. A document that explains these subtleties in clear, concise language should be useful to SAC staff and to SAC's clients.

4) Familiarizing data requestors with the data sources and with the intricacies of data manipulation and interpretation often takes more time than it would take a SAC staff member simply to find what he or she believes to be the desired figure. As current clients become familiar with available data and their uses, however, they should need little assistance from the SAC staff. As SAC becomes more widely known and our client list grows, the present time investment will prove valuable.

Granted, some officials are interested only in complying with the data requirements of government funding, and do not wish to be bothered with ferreting out and analyzing data themselves. Still, when they can be persuaded to go right to the source of the information they need and work with it themselves, they generally find it a rewarding experience. SAC's responsibility is to ensure that those seeking justice system data have the information they need to find and properly use the data. The CRIME RATES WORKBOOK is an attempt to provide that necessary information to Illinois SAC clients.

SCOPE:

This Workbook deals solely with crime incidence statistics and their use as a basis for management decisions. Of course, SAC receives requests for information on courts and corrections, on the impact of legislative, programmatic, and fiscal policies, and on many other topics. Workbooks on courts and corrections data are currently in the planning stage. In drawing together selections for inclusion in the Crime Rates Workbook, it was felt that the topic area should be defined strictly and covered thoroughly. For the same reason, discussions of traffic information, juvenile status offenses and violations of local ordinances are not included.

The CRIME RATES WORKBOOK does contain discussions of the major sources of Illinois crime data, the validity and reliability of data from each source, and an exhaustive list of their contents. Topics related to the use of crime data are also covered, e.g., crime rate calculation, trend analysis, sampling techniques, and offense coding schemes.

Because the Workbook is organized like a reference manual, each section of it can be read and understood independently of all other sections. An index has been provided to facilitate locating references to specific topics. In addition, sections dealing with related topics have been cross-referenced in the text.

Much of the information contained in the Workbook, including the source reliability ratings, is neither absolute nor static. Therefore, SAC plans to revise the CRIME RATES WORKBOOK periodically. Changes will be made in reliability ratings based on new information about or changes in data sources. Sections will be added or re-written to improve the Workbooks' usefulness. Additional data sources will be covered as they become available.

CONTENTS:

The current CRIME RATES WORKBOOK contains an introduction to each of the following sources of Illinois crime data: 1) the Illinois sample from the National Crime Surveys' national panel (re-weighted to represent Illinois demographically), 2) the National Crime Surveys' Chicago sample, 3) the Chicago Police Department, 4) Illinois Uniform Crime Reports, and 5) two local victimization surveys, one covering the cities of Joliet and Peoria, and the other covering fifteen counties in southern Illinois. Discussions center around how and what information is collected, organized and presented, and the limitations to data manipulation resulting from data collecting methods. Explicit directions are given for obtaining these data. For each data source, a name and address and, where possible, a phone number of an individual with access to the data are provided.

Data gathering methodologies of the data sources have been compared, and based on these comparisons, the data sources have been ranked in order of their reliability, validity and completeness. Of course some sources contain information for limited areas within Illinois, and some sources provide more accurate information for some crimes than for others. Hence, the reliability rankings are intended only as a general recommendation as to the utility of each of the sources.

Data users interested in a specific crime, geographic location, or demographic correlate of crime can refer to the data source recommendations provided in Chapter III of the Workbook. Chapter III, an encyclopedic compilation of crime types and demographic divisions one might encounter in crime data sources, is a quick reference source showing which crimes are included in each source, and which source will furnish the most realistic estimate of the incidence of each crime in every location for which data are available. Since crime definitions vary, these definitions are listed for each crime in each source.

Along with instructive sections on some simple data analysis techniques, a glossary has been included for those who are unfamiliar with the jargon so often used in discussions of crime data. Finally, the Workbook's bibliography lists some publications that deal with crime data analysis techniques and some that analyze data from the sources listed in the Workbook.

Again, the SAC staff sees the CRIME RATES WORKBOOK not as a finished product, but as a continuing project. We hope that this Workbook, and those that follow, will become useful planning and management tools. Toward this end we are requesting suggestions on format and content from Workbook users. A comment form has been included in the Workbook for this purpose.

THE EFFECT OF INCOME INEQUALITY ON THE RATE OF HOMICIDE AND PROPERTY CRIME: A TEST OF MERTON'S ANOMIE THEORY

by

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Sociological explanations of crime have given considerable attention to Merton's anomie theory without systematically testing it. This paper tests Merton's theory through operationalizing anomie in terms of the degree of inequality in the distribution of income in each of the fifty states. A multiple regression analysis determines that while income inequality is significantly related to the rate of homicide, it is not significantly related to the rate of property crime. A preliminary cross-national analysis of 29 nations replicates this same general finding. The results suggest that a relatively large gap between material success and the means to success is likely to result in crimes of violence rather than property crime once we control out the influence of other variables.

Merton's (1938) anomie perspective has received widespread attention in sociological theories of crime (Simon and Gagnon, 1976; Traub and Little, 1975; Cohen, 1965). In this view crime is the result of a disjunction between society's success goals and the normative structure governing the means to these goals. Crime results from the condition where the individual fails to achieve, or anticipates failing to achieve, the level of success of his or her reference group through legitimate means such as educational attainment and hard work. Faced with the resulting frustration the individual may strike out against society in the form of crime.[1]

Unfortunately, Merton does not provide us with any systematic method for testing his theory. However, we hold that a measure of the degree of income inequality would approximate the degree to which individuals perceive and experience a gap between material success and the probability of achieving success through legitimate means. We argue that extreme inequality is marked by relatively few success positions, while relative equality is characterized by many success positions. A high degree of income inequality hampers the degree to which substantial progress towards success goals is realized. Populations marked by a high amount of income inequality would be characterized also by high frustration and resentment especially among groups at the bottom of the stratification system who have the largest distance to travel to the top. From the standpoint of anomie theory we would expect that the greater the income

inequality, the greater the frustration experienced in the quest for material success, and the greater the incidence of both property crime and crimes of violence.[2]

METHODOLOGY

Dependent Variables:

The dependent variables in the present study are the rate of reported homicide and property crime (burglary, larceny of $50 and over, and auto theft) for the 50 states. The data are taken from the F.B.I.'s (1971) Uniform Crime Report for 1970. Since the proportion of crimes reported to police may vary significantly among the fifty states, caution should be exercised in interpreting our results. However, Skogan's (1974) analysis of statistics based on reported crime vs. those based on victimization surveys indicates that the two are highly correlated and that measurement errors in official statistics do not lead to false conclusions.[3] In any event, our data are the best that are available for the study of crime with the state as the unit of analysis.

Income Inequality:

We will use the Paglin-Gini index of income inequality. The Paglin-Gini index varies from zero (no inequality) to one (complete inequality) and is an equal interval scale so that a rating of .400 represents twice as much inequality as a rating of .200. The Paglin-Gini index is viewed by Paglin (1975) as less restrictive than the Gini index which requires in its definition of equality that persons have not only equal lifetime incomes, but also equal annual incomes at all stages of their respective life cycles. The Paglin-Gini index, however, is more realistic. In this definition of perfect equality, income varies with age where each family in a given age group is assumed to have the mean income for that age group. Our unit of distribution is the family and our source of data is Ruthenberg and Stano (1977:60-61).

In order to fulfill the purpose of this investigation a multiple regression analysis of each dependent variable was performed on income inequality and four control variables selected from the literature (percent black, unemployment, the rate of immigration, and population density). The investigation was limited to five independent variables so that we would have ten cases in the sample for each variable in order to reduce the problems of shrinkage and taking unfair advantage of chance fluctuations (Blalock, 1972:468).

Percent Black:

Our first control variable is the number of black persons as a percentage of a states' population. Percent black has received wide attention in the literature on crime (Gastil, 1971; Wolfgang, 1961; Gold, 1958; Danziger; 1975). Observers of black culture have argued that socialization in the black community encourages the externali-

zation of aggression, as opposed to the internalization of aggression, a social fact that corresponds, for example, to the findings that homicide is high in black populations but suicide is relatively low (Hendlin, 1969; Seiden, 1970). Our data are taken from the Bureau of the Census (1972:28).

Unemployment:

Past research has indicated that the rate of unemployment is a determinant of crime rates (Phillips and Votey, 1975; Sjoquist, 1973). Since the income of the unemployed is low, they have more incentive to commit monetary crime. In addition, the frustrations and pressures associated with unemployment are correlated with crimes of violence such as homicide (Henry and Short, 1954). Our data on the rate of unemployment are taken from U.S. Manpower Administration (1971).

Immigration:

The rate of interstate migration is an indicator of general uprootedness and social disorganization in a community. Prior research contends that the changes associated with interstate migration, such as the dissolution of friendships, peer groups at work, ties to relatives, familiar geography, and so on, breed alienation and increase the probability of crime (Stack, 1977). Our measure of the rate of migration is the number of immigrants to a state between 1965 and 1970 divided by the state's 1970 population. The data are taken from Bureau of the Census (1973a:352).

Population Density:

Our final independent variable is the degree of population density. Previous research has shown a direct relationship between population density and crime rates (Galle et al., 1972; Gillis, 1974). Population density is related to various stress and personality factors such as aggressiveness, punitiveness, and mental illness that underlie much criminal behavior according to the psychopathological theory of crime (Gillis, 1974; McCord and McCord, 1964). Our index of population density is the proportion of a state's population that resides in cities of 50,000 or more persons. The data were derived from Table 19 in Bureau of the Census (1973b).

THE ANALYSIS

Table 1 summarizes the results of the multiple regression concerning the rate of homicide. The positive signs of the regression coefficients indicate that the direction of all five relationships between the independent variables and the dependent variable are in the expected direction. Although there was some multicollinearity among the independent variables, the size of the t- statistics indicate that each of four variables (all but unemployment) have significant relationships with the rate of homicide even with all the other variables controlled. These results support the hypothesis that anomie is related to homicide. With all the other

variables controlled, the greater the income inequality the greater the rate of homicide. Income inequality affects the rate of homicide independent of percent black, interstate migration, population density, and unemployment.

TABLE 1. EFFECTS OF PERCENT BLACK, IMMIGRATION, INCOME INEQUALITY, POPULATION DENSITY, AND UNEMPLOYMENT ON THE RATE OF HOMICIDE (N=50)

VARIABLE	REGRESSION COEFFICIENT	STANDARD ERROR OF COEFFICIENT	COMPUTED VALUE OF STUDENT's T	BETA COEFFICIENT
BPOP[1]	0.284	0.042	6.813*	0.687
INMIG[2]	0.191	0.048	3.955*	0.314
GP[3]	38.017	14.946	2.544*	0.256
PD3[4]	4.782	2.003	2.387*	0.181
U[5]	0.348	0.221	1.570	0.124

Intercept...-10.3867

R^2 = .77

F = 29.42, df = 5,44, p <.01

* = statistically significant at the .05 level

[1]Percent black (1970)

[2]Rate of interstate immigration (1965-1970)

[3]Paglin-Gini index of income inequality (1970)

[4]Population density (1970)

[5]Rate of unemployment (1970)

Although income inequality is significantly related to homicide, the relative size of the beta coefficients indicate that two other factors, percent black and interstate migration, are even more closely associated with homicide rates. While a percent increase in income inequality is associated with a .25 percent increase in homicide, a percent increase in the black population is associated with a .68 percent increase in homicide. In addition, the rate of immigration (beta=.314) is also more closely associated with homicide than income inequality. Together the variables explain 77 percent of the variance in homicide rates. The F statistics indicates that the regression equation is easily significant at the .01 level.

Table 2 gives the results of the multiple regression regarding the rate of property crime. These findings provide no support for the anomie theory of property crime. Controlling for the other independent variables there is not a statistically significant relationship between income inequality and property crime. In fact, the negative sign of the relationship is the opposite of what we would anticipate from the standpoint of anomie theory. Evidently, the frustration and relative deprivation generated by income inequality has no independent effect on property crime.

TABLE 2. THE EFFECT OF POPULATION DENSITY, IMMIGRATION, UNEMPLOYMENT, INCOME INEQUALITY, AND PERCENT BLACK ON THE RATE OF PROPERTY CRIME (N=50)

VARIABLE	REGRESSION COEFFICIENT	STANDARD ERROR OF COEFFICIENT	COMPUTED VALUE OF STUDENT's T	BETA COEFFICIENT
PD3	4080.215	434.771	9.385*	0.758
INMIG	50.447	10.466	4.820*	0.408
U	122.810	48.036	2.557*	0.216
GP	-4665.857	3244.134	-1.438*	-0.154
BPOP	10.188	9.054	1.125	0.121

Intercept...819.323

$R^2 = .74$

$F = 24.68$, $df = 5,44$, $p < .01$

See notes to Table 1

Three of our other independent variables are significantly related to property crime. The most important factor is population density. A one percent increase in population density is associated with a .75

percent increase in property crime. A percent increase in the rate of immigration produces a .40 percent increase in property crime. Finally, again controlling for all other variables, a percent increase in unemployment is associated with a .21 percent increase in crimes against property. Taken together these variables explain 74 percent of the variation in property crime.

CONCLUSION

The findings of the present investigation indicate that the frustration associated with anomie is likely to be associated with homicide but is not significantly related to crimes against property. Controlling for other socioeconomic factors, income inequality is closely associated with homicide but bears no independent impact on property crime. Our findings provide no support for Merton's theory as it relates to property crime. In addition, other socioeconomic variables are more closely associated with homicide than income inequality.

It remains uncertain how well these results would hold up under alternative samples and measurements of key variables. However, our preliminary cross-national analysis of homicide and the rate of larceny, using INTERPOL (1973) data, in 29 nations indicates the same relationships. Under the different institutional frameworks of 29 nations we find that income inequality is significantly related to homicide but not property crime once we control for other variables such as GNP/capita, the clearance rate for homicide, and population size. While Merton's theory was originally meant to provide an explanation of property crime, it may be that its true vitality lies in an explanation of crimes of violence.

NOTES

1. The other options open to the individual who fails include sheer conformity (the most common response) where one may hand down one's hopes for success to one's children and "retreatist" activities such as alcoholism. For a study that confirms the association between anomie and alcoholism see Jessor et al. (1968).

2. From the research on attitudes towards income inequality we know that the poorer segments of the population have the highest level of animosity towards income differences (Form and Rytina, 1973; Stack, 1978). Research also indicates an association between low socioeconomic status and both crimes of violence and crimes against property (Wolfgang, 1958; Danziger, 1975:120). Putting these two principles together we have additional reason for expecting that income inequality should increase the rate of crime.

3. The regression analysis of rates of burglary in 26 cities by Booth et al. (1977:194) indicates that 7 of the 8 relation-

ships between burglary and independent variables are essentially the same whether we use statistics based on reported crime or ones based on victimization surveys. For example, we find that unemployment significantly affects the rate of burglary whether or not we use victimization statistics.

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AN INTRODUCTION TO THE ANALYSIS OF MINNESOTA'S OFFENDER BASED TRANSACTION STATISTICS (OBTS)

by

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ABSTRACT

This paper examines the Minnesota Offender Based Transaction Statistics system. How the data is collected and stored is described. Although the data has some shortcomings, it accurately describes the processing of defendants through the criminal justice system. Thus the data has many potential uses. Possible research questions and methods of analysis are discussed. Some examples of analysis of the data are also provided.

INTRODUCTION

The State of Minnesota collects a wealth of data on crime and the processing of persons by the criminal justice system. This data is gathered through the Criminal Justice Reporting System (CJRS) from police agencies, prosecutors, courts and corrections agencies across the state. Although summary crime statistics are published each year from this data source, other data in the system has not yet received any significant attention. In this report we describe what is available for analysis from this valuable but untapped data set, and we discuss how it can be used for the study of Minnesota's criminal justice system.

THE OFFENDER BASED TRANSACTION STATISTICS

To describe the CJRS data we must first retrace the steps in its collection. Police agencies report two kinds of data: the first on criminal incidents that come to their attention and the second on persons arrested for crimes. The crime incidence statistics become part of the well-known Uniform Crime Reports (UCR) and are published by the Bureau of Criminal Apprehension (BCA) in Minnesota and subsequently by the FBI. The reports on persons arrested for crimes start the flow of information on criminal defendants known as the OBTS or Offender Based Transaction Statistics. It is the OBTS data that concerns us here.

An arrest report is completed and a copy forwarded to the BCA for everyone--juvenile or adult--arrested for any offense except a traffic offense. If the police agency has a computer terminal linked to the state's MINCIS computer network, the arrest data can be entered directly onto the system. If the person arrested is an adult (or certified juvenile) and the crime is a felony or gross misdemeanor, a copy of the arrest form is also forwarded to the local prosecutor's office.

The prosecutor continues the tracking of the defendant. He completes the arrest/prosecution report form and sends copies to the BCA and to the court of first appearance. For each major court proceeding another form must be completed by the court and again sent on to the BCA. When the defendant's case is disposed of or a conviction obtained, this must also be reported. The tracking of convicted criminals proceeds with a sentencing report and with reports that are submitted by whichever correctional authority has custody or supervision.

The BCA enters all reports onto the computer system, which is maintained by the Information Systems Division (ISD). This data on the processing of defendants is stored in the computer on five distinct types of records. Each record type provides information about processing at a particular stage of the system and corresponds to one of the reports submitted by criminal justice agencies to the BCA.

The five record types and the data contained on each are summarized below:

Arrest Records	-- describe the offender (age, race, sex, etc.); the offense (uniform offense code, statute number); and the arrest (arresting agency, arrest disposition, date of arrest).
Prosecution Records	-- describe the prosecution decision regarding the arrest (prosecution agency, prosecution decision, date of decision).
Proceeding Records	-- describe the judicial proceedings (court agency, type of proceeding, court disposition, date of disposition, etc.) and the status of the offender (custody status, plea, type of attorney).
Sentencing Records	-- describe the sentencing of an offender (type of sentence, date, time/fine imposed, etc.).
Custody/ Supervision Records	-- describe the status of an offender in custody or under supervision.

During the building of the OBTS data file, the names of criminal defendants are removed; from that point on, individuals are identified only by number. This protects the privacy of the individual while still making possible analysis of the data on an individual basis. The identifying number is the control number assigned to a person by the arresting agency at the time of arrest for a particular criminal incident (which may encompass several crimes or charges and a number of individuals). If a person were arrested several times, perhaps in different areas of the state, he would be tracked with a different number for each incident. All records for an individual relating to a particular incident are arranged together on the computer in the tracking sequence. If several persons are arrested for a single incident, their records are kept adjacent to one another in the file. The resulting OBTS data file has a hierarchical structure which is illustrated in Figure 1.

Records are first grouped according to controlling agency (where the offense took place) then sorted successively by control number, charge number, person number, record type and date (the most recent date first). Note that the number of record types and records are variable. Periodically the computer files are sorted to merge new records with those previously submitted. This data, which is physically on magnetic tape, is available for analysis with the permission of the BCA.

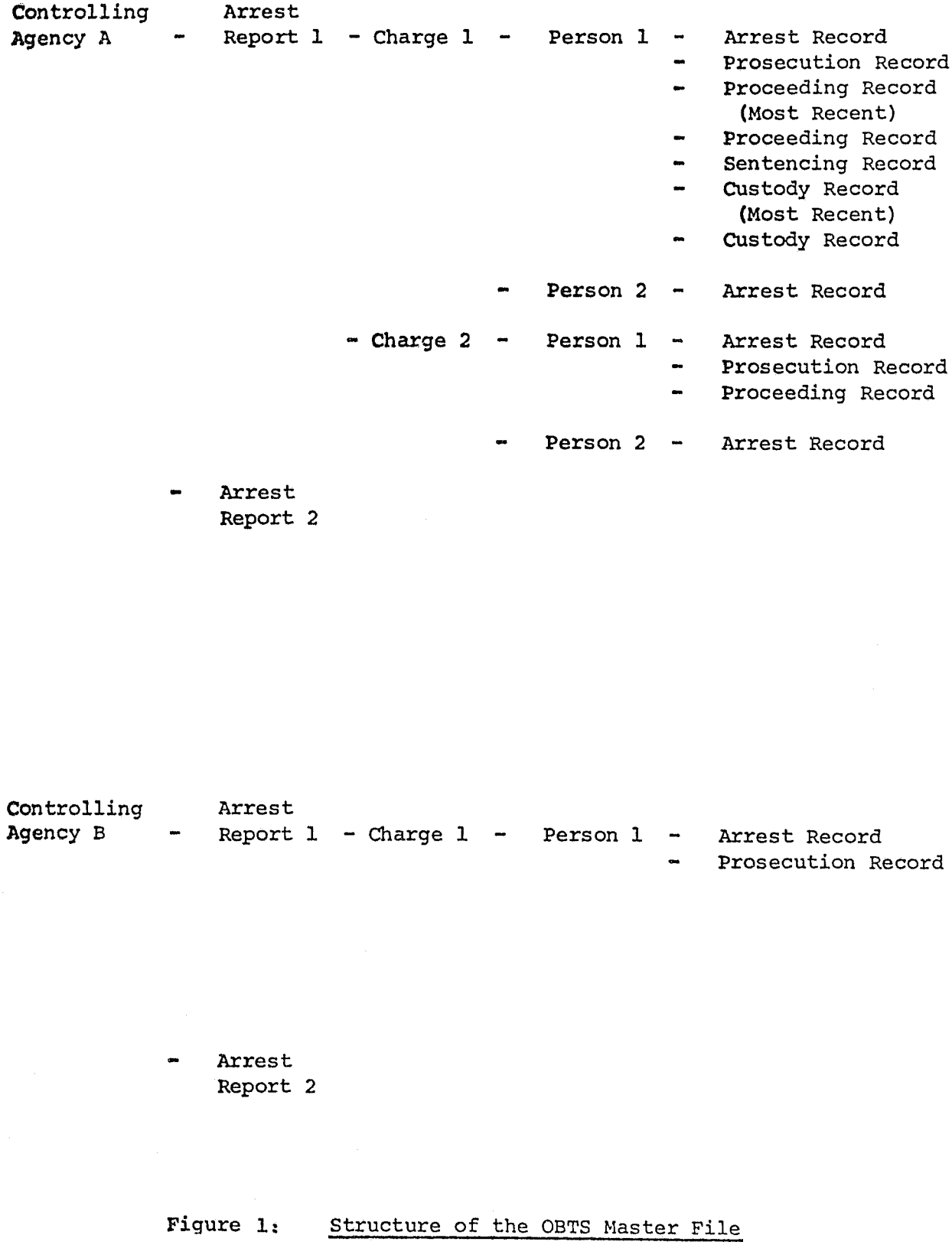


Figure 1: Structure of the OBTS Master File

For purposes of analysis the data has a few shortcomings. These are not fatal, but they do limit what might be done with the data. The chief liability is that of incomplete and inaccurate reporting. We consider this problem more extensively below. A second complication is reporting delay. The data is not timely enough to know the precise state of the criminal justice system on a daily or even monthly basis. To be sure of including all pertinent and reported records for a given time interval, one must anticipate a lag of several months. Another constraint on analysis is the lack of criminal history information in the OBTS file. It is not possible to determine whether a person being tracked has a prior record. This makes it impossible to study recidivism or the differential treatment of defendants as it may hinge on their criminal history. (Criminal history information is maintained in a separate computerized file -- CCH -- by the BCA.)

Despite its limitations, the OBTS data offers extraordinary opportunities to examine the flow of people through the criminal justice system. Many important questions can be answered on topics such as: court processing time, sentencing patterns, the charging of crimes, the differences among counties or judicial districts, the outcomes of trials, the usage of public or private attorneys, and differences owing to race, sex or age of defendants. Very importantly, system activities and flows can be monitored for changes in the system: to evaluate intended changes and to warn of the unintended.

The amount of data is so extensive that it is not economical to do an analysis on the whole data set. Furthermore, the OBTS data is not arranged conveniently for statistical analysis. Therefore, we have constructed two smaller data sets from the original by removing much of the redundant and, for our purposes, unnecessary information. These are described below. Our plan is to have separate data files for each year's data. That is, a file will contain all cases that begin with an arrest in that year and follow each case to completion, even if it runs into the succeeding year.

DATA VALIDITY

The foregoing description of how someone is tracked through the criminal justice system must be tempered with the knowledge that occasionally a report will not be filed or that errors will be made. The extent of unreported or erroneous data is hard to estimate. Experience indicates that the data on crimes and arrests is the best reported of any in the system. Only a few police agencies in the state fail to submit this information. After arrest, however, the proper tracking of a defendant is less certain.

If all those arrested were supposed to be tracked through the system, it would be quite easy to evaluate reporting completeness: a missing record at any stage would easily be detected. However, only adult felony and gross misdemeanor cases are tracked after

arrest. So if a person arrested for a felony is not tracked it may be due to a prosecutor having reduced the charge to misdemeanor rather than an instance of incomplete reporting. How often this happens we do not know because the prosecutor's reports are the most frequently missing of all the record types.

Fortunately there is so much redundancy in the reporting that even without a prosecutor's report we can still analyze the processing of individuals who have both arrest and judicial records present. The redundancy in the reporting forms also makes it possible to check on certain types of errors in reporting. We are thus able to correct the files in many instances where an error occurs. The reports from correctional agencies, the final stage in the tracking process, are not very informative, mainly acknowledging custody of defendants after sentencing. The bulk of interesting data is that provided by the courts.

To assess the completeness of the OBTS court data we can compare it with statistics published in the Annual Report of the Supreme Court. This publication gives totals for case terminations, dismissals, and trials for each county's district court. The reliability of this data is also open to question, but it is collected separately from the OBTS data. The results of a comparison between OBTS and Supreme Court data follow.

Of the 87 counties in Minnesota, we found that only about a dozen have seriously incomplete reporting of court data. And only four appear not to report it at all. Most of these counties have so few criminal cases in a year that their inclusion is not very necessary. An exception is Hennepin County, which we estimate reports on only about half of its court cases. With Hennepin County being the site of the state's largest district court, missing data here will cause any statewide totals based on the OBTS data to fall significantly short of actual. However, no biases are evident in Hennepin County's data, which means that it can still be used as a random sample.

In many research questions we are not concerned with totals but, instead, with percentages or proportions of defendants falling in particular categories; for example, the percentage of dismissals among burglary defendants. The Hennepin County data can be used for such analyses by itself but not by inclusion with statewide data. Alternatively we can also multiply Hennepin's totals by a correcting factor to obtain an estimate of state totals.

In examining court statistics we detected a number of counties which at first seemed to have incomplete reporting but were later found to have only certain errors in reporting that confused the analysis. Once observed, this problem was corrected by programming "around" the errors and reinterpreting the records.

The comparison of OBTS data with Supreme Court summary statistics gives good assurance that the OBTS data accurately describes the processing of felony defendants. A particular advantage of the OBTS data is that we can obtain summary data on an individual as well as a case

basis, whereas the Supreme Court reports only cases. A case may represent only a single charge, but for many research purposes we shall be more interested in the number of people involved than in the number of charges against a group of people.

We have also been able to make another more limited test of the OBTS data. Researchers at the Crime Control Planning Board had previously drawn a large sample of cases from prosecutors' files in several counties. This data was used for determining court processing time, among other purposes. We have found a close correspondence when average court processing time is calculated from the OBTS data for a county and compared with the estimates arrived at independently from the case samples. This is a second confirmation of the representativeness of the OBTS data.

Overall, Minnesota's courts do an excellent job of reporting; Minnesota ranks among the best in the nation in this. We anticipate that, as more use is made of the data, the quality of reporting will continue to improve.

DATA ANALYSIS

Our aim here is not to present a mass of data on Minnesota's criminal justice system. Rather, we wish to suggest--and invite suggestions--on possible uses for the data. Applications might include regular reports as well as investigations on specific topics.

Examples of research questions that the OBTS data can answer include: What percentage of burglary defendants (or other types of defendants) are convicted? Does this percentage vary significantly among counties? Is the conviction rate higher for those of minority races? Is a defendant more likely to be convicted if there is a trial? If there is a public defender? How likely is it for a convicted burglar to get probation or a suspended sentence? Do sentences vary significantly from one area of the state to another? Are a greater percentage of convicted burglars going to prison this year than last? And so forth, for any type or groupings of the crimes tracked.

If OBTS data is summed or averaged for each county, it can be merged with other county-level aggregate statistics. We have criminal justice expenditure and employment data for each county as well as court caseloads, crime and arrest totals and demographic information. When analyzed in combination, these statistics can reveal much about the costs and performance of criminal justice at the county level. One might investigate, for instance, those factors which lead to higher conviction or dismissal rates, or estimate the costs of processing defendants. Also available are computer programs for plotting data on a map of Minnesota counties. (An illustration of one is provided below.)

Before one can do any analysis of the OBTS data, a few general questions must be dealt with. These mainly involve decisions by the researcher on how to handle certain types of OBTS records. Specifically, one must decide: (1) what types of crimes are of interest and how broadly the crime type is defined; (2) what to do with defendants charged with more than one crime; (3) what to do with defendants having more than one final disposition; and (4) how to compare crimes and sentences of different severity.

While it is usually desirable to keep as much information as possible in an analysis, the complexity of handling multiple charges, crimes, and convictions for a large number of defendants will likely exceed the value to the analyst of that information in its full detail. To simplify the record on an individual, for instance, one might consider only the most serious offense charged. Or in looking at convictions, one might be concerned only with distinguishing between those sentenced to confinement and those not.

For the analyst's convenience we have set up three separate data sets based on the OBTS data. Each set has a different level of detail and complexity. Thus at the researcher's option he may analyze the complete OBTS file for every defendant--which is difficult and expensive in computer time--or employ a reduced data set which incorporates only the most frequently wanted information.

The OBTS master file contains information on all persons arrested in Minnesota for any offense except traffic offenses (disregarding the problem of incomplete or faulty reporting). For 1975 there are about 100,000 records in the file. However, the majority of these are arrest records of persons who are not sebsequently tracked through the system for various reasons, primarily:

1. The person is a juvenile--juveniles are not tracked by the system;

2. The offense is a misdemeanor--only felony and gross misdemeanors are tracked; or,

3. After arrest there is no subsequent prosecution.

In each of these cases a person is arrested and recorded in the system but not tracked further. This happens to about three-fourths of all persons arrested in Minnesota. Because we are often most interested in those who proceeded through the system, analysis of the entire data file is not economical. Therefore, we have constructed a reduced file by retaining information only on persons who continue in the system after arrest. This reduces the number of records to about 35,000. In addition, the new file has been restructured so that each person's records are grouped together before sorting on charge numbers.

The reduced OBTS file is still quite large--35,000 records--and contains a great deal of redundant and, for many purposes, unnecessary information. In addition, because of the variable number of records

per person, analysis of the data requires knowledge of computer programming and a great deal of time. To facilitate analysis we have further reduced the file to about 6,000 records by removing much of the redundant and less useful information.

This data file is a completely restructured and recoded version of the original OBTS data. It has been designed to make analysis as convenient as possible. To use it requires only a familiarity with an analysis program such as SPSS (Statistical Package for the Social Sciences). (The other data sets will almost certainly require a knowledge of FORTRAN or COBOL.)

In the simplified and recoded data set, all the information on a person is kept on the computer's equivalent of a single keypunch card. For the other two data sets the number of "cards" per person may vary; often there may be a half dozen or more.

Another simplification taken when recoding the data was to drop the statute number of the offense charged (which is recorded in the OBTS file) and keep only the uniform offense code (UOC). This means, for example, that everyone charged with a burglary-related offense, such as attempted burglary or possession of burglary tools, is lumped together. A researcher concerned with the details of offenses must revert to using the more cumbersome data files.

A valuable feature of the uniform offense code is that the code number is itself a measure of the relative severity of the crime: the lower the number, the more severe. In the simplified data set, the charges against a person are arranged in order of decreasing seriousness. Where possible, a court disposition and sentence are matched with the respective charge. An additional code indicates whether the accused was convicted of at least one charge or had all charges dismissed or acquitted. (This simple representation of what happened to a defendant is not present in the original OBTS file, which is oriented more to describing the outcome for each charge rather than for each person.)

We conclude with several examples of the types of analysis now possible with the OBTS data. The first is a breakdown for burglary defendants of the probabilities of conviction, a stayed or suspended sentence, and a prison term of one year or more; these figures are reported in Table 1 for each of the state's judicial districts. The average processing time for burglary defendants is also shown. This kind of analysis may point out variations in prosecution and sentencing across the state. The cost of such an analysis is less than two dollars.

As a second example we tested for differences in how Whites and Indians are processed. Looking at averages for all convicted defendants, we found no differences between Whites and Indians on these measures (variables): the incidence of guilty pleas, the type of attorney (public or private), the average processing time, the number of court appearances, the number of charges, and the length of confinement among those sentenced. Similar comparisons are also possible for any of the other variables contained in the file.

The OBTS data can also be used to describe and analyze the processing of criminal defendants in a single county or to compare different counties. An example of the former is provided in Figure 2 which describes Ramsey County district court activity in 1975. During 1975, about 900 persons were prosecuted for felonies and gross misdemeanors in Ramsey County. Of these about 650 (72%) were convicted on some charge, mostly by a plea of guilty--550 (85%). About 600 defendants received sentences, of which half were either stayed or suspended.

A final example is provided in Figure 3 which illustrates the levels of court activity by county on a map of Minnesota.

TABLE 1.

CASE OUTCOMES FOR BURGLARY DEFENDANTS

District	Probability of Conviction if Charged With Burglary	Probability of Stayed or Suspended Sentence if Convicted	Probability of Prison Sentence of 1 Year or More if Convicted (not Stayed or Suspended)	Average Processing Time from Arrest to Final Disposition (All Burglary Defendants) (months)
1	80%	10%	12%	3.0 mos.
2	65%	51%	9%	2.7 mos.
3	60%	51%	19%	2.3 mos.
4	60%	30%	24%	4.3 mos.
5	82%	21%	35%	2.4 mos.
6	78%	60%	13%	2.4 mos.
7	70%	20%	11%	2.8 mos.
8	76%	21%	20%	1.7 mos.
9	51%	47%	17%	1.8 mos.
10	70%	35%	25%	2.2 mos.

Ranges:

Probability of Conviction	51% - 82%
Probability of Stayed or Suspended Sentence	10% - 60%
Probability of 1 year Prison Sentence if Convicted	9% - 35%
Average Court Delay, All Burglary Defendants	1.7 mos. - 4.3 mos.
Total Sample of Burglary Defendants	N = 981

NUMBER OF DEFENDANTS

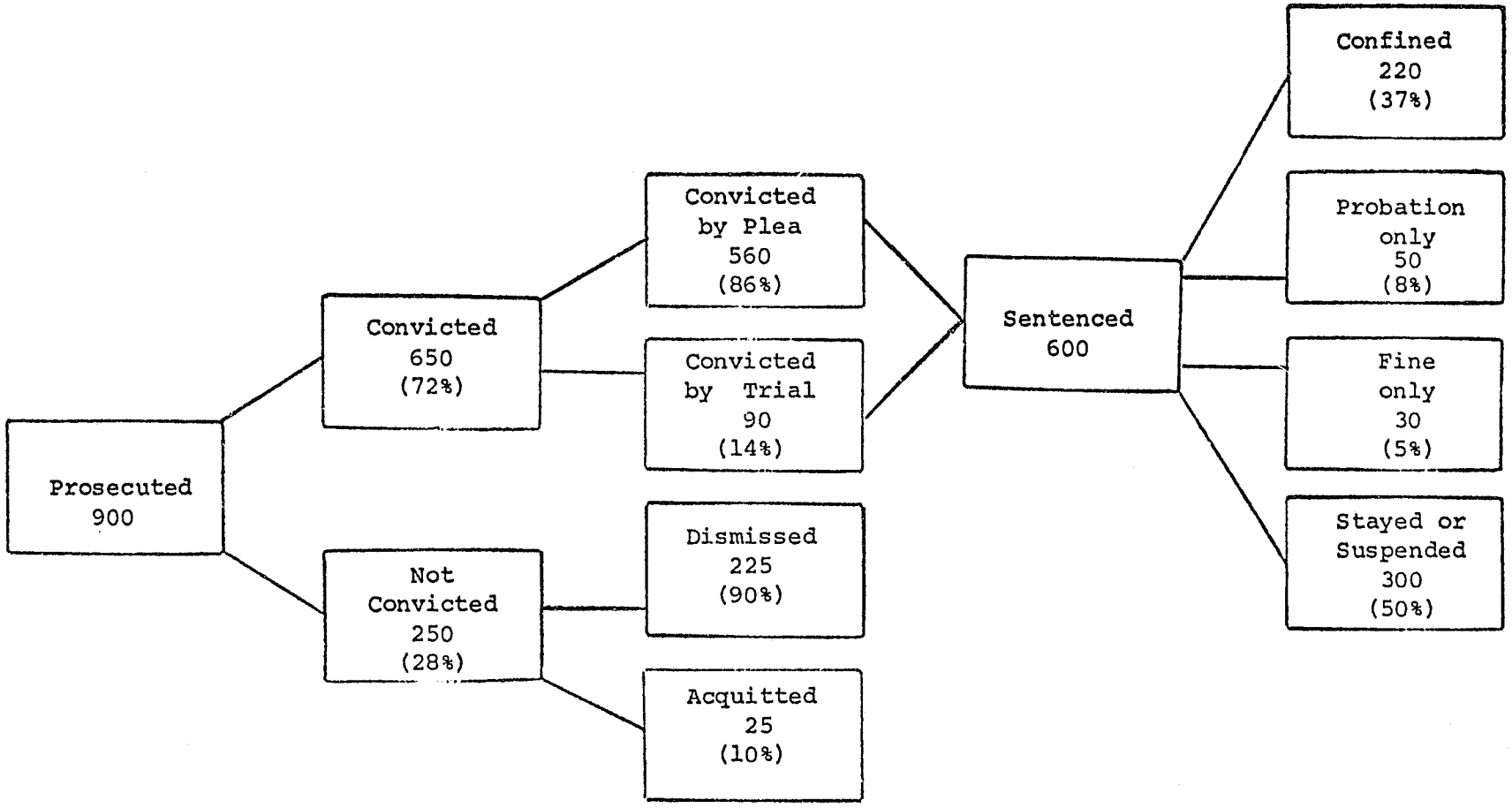


Figure 2: Ramsey County District Court Activity (Criminal)--1975.
(Numbers and Percentages are Approximate.)

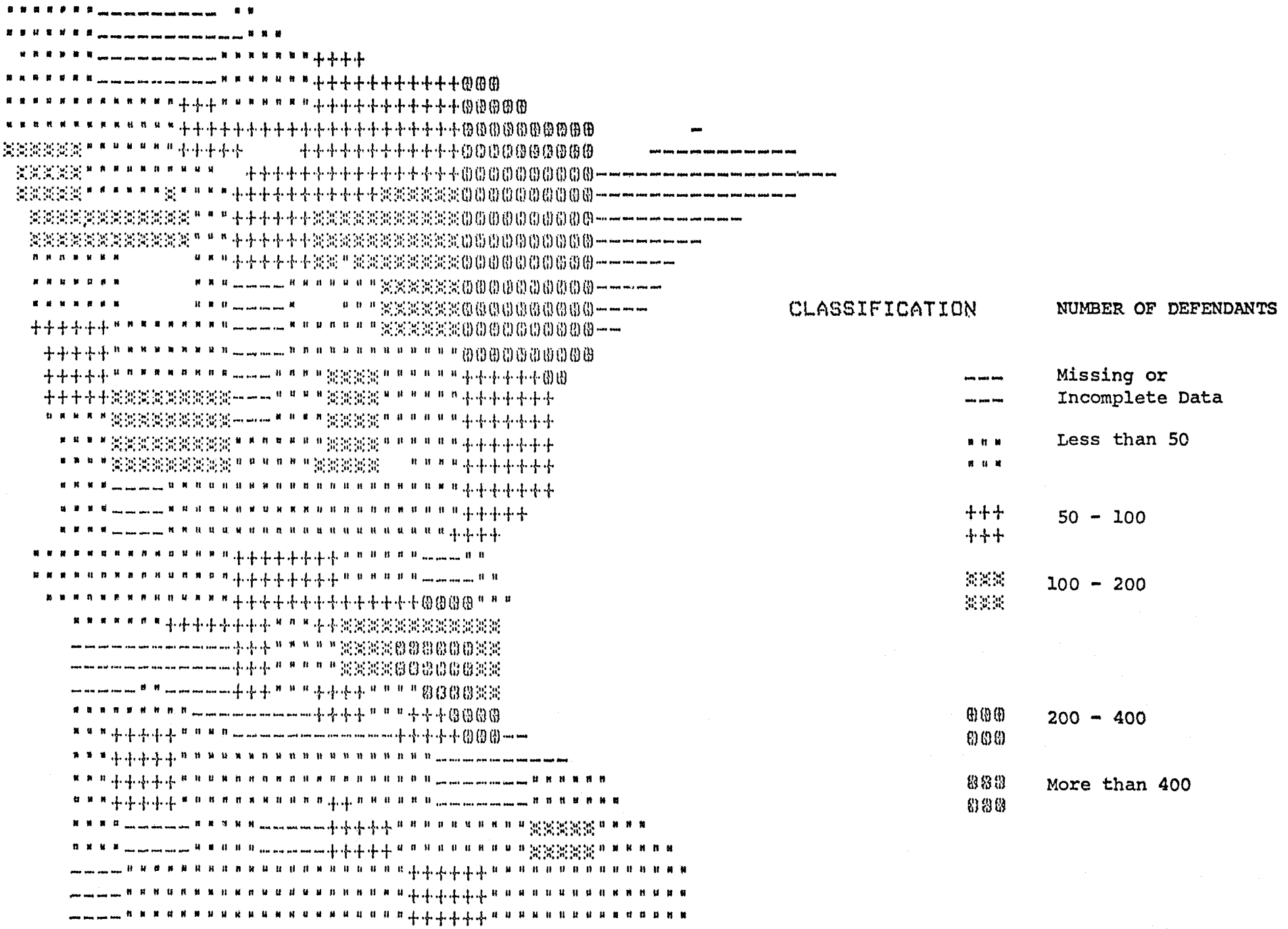


Figure 3: Minnesota District Court Activity (Number of Criminal Defendants) By County - 1975.

RECIDIVISM IN A MATCHED SAMPLE OF DIVERTED JUVENILE DEFENDANTS

by

Bill Hamm, Director
Statistical Analysis Center
South Carolina

FOREWORD

Youth Bureaus are a relatively new service structure with the first formal Bureaus being established less than ten years ago. In 1972, the Department of Youth Services, under new legislation, began establishing Youth Bureaus in local communities and absorbed some of the local youth programs/bureaus that had not received local support. The legislative mandate of 1972 established the Youth Bureau Division to serve the criminal and troubled youth in a community with the Youth Bureau's basic mission to change conditions that foster delinquency and to divert children and youth from the formal juvenile justice system. Because the legislative mandate of 1972 had no accompanying funds to accomplish the Bureaus' mission, the Bureaus were implemented primarily through the use of LEAA funds. These funds were awarded directly from LEAA or through the State Office of Criminal Justice Programs. These funding sources concentrated attention on the Bureaus' interaction with and direct effect on the criminal justice system.

While progress reports from the various Bureaus indicated a significant increase in the number of children receiving service, the relationship of this increase in service activity and the criminal justice system, primarily the Family Courts and institutions, was unclear. Monitoring of individual programs demonstrated that there did not appear to be any substantial reduction of the number of youth involved with the juvenile justice system. The Department of Youth Services replied to such monitoring findings stating that the real impact of Youth Bureaus was not being assessed adequately by monitoring.

In an effort to determine the impact of the Bureaus, a consulting firm was retained to evaluate the Bureaus' impact on the flow of juveniles through the criminal justice system. The Lieb Study looked at the five oldest Youth Bureaus, measuring whether or not there had been substantial reduction in the number

of juveniles processed in the family courts or institutions in areas where these Bureaus operated. That study found no significant impact on the flow had been made by the Bureaus. However, the study scope and methodology was questioned, severely in some cases, by the Department of Youth Services. While the study was adopted by the Governor's Advisory Committee on Juvenile Justice, there was no firm consensus as to the findings.

As the evaluation design was developed and the first steps in this study were implemented, the Governor's Committee on Criminal Justice, Crime and Delinquency was faced with requests for continuation funding for Youth Bureaus. In light of the lack of consensus on the Bureaus' effectiveness in diversion, the Committee decided to withhold complete funding approval until the study results were available. At the same time, the State Budget and Control Board expressed interest in the study as input to their recommendations to the Legislature concerning requests for State funds to continue Bureau operations previously supported through Federal funds.

During this period, an "Impact Study of the Youth Bureau Division" was released by the Department of Youth Services. This study indicated that the Bureaus were effective in keeping status offenders out of the criminal justice system and institutions. However, the methodology used in this study was seriously questioned; and the findings were rejected by OCJP and others as being unreliable.

This, then, is the environment in which this study is produced--the OCJP monitorings and the Lieb Study concluding no significant impact on the criminal justice system; the DYS reports and Impact Study concluding success; and the Juvenile Justice Advisory Council, the Governor's Committee, and the State Budget and Control Board awaiting clarification.

This study should provide further documentation and clarification on the effectiveness of Youth Bureaus in diverting juveniles from the criminal justice system.

STUDY SCOPE

When a child is diverted by Intake at Family Courts, there are numerous courses of action:

A. The child is simply sent home with advice, possibly after a talk with his parents or guardians.

B. The child is handled as in A with instructions to check back after some period to assess progress (frequently called a contract), e.g., to check on school attendance or grades.

C. The child is handled as in A with instructions to the child and/or parents to see an agency like Vocational Rehabilitation or the local Mental Health Center.

D. The child is referred to the Youth Bureau, if one is available, or referred concurrently to the Bureau and another resource.

When a Bureau referral is made, the child and parents go to the office and an assessment is made. At the Columbia Youth Bureau, if the juvenile doesn't show up or there is no interest or cooperation or if the Bureau decides the case is not appropriate for them to handle, such is reported back to the Court. If a case is accepted, assessment, counseling, and referral services are provided. At the Columbia Youth Bureau, the Bureau reports back in 6 months to the Court; and usually the charges are dropped upon the Bureau's recommendation.

Naturally, the hope of Intake when they make a diversion is that the non-judicial course of action is sufficient to keep the juvenile from getting into trouble again and returning to Court. All Courts have the non-judicial diversion options A, B, and C listed above. Many of them also have option D, the Youth Bureau.

The purpose of this study is to determine the advantage of having the Youth Bureau option available for diversion. The study is to examine the impact the Youth Bureau has had in meeting the objective of diverting juveniles from the Family Court in Richland County.

For this study, recidivism is defined as a return to Court after diversion for prosecution. This event was measured by a docketed petition. The recidivism period was limited to eight months after the date of referral by Intake. In other words, if a juvenile was placed on the Court docket for prosecution within eight months after he was diverted, he was considered a recidivist.

Juveniles that returned to Intake and were rediverted were not considered recidivists. Court docketing of the original offense upon which the diversion was made for disposing of the petition by nolle proseque after "successful rehabilitation" was not considered recidivism. Simply put, recidivism is the failure of the original diversion action to keep the juvenile out of Court for eight months.

The time period in which diversions were to be counted was from January 1, 1974, through March 31, 1977. The beginning date was the approximate starting date of the Columbia Youth Bureau. The ending date for counting diversions was established to allow for the eight months recidivism period of the last cases.

The Columbia Youth Bureau and Richland County Family Court were selected as the study site for a variety of reasons.

1. Continuity of key Court and Bureau personnel.

2. The quality of the Court records.

3. The quality of the Bureau's case files.

4. The Bureau had a formal agreement with the Court for reporting back to the Court on referrals which would improve the completeness of documentation in the case files at both sites.

5. The Bureau's early objectives were directed toward being an improved diversion resource for the Court.

6. The proximity of the records would facilitate collection and verification.

STUDY METHODOLOGY

Every known document was searched, checked, and rechecked at both the Court and the Bureau to locate every known instance of diversion, as defined for this study, by the Intake Unit of the Richland County Family Court from January 1, 1974, to March 31, 1977. Each case file at the Court was checked to insure positive, hard copy documentation of a diversion. Where information was vague or absent, corresponding files were checked at the Bureau for documentation. In all, 1,463 substantiated records of diversion were found. Of these, 58 records had virtually no data available for descriptive or matching purposes.

Each name (an alias) on each record was checked in the Court docket book to determine if the juvenile had recidivated or had a prior instance of court appearance. All possible cases of recidivism were recorded along with the relevant petition numbers. Each petition file was pulled; and record matches were established by name, sex, race, date of birth, and other descriptive data available.

The 1,463 records were divided into two groups:

1. Those cases referred to the Columbia Youth Bureau; and,

2. Those cases sent home or referred elsewhere.

The first group was labeled "Youth Bureau" and the second was called simpley "Diverted".

All cases, whether in Group 1, Youth Bureau, Group 2, or Diverted, were checked against the Youth Bureau files for positive matches, again substantiated by name, sex, race, date of birth. All cases that physically showed up at the Bureau offices were coded as either Diverted Shows or Youth Bureau Shows, and those that did not show up at the Bureau were coded as either Diverted No Shows or Youth Bureau No Shows. Naturally, most of the Youth Bureau group would be expected to be Youth Bureau Shows; and most of the diverted group would be expected to be Diverted No-Shows.

A comparison of the group referred to the Bureau with the group diverted elsewhere provided interesting information but was not necessarily a "fair" comparison of groups of the same kinds of juveniles. Therefore, certain descriptive data was collected on each individual to allow for matched groups. The object of matching cases from the Youth Bureau group with the Diverted was to establish pairs of cases that are alike in all recorded aspects except for the fact that one was sent to the Bureau and the other was diverted elsewhere. The aspects used in the initial pairing were date of diversion, age at time of diversion, living arrangement, sex, race, and offense type.

To insure that the grouping of crimes into offense types did not pair offenses with significantly different likelihoods of recidivism, an analysis of individual offenses was scheduled. Using a multiple regression equation and allowing for interaction of factors, such "mismatches", could be identified and corrected. (In fact, some mismatches were identified in offense group one and corrections were necessary.)

Additional matching criteria were to be family income and educational attainment level. However, these data were not consistently available for each case for comparison. Family income was available for only 54% of the cases, and educational level was available for 72% of the cases. These criteria, then, were not used in the initial pairing process. However, it was determined that if the matching produced pairs with statistically significantly differences in income or educational attainment (for pairs that had this data), a rematch would have to be made using these criteria in the initial pairing process. (In fact, such differences did not occur and rematching was not necessary.)

Eliminated from consideration were those cases with prior criminal histories or referrals. Normally, juveniles with prior records are not diverted and would not be appropriate study subjects. Additionally, it was felt that a prior referral would be similar to the prior criminal history situation, so only the first referral in a juvenile's career was eligible for inclusion.

The next step was to eliminate from matching consideration Youth Bureau cases that were referred but did not show up--Youth Bureau No-Shows. Also eliminated were those diverted cases that somehow showed up at the Bureau--Diverted Shows. The cases remaining were Youth Bureau cases that actually went to the Bureau and the diverted elsewhere cases that actually stayed elsewhere.

The result of this matching (Match 1) was matched sub-groups of each of the two main groups, Diverted and Youth Bureau, that were alike. The comparisons of these matched sub-groups observe the relative effectiveness of two exclusive diversion conditions, i.e., Diverted Elsewhere vs. Youth Bureau.

A second comparison of matched pairs was anticipated after any mismatches were identified and eliminated from the above Match 1. This second set of pairs is called Match 2.

It was determined that a significant number of cases existed to allow for another measurement, Match 3, which was to be made by pairing those juveniles who were referred to the Bureau but did not show up, Youth Bureau No-Shows, with the Bureau referrals who did show up, Youth Bureau Shows. This match would compare cases that were alike in all respects, including the initial referral choice of the Intake Officer, except that half showed up at the Bureau and half did not.

SUMMARY OF MAJOR FINDINGS

The Columbia Youth Bureau diversion program appears to have no significantly different results, measured by this study's definition of recidivism, than the alternative of diversion elsewhere.

This study involved one major function, diversion, of the Columbia Youth Bureau. The measure of effectiveness indicates the relative performance of two diversion alternatives in keeping a juvenile from being adjudicated (minimizing penetration) for eight months.

In this study, there was no indication of any significant difference in recidivism when diversions to the Columbia Youth Bureau are compared to diversions elsewhere.

1. Overall, juveniles referred to the Bureau did not have a statistically significant higher recidivism rate than those diverted elsewhere.

2. Juveniles referred to the Youth Bureau have statistically significant different characteristics than those diverted elsewhere.

    a. A higher percentage of those referred to the Youth Bureau were male.

    b. Those sent to the Bureau are slightly older.

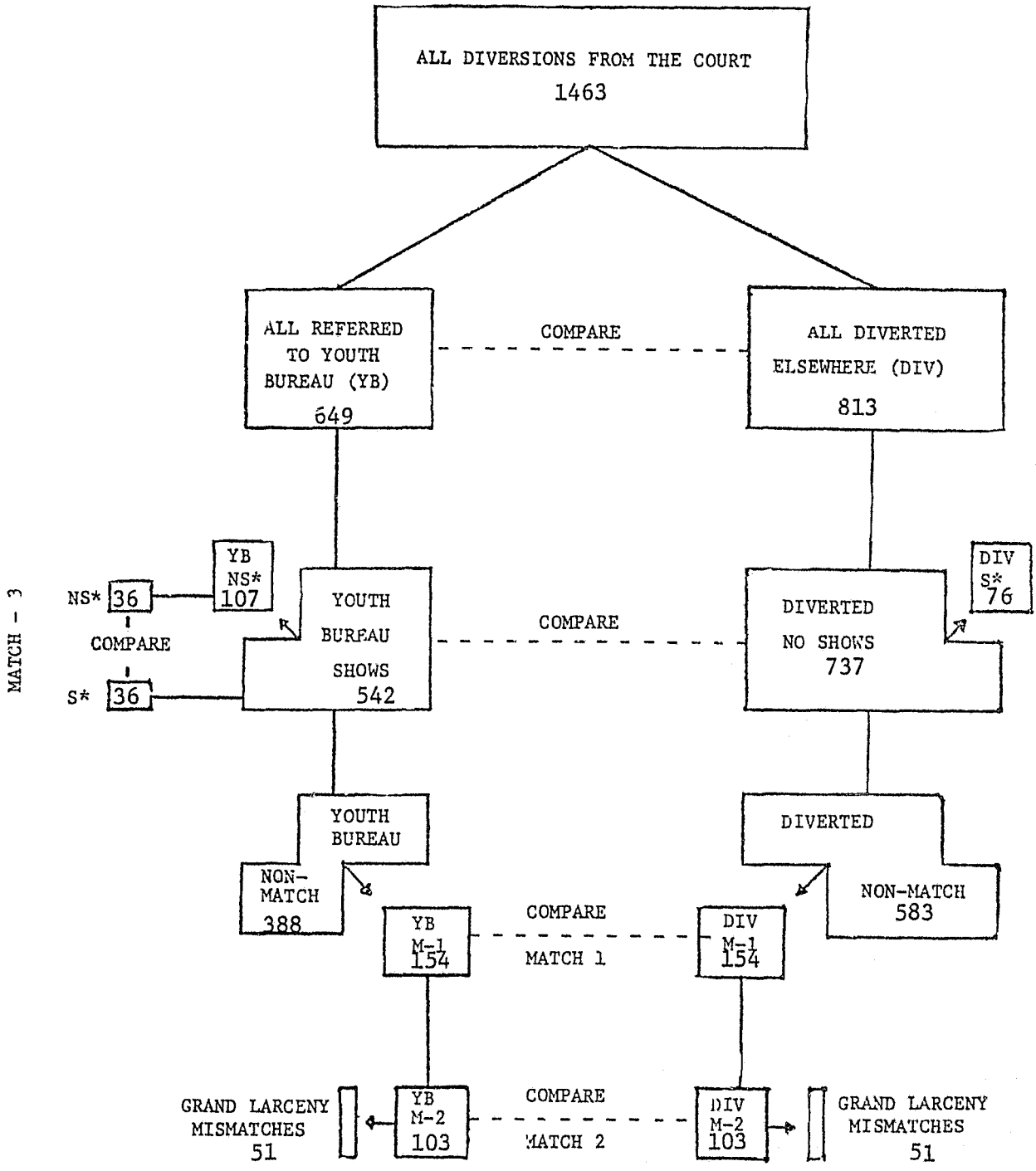
    c. A higher percentage of Bureau referrals had committed offenses of grand larceny, breaking and entering and drug related offenses.

    d. A lower percentage of Bureau referrals had committed offenses of shoplifting and assault.

    e. Those sent to the Bureau are slightly further behind in school.

3. For matched pairs of juveniles, there is no statistically significant difference in recidivism for those referred to the Bureau and those referred elsewhere.

SCHEMATIC OF THE COLUMBIA YOUTH BUREAU
-70-
IMPACT STUDY METHODOLOGY



* NS = No Shows; S = Shows

NOTE: Youth Bureau shows are those cases that were referred to the Bureau and actually went to the Bureau. The No Shows are those few cases that did not go to the Bureau although they had been referred there.
Diverted Shows are those few cases that were not referred to the Bureau by Intake but for some reason showed up there. Diverted No Shows are those cases that were not referred to the Bureau and did not go there.

4. For all Youth Bureau referrals, those that showed up did not have a statistically significant higher recidivism rate than those who did not show up.

5. Those Youth Bureau referrals that showed up have statistically significant different characteristics than those who did not show up.

   a. Those that did not show up have slightly smaller families.

   b. Those that did not show up are slightly younger.

   c. Those that did not show up are in lower grades in school.

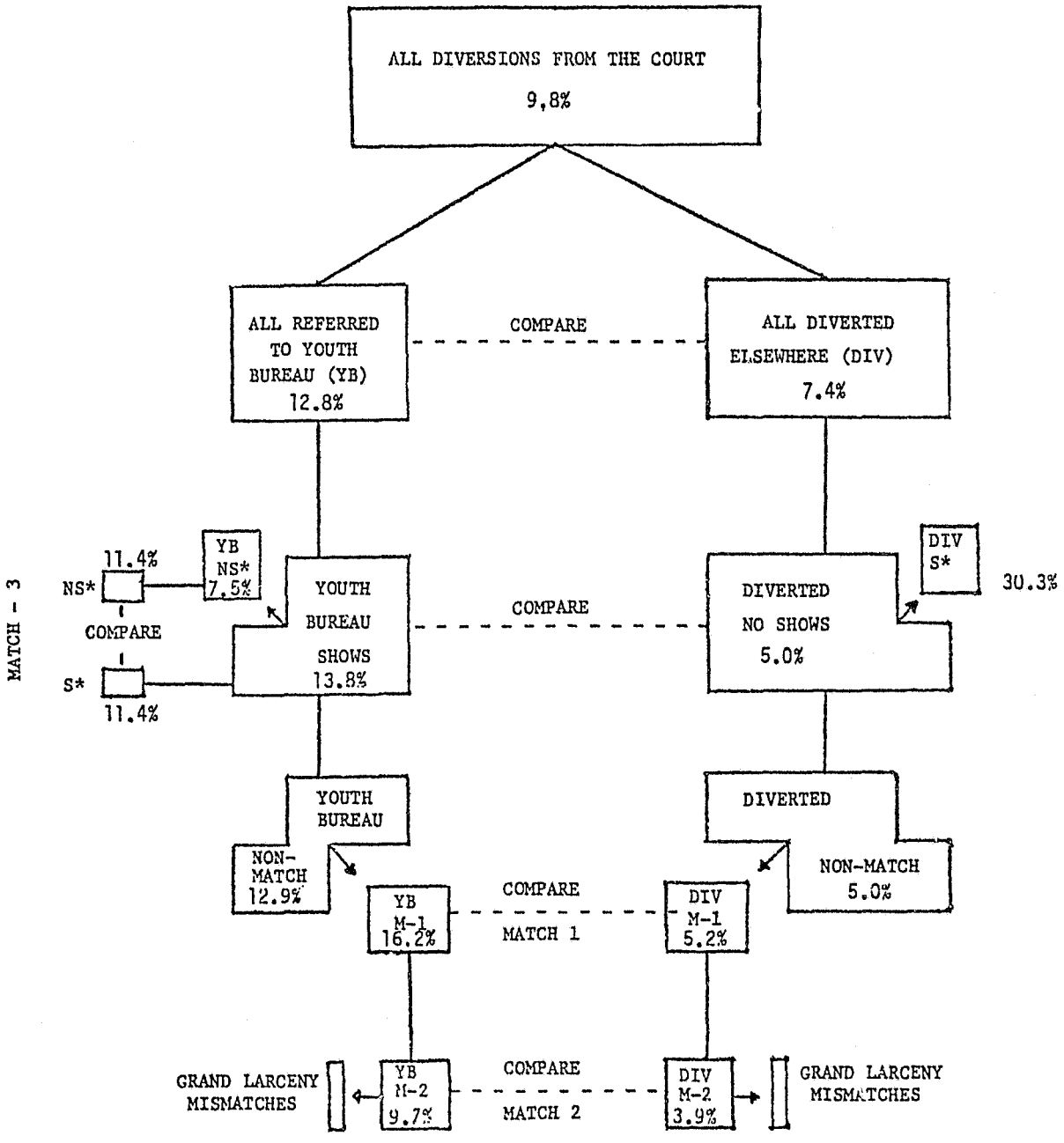
6. For matched pairs of juveniles referred to the Bureau by the Court, there is no statistically significant difference in recidivism rates between those who showed up and those who did not.

ADDENDUM TO COLUMBIA YOUTH BUREAU IMPACT STUDY

Match 3, between Youth Bureau Shows and Youth Bureau No-Shows, consisted of only 35 pairs. In reviewing the analysis of the characteristics, it was determined that certain factors used as criteria for this match were not significant factors affecting recidivism. A rematch was made using only the characteristics that had a statistically significant relationship to recidivism. This new Match 3 produced 65 pairs. Again, there was no significant difference in recidivism rates of the Youth Bureau Shows and the Youth Bureau No-Shows.

Initial review indicates that the Youth Bureau Show matches are representative of the entire Youth Bureau Show population. Detailed computer analysis will be necessary to confirm this. If this fact is confirmed, it would indicate that the majority of the Youth Bureau clients would not have fared significantly worse if they had not gone to the Bureau.

SCHEMATIC OF METHODOLOGY WITH RECIDIVISM RATES



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TECHNICAL SESSION B

8:30 - THURSDAY

FEBRUARY 23, 1978

MODERATOR - CINDY TURNURE

DIRECTOR, SAC

MINNESOTA

STATE AID TO LOCALITIES: LAW ENFORCEMENT

by

Frederick L. Anderson
Statistical Analysis Center
Division of Justice and Crime Prevention
Commonwealth of Virginia

SUMMARY

One approach to the problem of decreasing tax bases caused by urban exodus is to subsidize local operating expenses with State funds. This paper discusses the application of regression analysis in the development of a procedure to determine levels of assistance for law enforcement in cities, counties, and towns in the Commonwealth of Virginia. An analysis is made of existing patterns of expenditures and the correlations to factors measuring need and ability to pay such as property and violent crime rates, personal income, taxable retail sales and real estate, area and population. Legislation has been drafted and is being considered during the 1978 session of the General Assembly.

State aid to city and county police departments in Virginia is being considered because of several factors. First, aid is already provided to Sheriffs by the State Compensation Board which funds approximately two-thirds of their salary and operating expenses. Second, as we all are aware, cities face problems in funding because of reduced tax bases due to large number of people moving to the suburbs. Third, there is an increasing pressure to prohibit annexation. In order to accept this moratorium, cities must have some means of support from outside their corporate limits. And, finally, some assistance seems justified since the state has imposed minimum training standards for law enforcement officers.

House Bill No. 599, presently before the Virginia General Assembly, addresses these issues by proposing state support for local health, welfare, and law enforcement expenditures. Virginia's SAC assisted in the preparation of this legislation by developing the formula to be used in determining the extent of state financial aid to individual localities.

The political organization of Virginia localities is necessary to understand our efforts. Cities and counties are separate entities with no overlap in function or responsibility. Both cities and counties have sheriffs; but only in counties without police departments do the sheriffs have law enforcement responsibility. In no case is a sheriff authorized to perform patrol activities. Five of Virginia's counties have elected to have police departments. In these five counties and all the cities, the sheriff is responsible only for providing court guards and jail administration, including prisoner transfers.

Towns constitute a third type of government in Virginia. These are included within counties and may or may not have their own police. Law enforcement responsibilities within towns are determined by individual agreements between themselves and the county sheriff or police department.

The initial step in the analysis was to gather pertinent data for Virginia's forty-one cities and ninety-five counties. Towns were excluded since many do not report crime and none are required to report expenditures to the state auditor, who is the source of this data for cities and counties.

Legislation was proposed in 1977 to provide state aid to the same local agencies included in the current bill. It called for the equitable distribution of state aid based upon several factors: need, effort, and ability to pay. We began to define data elements which could be interpreted as measures of these factors. In addition, population and area were used to obtain per capita and density transformation of the variables. (Figure 1)

Anticipating the use of regression analysis, we considered a number of possible independent variables:

- total law enforcement expenditures
- number of sworn law enforcement officers

- expenditures per sworn officer
- expenditures per 1000 population
- number of officers per 1000 population.

From correlations and initial regression runs it was apparent that the best relationships (least residual variation) would be obtained by the use of total expenditures and number of sworn officers.

The scope of our analysis was limited to a single year for two reasons: The U.C.R. program in Virginia became compulsory in 1976. Prior to that there were no crime figures for all cities and counties. Second, the auditors report giving 1976 expenditures had not been published. With only one year of data to use, we concluded that future revisions in the formula would be required as more data became available, whatever the results.

Specific fiscal procedures used throughout the state gave rise to additional problems. The Auditor of Public Accounts publishes annually a summary of all expenditures for cities and counties by function. However, these items represent only those funds passing through the local treasurer. Prior to 1977, state funds for sheriff and deputy salaries were often paid by the state directly to individuals, and therefore were not included in the auditor's report. At the same time, budgets published by the State Compensation Board are developed for the purpose of determining levels of state funding to sheriffs and often cover only a portion of total expenditures. That is, localities frequently elect to provide more than one-third of the Compensation Board budgets for their sheriffs. Given these limitations, our best estimate was obtained by using the maximum of these two figures for counties without police departments. For counties with police as well as all cities, the auditor's figures were used since Compensation Board figures do not include police expenditures.

As our work progressed, we limited our attention to total expenditures as the dependent variable for several reasons. First, our agency views crime and the operation of criminal justice systems as primarily a local issue. Each of the local systems is highly independent, operating under a wide variety of conditions, needs, and priorities. In addition, there has been a reluctance on the part of the Virginia General Assembly to impose additional controls over localities. It is becoming increasingly apparent that federal and state requirements not only impose additional burdens, but in some cases interfere with effective local government. Because of these reasons we chose not to pursue the development of a formula to specify the number of law enforcement officers to be subject to state funding assistance.

At this point it is important to discuss a major issue in the formula development. By using actual expenditures as the independent variable we risk the development of a formula which tends to sustain patterns which may be undesirable. If this is the case, then the issue becomes one of how to determine what is desirable. Arguments can also be made for interpreting existing expenditures as the best expression of a locality's view of its problems.

Primarily because of limited data, we chose to emphasize the explanation of existing expenditures in terms of need, effort, and ability to pay. This experience, together with the availability of additional data, will provide opportunity in the future to examine this issue in greater detail.

Early in our association with the Commission*, it became apparent that in order to receive favorable consideration the formula would have to meet several constraints:

- It must be at least moderately understandable to the lawmakers;
- It must have reasonable results; the calculated pattern of expenditures could not deviate too widely from the actual;
- It must be related to need and ability.

The diversity between localities as measured by nearly any variable is enormous. Localities range from one square mile in area to over a thousand, from under 40 million in taxable real estate to over 11 billion, and from only two reported index offenses to over 23 thousand. Total law enforcement expenditures range from under 20 thousand to nearly 15 million. This variation can be seen in Report A of the Appendix.

Due to the particular techniques in regression analysis, the larger values of the independent variable have the greatest influence in calculating coefficients. Thus it is possible for some calculated local expenditures to be negative, implying that localties should pay the state. Since negative state aid is not realistic, a final constraint for the formula development was to obtain all positive calculated expenditures.

This last constraint gives added weight to the use of a high R-square as a selection criterion. In addition, since the data contain a number of highly correlated "independent" variables, we examined the effects of "forcing" these into the solution, in order to achieve positive results.

Thus, during the repeated runs of the regression procedure, we attempted to:

- gain a sufficiently high R-square to obtain all positive predicted values;
- use as few variables as possible;
- avoid the use of complicated transformations.

The final regression equation is shown in Figure 2. Figure 3 shows the correlation matrix for variables in the regression equation.

*Commission for State Aid to Localities, General Assembly, Commonwealth of Virginia.

For presentation to the Commission a special program was developed to show the detail of the formula developed. This program produced the five reports listed below. A page from each report is shown in the Appendix.

Report A. Values of Basic Variables

Report B. Values of Variables and Transformation Used in Formula

Report C. Contribution of Each Factor (The Product of Each Variable and Its Multiplier)

Report D. Contribution of Each Factor as a Percentage

Report E. Comparison of Actual and Formula Expenditures (State funding estimates are two-thirds Compensation Board and formula figures respectively.)

There are still several issues to be resolved. Before discussing these we need to review the way the formula will be implemented. The bill calls for state funding of two-thirds of law enforcement expenditures as calculated by the formula beginning in the 1982 biennium. As an interim step, police departments will receive one-third funding from the state during the 1980 biennium. The legislation specifies the variables and their transformations which will be used, allowing only the constant and coefficient to be recalculated from year to year. However, the SAC will be required to analyze the adequacy of these variables and propose changes in the Code as needed. An annual report from the SAC will be required, showing the effects of the formula upon all localties.

Towns have been included by requiring their certification. They may apply for certification for state funding assistance if they (1) meet the same financial reporting requirements as do cities and counties, (2) meet the same law enforcement training standards as required for cities and counties and (3) participate in the Virginia U.C.R. program. Towns will be aggregated within counties and the state funds will be divided according to population.

The first issue to be resolved is the question of whether the formula will motivate localties to continue undesirable expenditure patterns. This is a distinct possibility; however, as we accumulate new data and are able to perform multiple year analyses, we will increase our confidence in applicability of patterns evidenced by the formula. If they do not bear out, we will revise it. By the same token, additional data will reveal the adequacy of the particular variables in the formula and enable us to resolve problems of multicolinearity or highly correlated predictor variables.

THE USE OF UNIFORM CRIME REPORTS IN MANAGEMENT AND ADMINISTRATIVE STATISTICS

by

Dr. Anthony A. Croce, Director
Statistical Analysis Center
New York State Division of Criminal Justice Services

Uniform Crime Reports present some methodological problems. The data is grouped, preventing "transactional" analysis. The offense data is not connected on a case by case basis with the arrest data, and the overlap of offenses one year which result in an arrest during some other year is not known.

Despite these difficulties, the UCR data is frequently the only available information on a statewide basis. Because of this, New York State has developed methods of using this data on an "indicator" of criminal justice activities in the state's 62 counties.

The "input" to each county's criminal justice system is considered to be part I offenses, reported through the UCR data. Felony arrests in a county are considered to be the system's "output". The size of the civilian population in the county is used to standardize the data.

The method of computing the ratio between "input" and "output" relies upon the creation of rates. It is the ratio between two rates which enables the analyst to compare counties with relatively greater "outputs" against those with relatively less. If rates are not used, and if the analyst relies upon the correlation of individual data elements, no findings emerge.

This point is illustrated in the 1975 data. The Pearson r for the three data elements of population, part I offenses and felony arrests are all highly correlated and are significant. Moreover, the correlations are in a positive direction. This means that as the size of the population increases in the State's 62 counties, the volume of part I offenses increases ($r = +.99$). As the population increases, the volume of felony arrests increases ($r = +.98$). As the volume of part I offenses increases, the volume of felony arrests increases ($r = +.99$). These findings are hardly useful for management purposes, since they express the obvious.

Some counties are larger in population, offenses, and arrests than are other counties. At least, this is all that can be learned in the absence of rates.

However, when the 1975 data is converted into rates, a finding emerges which can be interpreted theoretically and which has useful connotations for management and planning. Part I offenses in each county can be divided by the county's population to provide an offense rate. This is an "input" statistic which can be compared among counties of varying sizes. The "output" statistic can also be standardized for comparative purposes by computing the number of felony arrests per part I offense. When the 1975 offense rate was correlated with the felony arrest rate, it was learned that "input" has a negative relationship with "output" across the state's 62 counties. The Pearson r was -.30.

This finding supports either of two theoretical interpretations. According to one view, a "deterrent" influence has been found. The counties with relatively greater proportions of felony arrests have relatively lower offense rates. Arrests "deter" offenses. But another interpretation is that counties which are overwhelmed by their offense problem have reached the "system capacity" in their amounts of felony arrests. Although their arrests are greater than in other counties, their offenses are still greater, so that the proportion of arrests to offenses is relatively low.

It is the "system capacity" model which is most useful for planning purposes. The methodology described above enables planners to empirically identify counties whose criminal justice resources are insufficient to cope with the offense problem facing the criminal justice system. Resources here include the police manpower available in the county, with its available level of training, talent, and experience. Resources also include budgets, equipment and facilities. The "system capacity" model presumes that available resources are being focused in each county upon the production of a volume of felony arrests.

When important correlations are found, cattergrams may be used to graphically display the relative position of each county, taking into account its offense rate and its arrest rate. This enables planners to allocate larger proportions of new resources to those counties which appear in the negative quadrants of the scattergram.

Ranking counties in this way sometimes is not desirable. There are many reasons why anonymity is to be preferred over the explicit naming of counties in rank order. When this is the case, the scattergram may be used to depict the statewide condition of criminal justice, without assigning a name to the individual counties. Computerized scattergrams do not usually identify cases to begin with.

Finally, the methods used in New York State will gain validity as "indicators" of the input-output activity in the State's counties if several years' worth of data show similar patterns. Only then will it be known whether grouped data such as that provided by Uniform Crime Reports can reliably "indicate" the kind of information which would be provided in a truely "transactional" statistic. Figure 1, below, gives some promise that the New York State UCR data does have value as an "indicator" of criminal justice input and output.

FIGURE 1

	YEAR	
	1975	1976
Per Capita Part I Offenses by Felony Arrests per Part I Offense	-.30	-.11
Per Capita Part I Offenses by Indictments per Part I Offense	-.51	-.39
Police per Felony Arrest by Felony Arrests per Part I Offense	-.60	-.56
Percent of Police who are Part Time by Felony Arrests per Part I Offense	+.34	+.41
Percent of Police who are Sheriff's by Felony Arrests per Part I Offense	+.26	+.13

Figures 2 and 3, below, show the value of the scattergram for planning purposes. In Figure 2, the verticle axis gives the county's rate of felony arrests per part I offense. The horizontal axis gives the per capita part I offense rate. The vertical axis in Figure 3 is the same as in Figure 2. The horizontal axis in Figure 3 shows the number of full time uniformed police per felony arrest. Each star in the scattergrams indicates one county; the exception is New York City's five counties which have been grouped as a single geographic unit.

CONTINUED

1 OF 2

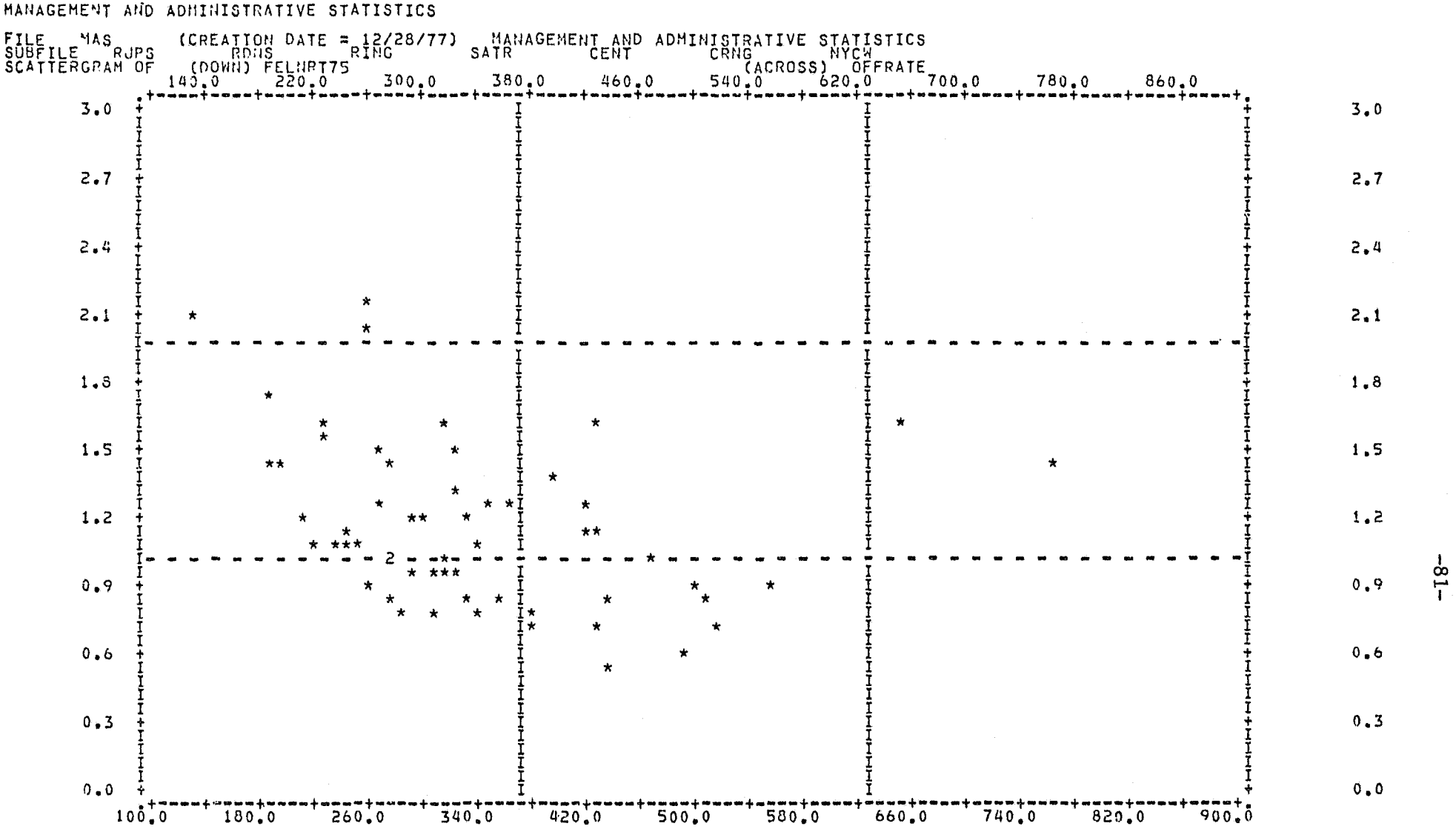


FIGURE 2

FELONY ARREST RATE
BY
PART I OFFENSE RATE
1975

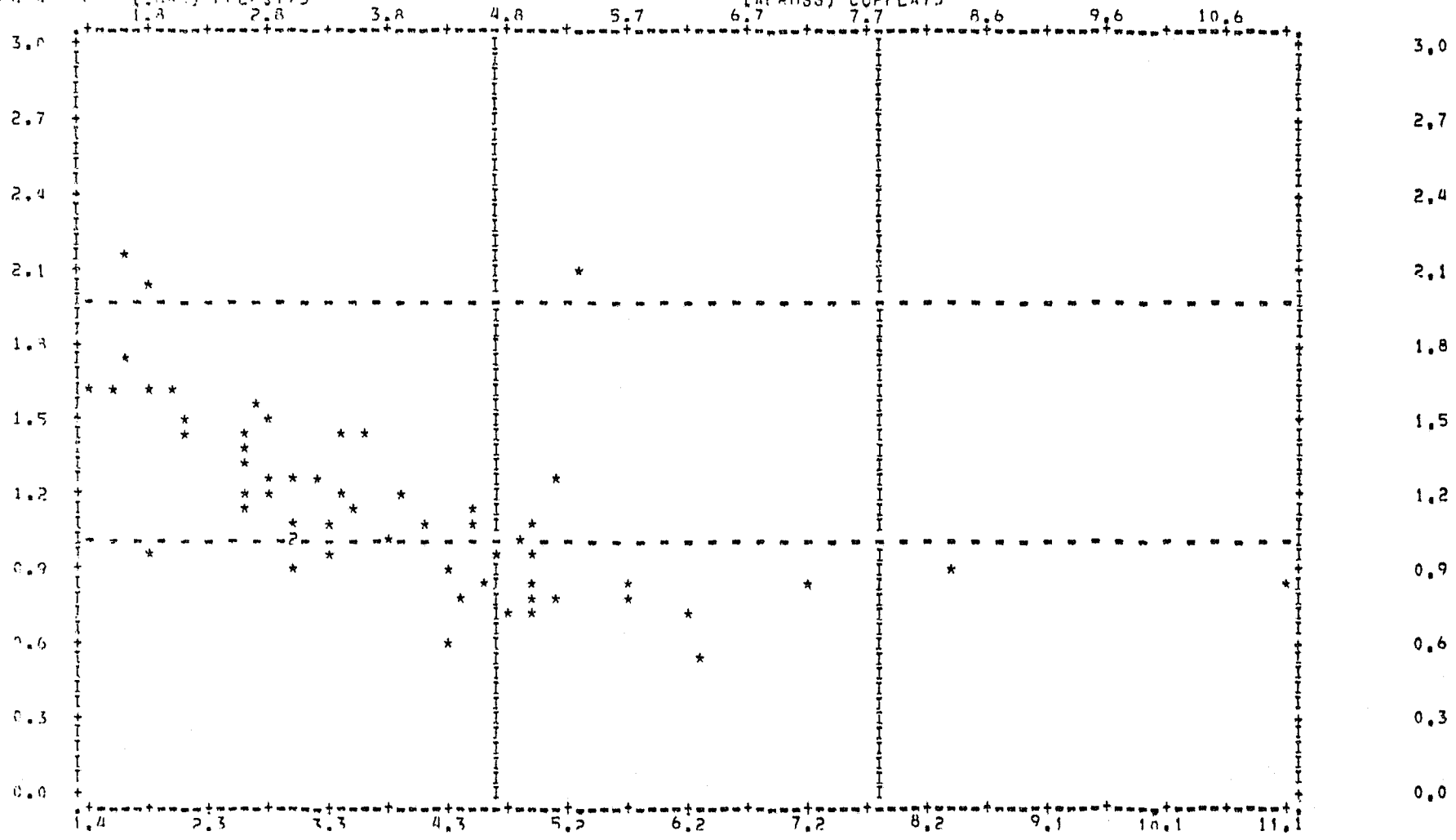


FIGURE 3

FELONY ARREST RATE
BY
POLICE PER FELONY ARREST
1975

CONFIDENTIALITY OF RESEARCH AND STATISTICAL DATA

by

Carol Kaplan

(DID NOT SUBMIT COPY OF PRESENTATION)

ANALYSIS SESSION: CAREER CRIMINALS

4:00 - THURSDAY

FEBRUARY 23, 1978

CHAIRMAN - ANTHONY CROCE

DIRECTOR, SAC

NEW YORK

ANALYSIS SESSION: CAREER CRIMINALS

Anthony Croce, Chairman

The purpose of the session was to determine the consensus of opinion on the definition of the "career criminal" concept, and on its importance as a target of research and criminal justice special projects.

The discussion focused on LEAA's Integrated Career Criminal Apprehension Program, which attempts to identify, apprehend, and prosecute career criminals in a manner which will reduce individual recidivism or general crime rates. Several states explained their projects. Clear information on the methods used by these projects to identify "career criminals" is difficult to obtain. Even more difficult is the attempt to implement empirically based methods of evaluating the impact of these projects, or of providing minimal feedback information which might lead to modifications of procedures.

The CJSA members were asked whether they had easy access to grouped data from the computerized (or manual) criminal history files in their states. The general response indicated that statistical analysis could not easily be undertaken from these files. Thus, a key data base for identifying the characteristics of career criminals is not being tapped. Discussion among members led to these decisions: 1) A committee was appointed to investigate the problems involved in doing a multi-state study of criminal histories to determine the characteristics of career criminals. 2) If the committee's report is promising, the study will be undertaken by the CJSA in cooperation with those members who volunteer their data. 3) Once the feasibility and empirical basis of the effort are well in hand, the CJSA will be in a better position to assess whether it desires to formulate an Association opinion on the subject, or to recommend actions.

The discussion was stimulated by a review of work done in the field by the Federal Bureau of Investigation. Ten years' experience with a variety of data bases and research designs have put the FBI in a favorable position to alert CJSA members to the methodological problems involved in researching career criminals. The FBI is not currently engaged in such research, but cooperation between the FBI and the CJSA on the topic is desired by all parties.

ANALYSIS SESSION: STATUS OFFENDERS

5:45 - THURSDAY

FEBRUARY 23, 1978

CHAIRMAN - MICHEL LETTRE

CHIEF OF INFORMATION AND STATISTICS

MARYLAND

ANALYSIS SESSION: STATUS OFFENDERS

Michel Lettre, Chairman

The purpose of the Analysis Session on Status Offenders was to look at an aspect of the justice system which was currently undergoing change, to describe the type of change that was taking place and to identify a set of issues which would illuminate the change that was occurring. Having looked at the changes taking place in the manner of processing status offenders, efforts were made to determine what impact, if any, analytical findings had or are having on the changes that are occurring. In addition, the question of what types of information would be useful in assessing the impact of change were also addressed.

To facilitate the session discussion, a brief questionnaire was sent to all members of the Criminal Justice Statistics Association prior to the meeting (a copy of the questionnaire appears in Attachment A). A brief summary of the questionnaire responses received and the discussion which took place at the meeting session follows.

Types of Behavior Subject to "Status Offender" Classification

Based on the meeting discussion and questionnaire responses, status offender behavior can generally be regarded as inclusive of the following types of misbehavior:

1. Truancy or other-school-related misbehavior;

2. Disobedience to parents;

3. Running away;

4. Conduct dangerous to self or other; and,

5. Conduct which imperils a juvenile's morals.

Status offender behavior can be summarized as behavior which if committed by an adult would not be criminal. It therefore, represents a separate class of behavior which is applicable to juveniles.

Alternative Manners of Handling Status Offenders

Given the fact that status offenders represent a class of behavior that is applicable to juveniles, that this behavior is in fact viewed by society as misbehavior, and that this misbehavior is at least classified as different from delinquent behavior (i.e., acts which if committed by an adult would be subject to criminal processing), then the question of how juveniles who commit these acts should be handled needs to be addressed.

The alternative manners of handling status offenders as reflected in the questionnaire responses and session discussion can be categorized as follows:

1. Processing of status offenders in the same manner as delinquents - e.g., court jurisdiction over certain non-criminal juvenile misbehavior or status offenders; subject to formal fact finding process with the status offense being sustained or not sustained by the court; dispositioned alternatives available to the court are exactly the same as those used in dealing with delinquents, status offenders can be committed to the same institutions as delinquents.

2. Processing of status offenders in same manner as delinquents but without placement of committed status offenders in the same institution as a delinquent.

3. Increased efforts to resolve the status offender's problem through community programs and diversion while retaining court jurisdiction over status offenders - court action would be directed at the child; no child would be committed to an institution to which delinquents are committed.

4. Well-planned court jurisdiction for certain well-defined status offenders is retained but only after all non-judicial (e.g., community based services) are exhausted - where formal court action is taken truth or facts related to problems would be established without making a designation of fault; emphasis of court would be away from the child; action of the court would be directed at the problem, the family participants, and the public institution or agency designated to provide needed services; no court commitment of child in an institution to which delinquents are committed.

5. Complete removal of status offenders from jurisdiction of the juvenile court and place responsibility for providing services with the community and social agencies more capable of dealing with the problem.

Issues Related to the Determination of the Manner of Handling Status Offenders

The manner selected for the processing of status offenders appears to be a function of such things as: 1) how status offender behavior is viewed in comparison to delinquent behavior, 2) the traditional institutions and procedures available for processing status offenders, and 3) the general availability of alternative resources for handling status offenders.

In order to determine the "best" manner for handling the status offender and the types and amount of resources required to handle such juveniles it would be desirable to have information which would address the validity of the following issues or concerns:

1. Status offense behavior is the precursor of delinquent behavior.

2. Status offender behavior is indicative of transitional deviance, not indicative of a life long commitment to criminal behavior.

3. Finding of delinquency is increasingly viewed today like a criminal conviction and therefore, being adjudicated a status offender may carry a stigma as strong or even stronger.

4. Status offenders consume a large share of the already meager resources (e.g., court, treatment) that are available to meet the needs of the delinquent child.

5. Many children accused as status offenders could also come under the court's jurisdiction over neglected children (e.g., younger juvenile offender victim of an inadequate family situation as opposed to true status offender) or under the courts jurisdiction over delinquents (e.g., youngster may be charged with status offense as opposed to delinquent offense because it is easier to sustain in court or because of a plea bargain to avoid delinquency adjudication).

6. Dispositional alternatives available to status offenders are exactly the same as those used in dealing with delinquents. This lack of alternatives results in commitment to institutions where status offenders are treated like delinquents and in contact with delinquents.

7. Available disposition alternatives for status offenders are not family centered even though invariably the problem is a family one. Thus, traditional dispositions result in removal of any hope of dealing with the problem in the proper setting.

STATUS OFFENDER - Questionnaire Responses

STATE (Respondent)	MANNER OF HANDLING STATUS OFFENDER	LEGISLATION GOVERNING STATUS OFFENDER	STANDARDS & GOALS	QUANTITATIVE DATA
1. Alabama (Michael DeVine)	Court jurisdiction over status offenders; cannot commit to an institution or facility established for delinquents with certain exceptions.	Yes - October, 1975 - Juvenile Court with exclusive original jurisdiction over children alleged to be delinquent, dependent, or in need of supervision; status offender found to be in need of supervision cannot be committed to an institution or facility for delinquents with certain exceptions (5-131 (e)).	Yes (not provided)	Yes - # of referrals by reason for referral, sex, race, court disposition - 1975.
2. Arizona (Sarah Weissinger)	Process same as delinquents but without commitment to Department of Corrections; increased use of community programs.	Yes - Article 4 § 8-241 A.3. - no commitment of incorrigibles to Department of Correction.	Yes (not provided)	Yes - JJDP, 1977 Monitoring Report.
3. California (Richard Beall)	Increased use of diversion to community programs but retain court jurisdiction over status offenders.	Yes - proposed legislation defines circumstances whereby status offender may be detained in secure facilities (shelter care, crisis resolution home); may not be detained in any jail, lock-up, juvenile hall; funds are specified for implementation of proposed legislation.	Yes (not included)	Yes - Disposition of referrals 1974-1977.
4. Indiana (John Ransburg)	Increased use of diversion to community programs but retain court jurisdiction over status offenders.	Proposed Juvenile Code before current General Assembly - Shelter care for status offenders; no commitment of status offenders to institutions for delinquents.	No - in process of developing.	Yes - Custody characteristics
5. Kansas (Donald Carter)	Process same as delinquents w/o commitment to delinquent institutions.	No - (none provided)	Yes - (not provided)	Yes (not provided)
6. Louisiana (Paul Grosser)	Process same as delinquents w/o commitment to delinquent institutions; increased use of diversion to community programs	Yes (not included)	Yes (not included)	Yes (not included)

STATUS OFFENDER - Questionnaire Responses (con't)

STATE (Respondent)	MANNER OF HANDLING STATUS OFFENDER	LEGISLATION GOVERNING STATUS OFFENDER	STANDARDS & GOALS	QUANTITATIVE DATA
7. Maryland (Michel Lettre)	Process similar to delinquents - not detained or committed with delinquents; increased use of diversion to community resources.	Yes - Child in need of supervision may be placed in shelter care facilities, private home not detention centers; may not be committed to facility for confinement of delinquent children.	Yes - recommend complete removal from jurisdiction of juvenile court.	Yes - processing trends for status offenders, 1972-1977.
8. Minnesota (Cynthia Turnure)	Process same as delinquents w/o commitment to delinquent institutions; increased use of diversion to community programs.	Yes - currently may be placed in detention or correctional facilities; bills introduced to prohibit pre-adjudication and post dispositional placement in detention or correctional facilities.	(not included)	(not included)
9. Nebraska (Hilary Keegan)	Process same as delinquents with some restrictions.	Yes - Same dispositions as available to delinquent child but can only be committed to Department of Correctional Services unless fails to make satisfactory adjustment, necessary for protection of health and welfare.	No	Yes - (1976 Juvenile Court Report).
10. New Hampshire (Roger Hall)	Increased use of diversion to community programs but retain court jurisdiction over status offenders.	Yes - State statute prohibits housing of juveniles with delinquents both pending and after disposition.	No	Yes (not included)
11. North Carolina	Process same as delinquents.	Pending Legislation - provides for statement of intent to develop community based resources for status offenders.	Yes (not included)	Yes - # of commitments to training schools and community based alternatives.
12. Oklahoma (Mike Lowther)	Limited court jurisdiction - increased use of community services.	Yes - no child adjudicated in need of supervision may be placed in a juvenile institution unless demonstrated to be unmanageable in a less restrictive placement.	Yes (not provided)	Yes (not provided)
13. Oregon (Pamela Gervais)	Process same as delinquents but with limits on commitment to delinquent institutions.	Yes - Status offenders may not be committed to a state training school; may not be detained in jail or detention facility over 72 hours.	Yes (not provided)	Limited Reliability

STATUS OFFENDER - Questionnaire Responses (Con't.)

STATE (Respondent)	MANNER OF HANDLING STATUS OFFENDER	LEGISLATION GOVERNING STATUS OFFENDER	STANDARDS & GOALS	QUANTITATIVE DATA
14. Pennsylvania (Phillip Renninges)	Removal of status offender from jurisdiction of the court to community and social agencies.	Yes - (not attached)	Yes (not provided)	Yes (not provided)
15. South Carolina (Bill Hamm)	Increased use of diversion to community programs but retain court jurisdiction over status offenders.	Yes (not attached)	Yes (not provided)	Yes (not provided)
16. Texas (Ralph Collins)	Process same as delinquents but w/o commitment to delinquent institutions.	Yes - May not commit to Texas Youth Council unless adjudicated delinquent.	No	No
17. Virginia (Ron Collier)	Retain court jurisdiction with increased use of diversion to community programs.	Yes (not attached)	Yes (not yet finalized)	Yes
18. Washington (John Chadwick)	Removal of status offender from jurisdiction of court to community and social agencies.	Yes - effective July 1, 1978 - handling of status offenders outside of juvenile justice system and restricted involvement of the court.	No	No

8. The status offense jurisdictional status is too indefinite to serve as a permissable standard by which to judge a juvenile's conduct.

Questionnaire Responses and Meeting Discussion

The various state responses to the questionnaire are summarized in the table which follows. It is apparent from these questionnaire responses that the various states are moving in the direction of handling status offenders in a manner which is different from that of the delinquent juvenile.

If this is the case, then at a minimum the tacit assumption has been made by these states to reject the hypothesis that status offender behavior is a precursor of delinquent behavior, (see issue #1 of prior section). No states represented at the session were able, however, to provide information suggesting that analytical findings with respect to this issue were responsible for the changes being made in their state in the way status offenders were processed. It was generally concluded that for analysis to shed light on this issue would require some form of juvenile referral history information along with the ability to distinguish status offender behavior from delinquent behavior and to control for the possible influence on status offenders of system induced association with delinquent offenders. Thus, if analysis is to shed light on fundamental decisions such as the nature of status offender behavior then the data base to support answers to such questions must be strengthened.

It was noted that given the decision to change the manner of status offender processing, information was available in some states that could address such issues as:

1. What portion of the court and treatment resources that are available are consumed by status offenders?

2. What is the availability of alternative resources for the handling of status offenders?

3. What is the potential impact on resource requirements of changing the role of the court with respect to status offenders?

Several states noted that juvenile processing statistics were available which would enable a comparative description of status offender and delinquent client processing. Such information would at a minimum enable one to determine the portion of the court and treatment resource consumed by status offenders, to determine whether or not status offenders in fact have a higher likelihood of commitment than delinquent offenders, and to anticipate the alternative resources that would be required should community based alternatives be increasingly utilized for status offenders (e.g., Attachment B shows trends in the manner and volume of delinquent and status offender processing for Maryland for the years 1972-1977 as presented and discussed at the session).

It was noted that juvenile client transaction statistics would at a minimum be useful to states in assessing, for example, the impact of legislative change on status offender processing. Availability and use of such statistics could, for example, avoid the problem of mandated legislative change in the absence of sufficient resources to respond to the mandate. From the session discussion it was apparent that where states did not attempt to anticipate the impact of change prior to its enactment, there was a subsequent need to monitor the impact of the change in order to be responsive to the mandate (albeit belatedly).

Conclusions

The principal outcome of the Analytical Session conducted on Status Offenders was the realization that many of the issues involved with determining policy on how to treat status offenders lend themselves to analysis. It was clear, however, that policy in many instances was being made with respect to status offender processing without the benefit of any analytical input.

It was noted that analytical findings could be responsive to such fundamental issues as whether or not status offender behavior is or is not the same as delinquent offender behavior. To perform such analyses, data bases on juvenile client history would be required. At a more modest level, juvenile tracking statistics could be used to assess the anticipated impact of a change once the more fundamental policy choices have been made or identified. In this latter instance analysis would affect a better assessment of the requirements needed for the implementation of the changes being considered.

Finally, the apparent lack of analysis as an input into the policy choices with regard to status offender processing may in part be due to the lack of comprehensive data systems in the juvenile justice area. If quantitative analysis is to play a part in policy formulation and assessment then appropriate data bases must exist and be accessible. In addition there must exist individuals with the skills and judgment to utilize this data as well as a context for policy development which is at a minimum open to the consideration of analysis.

ATTACHMENT A

CRIMINAL JUSTICE STATISTICS ASSOCIATION MEETING - WILLIAMSBURG, VIRGINIA, FEBRUARY 22, 23, 24 ANALYTICAL SESSION: STATUS OFFENDERS (FEBRUARY 23, 6:00-8:00 p.m.) QUESTIONNAIRE

NAME: _____

TITLE: _____

STATE: _____

1. Are you planning on attending the Analytical Session on Status Offenders at the Williamsburg CJSA meeting (February 23, 6:00-8:00 p.m.)?

   ☐ YES ☐ NO ☐ Undecided

2. Which of the Alternative Manners of Handling the Status Offender does your State currently employ?

   ☐ Process same as delinquents.

   ☐ Process same as delinquents but w/o commitment to delinquent institutions.

   ☐ Increased use of diversion to community programs but retain court jurisdiction over status offenders.

   ☐ More limited and defined court jurisdiction - no finding of fault; increased community services directed at family and not just the juvenile.

   ☐ Removal of status offender from jurisdiction of the court to community and social agencies.

3. Does your State have specific enabling legislation concerning court jurisdiction over status offenders?

   ☐ YES ☐ NO - (attach copy or bring to Williamsburg)

4. Has your State adopted or is it in the process of adopting specific standards and goals related to status offender jurisdiction? ☐ YES ☐ NO (attach copy or bring to Williamsburg)

5. Do you have access to data describing in some quantitative sense your State's manner of processing status offenders versus delinquents? ☐ YES ☐ NO

   Can you summarize this information for presentation at Williamsburg? ☐ YES ☐ NO

6. Do you have access to data or are you aware of analytical work which is directed at one or more of the issues related to status offenders and their processing? ☐ YES ☐ NO

   Can you summarize or present this information at the Williamsburg meeting? ☐ YES ☐ NO

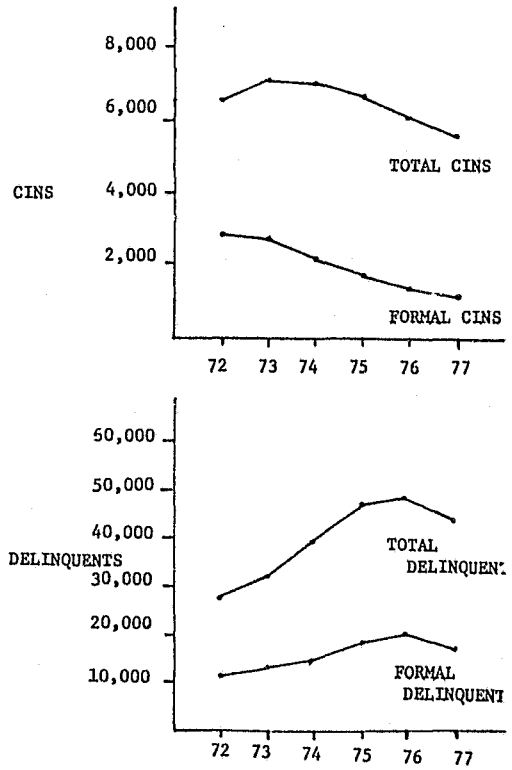
Please send the completed questionnaire to:

Michel A. Lettre, Statistical Analysis Section
Governor's Commission on Law Enforcement and the Administration of Justice
Suite 700
One Investment Place
Towson, Maryland 21204

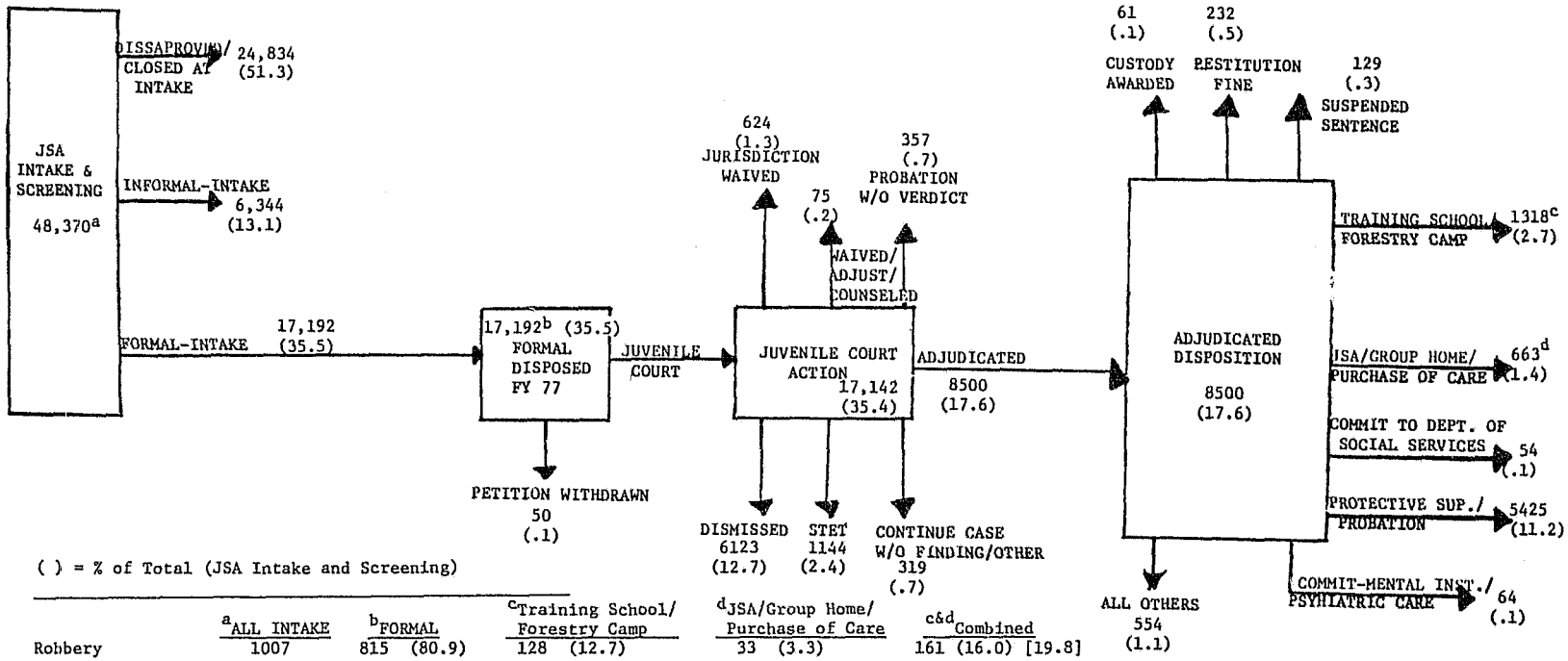
ATTACHMENT B CHILDREN IN NEED OF SUPERVISION (CINS) AND DELINQUENTS PROCESSED BY MANNER OF HANDLING
FISCAL YEARS 1972 THROUGH 1977

FISCAL YEAR	CINS *				DELINQUENTS			
	FORMAL	INFORMAL	DISAPPROVED/ CLOSED AT INTAKE	TOTAL	FORMAL	INFORMAL	DISAPPROVED/ CLOSED AT INTAKE	TOTAL
1977	1,149 [-10.6%] (20.9)	828 [+17.1%] (15.1)	3,513 [-15.2%] (64.0)	5,490 [-10.5%]	16,269 [-18.4%] (37.9)	3,949 [-9.8%] (9.2)	22,690 [-11.0%] (52.9)	42,908 [-13.8%]
1976	1,285 [-24.4%] (21.0)	707 [-33.6%] (11.5)	4,141 [+13.0%] (67.5)	6,133 [- 4.6%]	19,926 [+15.9%] (40.0)	4,377 [-31.0%] (8.8)	25,495 [+ 2.7%] (51.2)	49,798 [+ 3.0%]
1975	1,699 [-14.8%] (26.4)	1,065 [-38.2%] (16.6)	3,665 [+18.4%] (57.0)	6,429 [- 5.7%]	17,192 [+20.0%] (35.5)	6,344 [+47.8%] (13.1)	24,834 [+25.8%] (51.3)	48,370 [+26.1%]
1974	1,995 [-26.7%] (29.3)	1,724 [-18.3%] (25.3)	3,096 [+45.1%] (45.4)	6,815 [- 2.3%]	14,322 [+ 1.6%] (37.3)	4,291 [-30.2%] (11.2)	19,747 [+86.6%] (51.5)	38,360 [+24.4%]
1973	2,722 [- 1.7%] (39.1)	2,109 [-10.0%] (30.3)	2,134 [+76.2%] (30.6)	6,965 [-10.1%]	14,093 [+ 5.9%] (45.7)	6,151 [-15.4%] (20.0)	10,580 [+52.9%] (34.3)	30,824 [+12.1%]
1972	2,770 (43.8)	2,343 (37.0)	1,211 (19.1)	6,324	13,310 (48.4)	7,270 (26.4)	6,919 (25.2)	27,499

( ) = % of row total
[ ] = % change from the previous year
*CINS - Children in Need of Supervision



MARYLAND JUVENILE PROCESSING - FY 75 DELINQUENTS

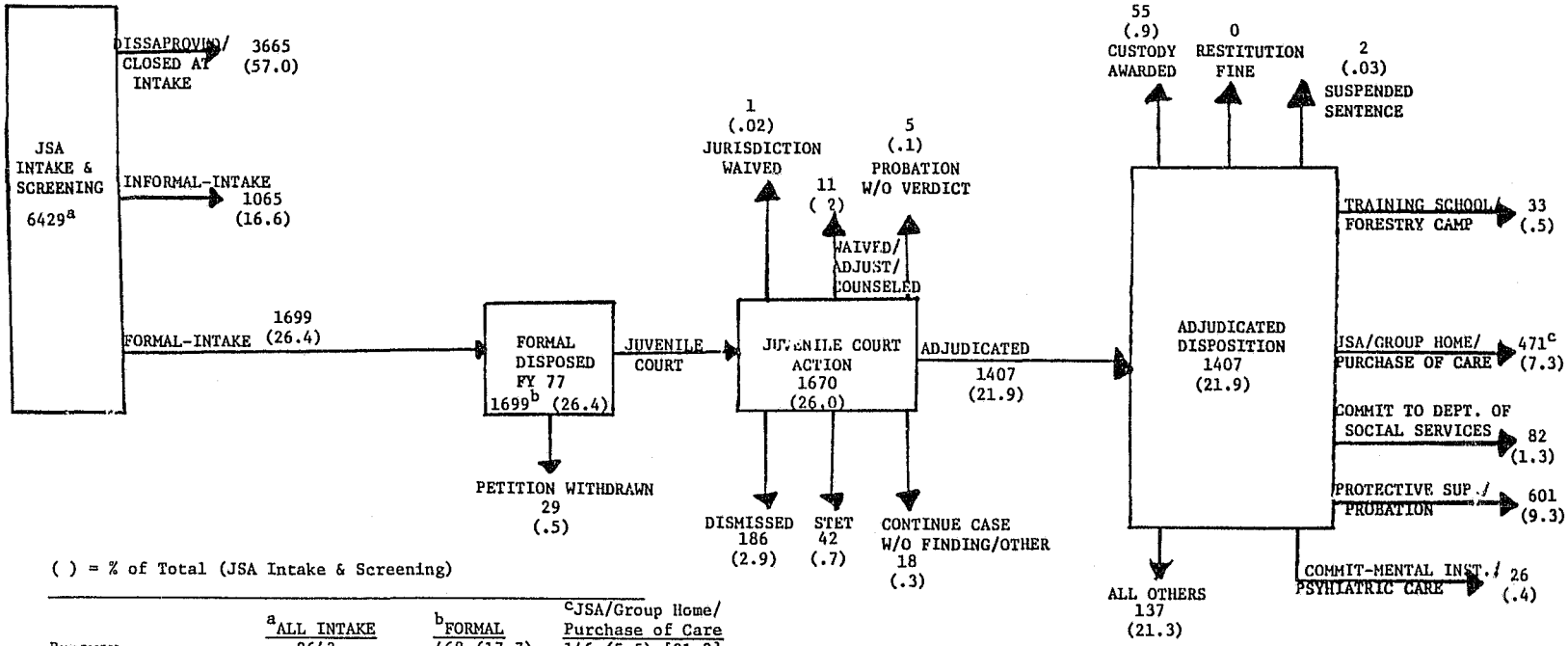


( ) = % of Total (JSA Intake and Screening)

	[a]ALL INTAKE	[b]FORMAL	[c]Training School/ Forestry Camp	[d]JSA/Group Home/ Purchase of Care	c&d Combined
Robbery	1007	815 (80.9)	128 (12.7)	33 (3.3)	161 (16.0) [19.8]
Burglary	6809	4185 (61.5)	368 (5.4)	171 (2.5)	539 (7.9) [12.9]
All Assaults	6627	2693 (40.6)	176 (2.7)	84 (1.3)	260 (3.9) [9.7]
All Larceny	13256	4635 (35.0)	391 (2.9)	193 (1.5)	584 (4.4) [12.6]

( ) = % of all Intake
[ ] = % of Formal

MARYLAND JUVENILE PROCESSING - FY 75 CINS

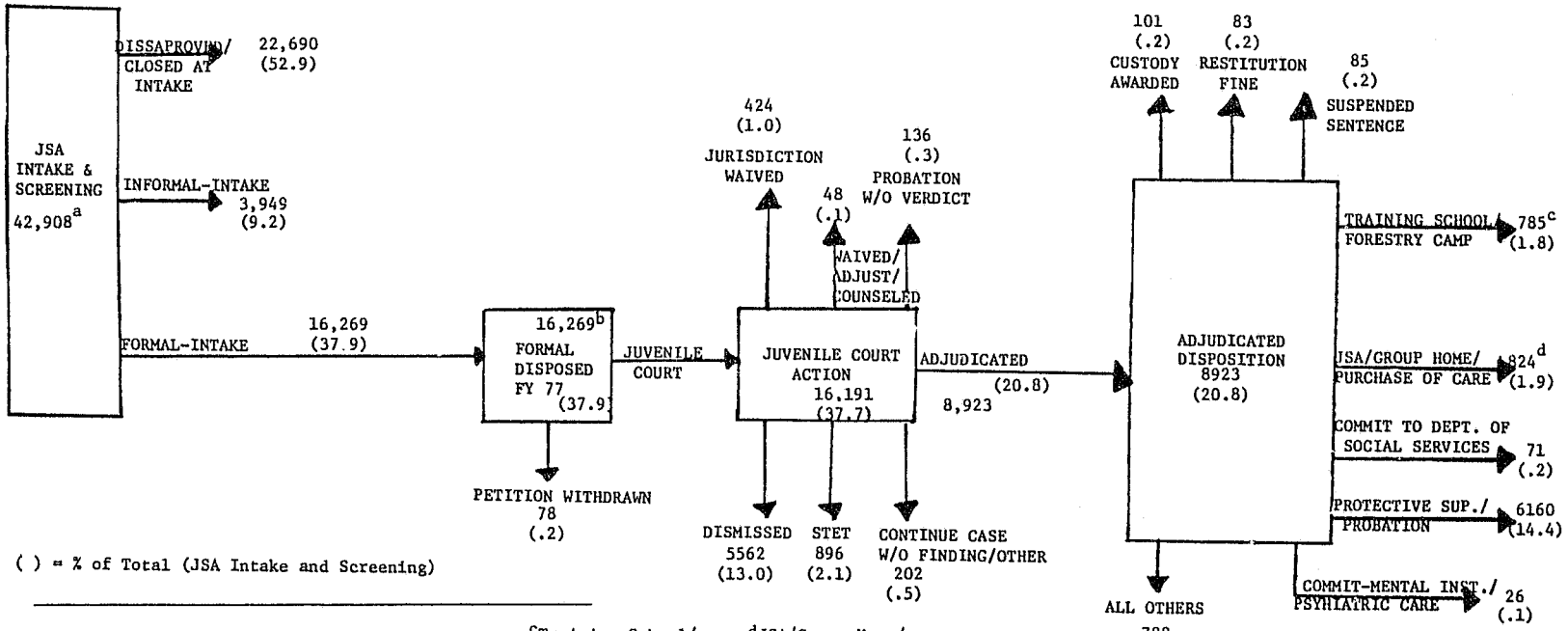


( ) = % of Total (JSA Intake & Screening)

	[a] ALL INTAKE	[b] FORMAL	[c] JSA/Group Home/ Purchase of Care
Runaway	2643	468 (17.7)	146 (5.5) [31.2]
Truancy	1148	237 (20.6)	31 (2.7) [13.1]
Ungovernable	2638	994 (37.7)	294 (11.1) [29.6]
Total	6429	1699 (26.4)	471 (7.3) [27.7]

( ) = % of All Intake
[ ] = % of Formal

MARYLAND JUVENILE PROCESSING - FY 77 DELINQUENTS

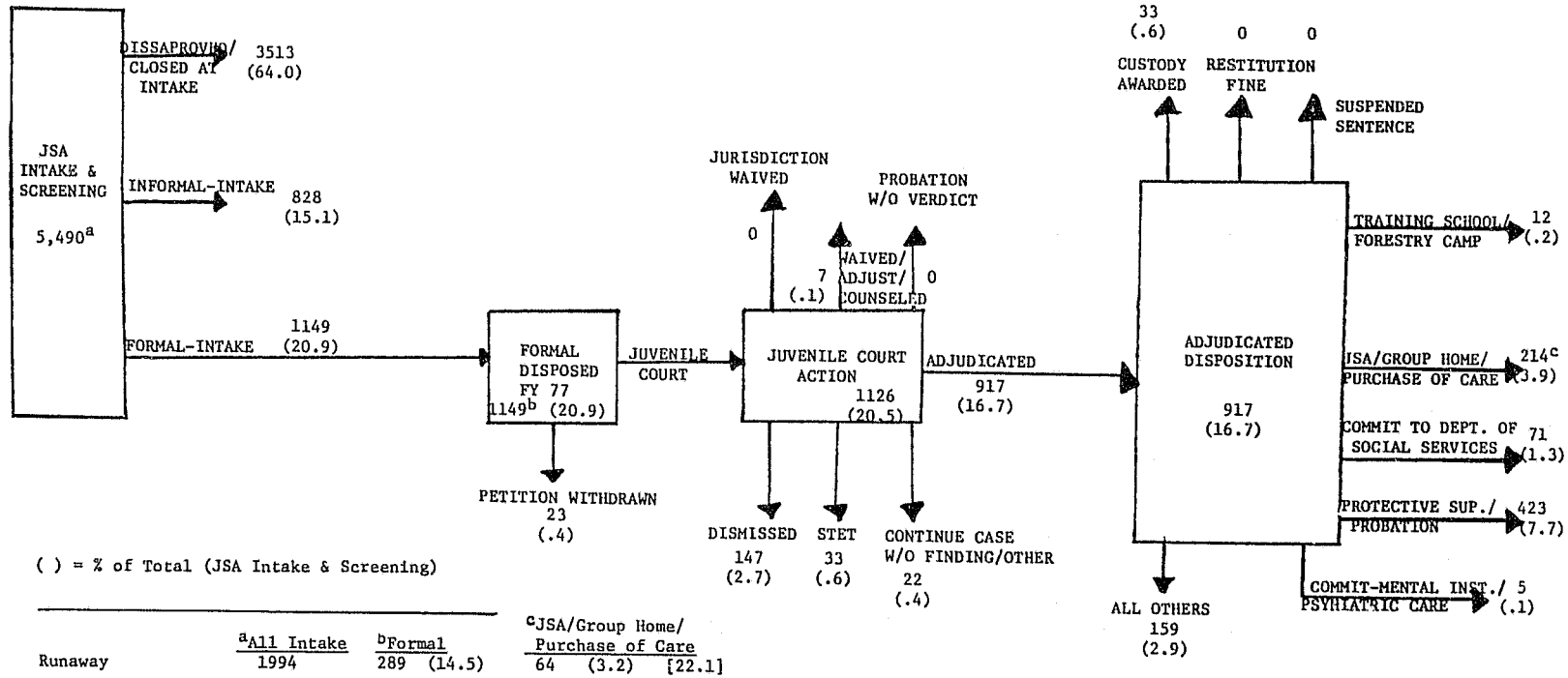


( ) = % of Total (JSA Intake and Screening)

	[a]All Intake	[b]Formal	[c]Training School/ Forestry Camp	[d]JSA/Group Home/ Purchase of Care	[c&d]Combined
Robbery	806	656 (81.4)	46 (5.7)	54 (6.7)	100 (12.4) [15.2]
Burglary	6263	3798 (60.6)	240 (3.8)	192 (3.1)	432 (6.9) [11.4]
All Assaults	6445	2713 (42.1)	93 (1.4)	134 (2.1)	227 (3.5) [8.4]
All Larceny	11764	4578 (38.9)	235 (2.0)	251 (2.1)	486 (4.1) [10.6]

( ) % of all Intake
[ ] % of Formal

MARYLAND JUVENILE PROCESSING - FY 77 CINS



( ) = % of Total (JSA Intake & Screening)

	[a]All Intake	[b]Formal		[c]JSA/Group Home/ Purchase of Care		
Runaway	1994	289	(14.5)	64	(3.2)	[22.1]
Truancy	1149	210	(18.3)	22	(1.9)	[10.5]
Ungovernable	2347	650	(27.7)	128	(5.5)	[19.7]
Total	5490	1149	(20.9)	214	(3.9)	[18.6]

( ) = % of all Intake
[ ] = % of Formal

VICTIMIZATION METHODOLOGY FORUM

8:30 - FRIDAY

FEBRUARY 24, 1978

MODERATOR - CAROLYN SHETTLE

DIRECTOR, SAC

MASSACHUSETTS

VICTIMIZATION METHODOLOGY FORUM

PARTICIPANTS:

Carolyn Shettle - Massachusetts - Moderator
Bob Allison - New Hampshire
Bob Lehnen - NCJISS
Al St. Louis - Texas
James Villone - South Dakota

The panel discussion focused on two major topics:

1. What are the alternative methodologies available to a state or local area wishing to do a victimization study?

2. What are the uses of victimization data?

Victimization studies were defined as studies designed to determine the incidence and characteristics of crime by asking individuals about their experiences. We did not discuss attitudinal studies asking individuals for their opinions on various criminal justice issues, even though these are sometimes referred to as victimization studies.

Alternative Methodologies Available for State or Local Victimization Studies

Bob Lehnen discussed the possibility of using information obtained in the national victimization study for sub-national studies. He pointed out that relevant information is now available or can be expected in the near future through the following sources:

1. Published victimization reports.

2. User tapes, providing city and national data. These tapes are being processed by Dualabs of Arlington, Virginia, and should become available through the Criminal Justice Data Archive at the University of Michigan.

3. Area Special Tabulations. The Census Bureau will provide such tapes on a for cost basis. Such tabulations have been provided to the ten largest states for the years 1974 through 1976.

While no requests have been received for special tabulations from SMSA's, it is possible that such tabulations could be made. However, there are potential problems with filling these requests. For example, there is the disclosure-avoidance problem (discussed in Lehnen's paper at the Thursday morning session), as well as time and cost considerations. If numerous requests were received, ways of expediting the processing would be considered.

As of now, the national data base cannot be used for small states. It is possible, however, that one could form estimates of their victimization rates through simulation. However, this has not yet been tried.

4. National Baseline. Willard Hutchins has been working on the development of a National Criminal Justice Baseline Data File for the last year, using an interactive computer at the University of Michigan. He is exploring software options available to make criminal justice data bases, such as employment and expenditure and victimization, more accessible. He should have some statements about the ease and cost effectiveness of the system by the end of the summer of 1978.

Al St. Louis discussed the experience of the Texas SAC in conducting mail victimization surveys. His observations are for the most part contained in his paper, which follows this one. In addition, he expressed interest in exploring the possible uses of the national data.

Bob Allison pointed out that in a small low crime state like New Hampshire, performing a standard victimization study using block sampling and door to door interviewing is not justified from a cost standpoint. He has been evaluating alternative strategies of discovering where victimization incidents take place and who are the victims.

Three methodological approaches to victimization studies have been tried: 1) A mail survey; 2) Random digit dialing; and, 3) Quota sampling. The techniques for the latter method were based on Mr. Allison's experiences with commercial studies. He summarized his findings as follows:

- Of the methodological techniques examined, Quota Sampling shows the most promise. Where block sampling may involve direct costs of as much as $30 per case, comparable quota sampling may be done for a fraction of that cost, perhaps as little as $2 per interview. Results, and with some refinements, future efforts may produce samples which are sufficiently representative so as to be useful.

- Mail Sampling, as employed in this study, is regarded to be wanting. Failure on the part of any substantial proportion or respondents to complete and return questionnaires not only skews sample design, but renders all data questionable because it is not possible to know whether non-responders are different in any important characteristics including their experience with victimization. Properly executed, mail sampling can be inexpensive, but until ways can be found to guarantee very high completion rates, results must be regarded as inconclusive.

- Random Digit Dialing, where WATS line are already available, can also be accomplished inexpensively ($2 per case or less). There are some problems, primarily involving the willingness of respondents to testify. Samples drawn are reasonably representative of the population.

While he has not experimented with simulation techniques, Mr. Allison expressed interest in the idea of simulating victimization rates which Mr. Lehnen had proposed. Carolyn Shettle added that Massachusetts has used the Area Special Tabulations from the National Study. (See paper following this one.)

The Usefulness of Victimization Studies

James Villone started the discussion of the usefulness of victimization studies. He pointed out that there are two common ways of estimating crime: The UCR data and victimization surveys. In 1975, South Dakota decided to do a mail victimization study similar to Texas's, because the UCR data available at that time was very incomplete. While they received a 77% return rate and did a telephone follow-up with a sample of 5,000 people, they have been reluctant to release the results for several reasons:

1. People want to treat the results as "real numbers". They frequently fail to realize how broad the confidence limits are. It is accordingly necessary to release the results cautiously.

2. While victimization studies uncover considerable unreported crime, unreported crimes are generally not serious. The one possible exception is rape, which is sufficiently rare that victimization studies cannot adequately estimate its incidence anyway. Because the unreported crime is generally trivial, it is not policy relevant.

3. National and city-wide studies may be justifiable from a cost perspective. It is questionable whether state studies are justifiable when it costs between $80,000 and $100,000 to do a state

victimization study. There are better things one can get for this much money in those states with limited financial resources.

Bob Allison claimed that while annual state victimization studies may not be justified, he feels a one-time study is justifiable. Such a study can be used to acquaint legislators and others with information about unreported crime, victim characteristics and offender characteristics.

Al St. Louis indicated that even though victimization data may be crude, he feels it is as good as the UCR data. The crime victim index is a unique measure, which is more sensitive to violent crime than is the UCR crime index. This allows them to place the spotlight on violent rather than property crime.

James Villone said that he was not claiming that victimization studies were of no use, but felt that the money could be more wisely spent on other types of studies. UCR is a good indicator of unreported crime. Since most unreported crime is trivial and not policy relevant, victimization surveys add substantial cost, but very little additional information to what we can obtain from UCR. If we wish information about victim characteristics, it might make more sense to add questions about victim characteristics to the UCR study than to perform separate victimization studies.

Bob Lehnen indicated that he is interested in knowing more about how people at the state level are using victimization data. For example, is it helping states to identify and aid groups of victims? Has it proved helpful in consideration of hand gun legislation? Has it proved helpful in calibrating the UCR data?

Bob Lehnen also indicated interest in the question of whether there is a need to continue the national victimization reports on an annual basis. He pointed out that when people look for crime data, they want current data rather than data which is several years old.

Bob Lehnen also expressed some disagreements with Jim Villone's comments. If we view the criminal justice system as a service delivery system, then it is important to be aware of crime victims, especially those who do not report the crime and, therefore, are not being served. For example, the fact that many people do not report crimes because they perceive the police as ineffective raises important issues.

General Discussion - Panel and Audience

Cindy Turnure said that Minnesota has not done a victimization study and perceives no need for one. UCR data in Minnesota is good and she doubts whether a victimization study would be cost effective. While she does know of a local crime prevention program which did obtain victimization information in order to plan an action program, she is unsure of the effect of a state-wide victimization study.

Roger Hall claimed that the New Hampshire study is proving useful. While we know a lot about offenders and are learning an increasing amount about the criminal justice system, we need to know more about the victim. We especially need to know in what ways the victim differs from the general population. However, it isn't necessary to obtain this information every year.

Mr. Hall claimed that the New Hampshire victimization study has had an impact on programs. For example, New Hampshire was considering placing a rape specialist in every police department in the state. The victimization study results pointed out that rape is too rare a crime to warrant that many specialists.

Al St. Louis added that victimization studies are likely to have unanticipated effects. For example, the results of the Texas Legislative Programs for victim restitution are now being considered. Cindy Turnure claimed that these latter results would not be relevant in Minnesota, since the state is already providing a lot of victim services.

Roger Hall said that the victimization study in his state had an effect on programs to aid elderly victims. Bob Allison added that police chiefs were trying to place a high emphasis on protecting the elderly.

Fred Anderson stated that only a very small percent of those committing property crimes in Virginia end up entering the correctional system. Yet, most of the crimes in the state are property crimes. This means any deterrent effect of the criminal justice system is minimal. We, therefore, need to look outside the criminal justice system in order to provide and coordinate services. Victimization studies can be useful in focussing attention away from the criminal justice system and towards the victim.

Ben Renshaw commented that NCJISS has been looking at a number of issues related to victimization studies including the questions of what are their benefits and what impact have they had. Some of the states will be contacted to ascertain what their experiences have been.

Paul Grosser expressed an interest in knowing whether anyone had done an Inventory of Victim Surveys. He plans to do one, focussing on what the experiences of victims have been.

James Villone said that victimization studies often contain some attitudinal questions. He feels these can be helpful. However, there is considerable consistency between studies with respect to types of people victimized. Areas not doing their own studies can take advantage of this consistency.

A member of the audience indicated that crime should be studied at the community level. It is especially important to note differences among groups' tendencies to report crimes. While it may make little

sense to report trivial crimes to the police, some groups may have a reporting threshold which is too high. These studies should be occasional rather than repetitive.

Al St. Louis said that he feels some of the cost figures for victimization studies which have been quoted were on the high side. He figures that their five surveys together have cost less than $95,000 and the studies have become increasingly less costly, as the staff has become more expert at performing them.

Bob Lehnen indicated that the victimization studies did not only turn up trivial unreported crimes. Approximately 2/3 of all crimes go unreported. Even serious assaults in which the victim is hospitalized go unreported approximately a third of the time.

In sum, this forum pointed out that there are a variety of methodological alternatives available to a state or local area wishing to do a victimization survey:

1. Use of the national victimization data;

2. Mail surveys;

3. Telephone surveys; and,

4. Quota sampling.

Panelists and audience members presented a range of views on the question of the uses of victimization studies. On the positive side, victimization studies focus attention on the victim rather than the offender, provide a "unique" role for SAC and have been helpful in some policy situations. On the negative side, victimization studies are costly. Since many findings have been consistent across the studies done, one can question whether the costs of further studies is justified.

VICTIMIZATION DATA: SOME THOUGHTS ABOUT ITS STRENGTHS AND WEAKNESSES

by

Carolyn Shettle, Director
Massachusetts Statistical
Analysis Center

ABSTRACT

This paper points out that victimization studies provide us with some information about crime which cannot be easily gleaned from other sources. However, problems exist with the data due to the difficulty of sampling large numbers of victims and due to questions about the validity of data based on individuals' recalling of prior events. Victimization crime rates are compared with UCR crime rates after adjustments are made for some of the obvious differences between the studies. Victimization rates seem to be considerably higher, thus raising the question of the validity of the two measures. Perceived characteristics of offenders in the victimization study are, however, consistent with offender characteristics as reported in the UCR arrest statistics.

Statistical Analysis Centers in the ten largest states have been provided with victimization data for their states from the national survey. While I am basing this talk on the work we have done with the Massachusetts data, many of the comments would be equally appropriate for other victimization studies.

The first section of this paper deals with some of the advantages of using victimization data. The second section examines some of the problems encountered in using the data. The third section approaches the question of the validity of victimization data by contrasting the victimization data with UCR information about crime rates and offender characteristics.

1. ADVANTAGES OF USING VICTIMIZATION DATA

The major advantage of the victimization data is that it permits us to learn about crimes that are not reported to the police. This is the vital because it helps overcome one of the major problems with the UCR statistics. The police are only able to report to the F.B.I. those crimes of which they are aware. This means that the UCR figures underestimate crime. It also creates the possibility that apparent crime trends are due to changes in individuals' tendencies to report crimes to the police. Similarly apparent differences among crime rates may be created or concealed by differences in their rates of reporting crimes to the police.

A second important advantage of the victimization studies is that they provide an opportunity to answer the question, "What is the probability of an individual being the victim of a crime?" One can obtain both a general probability for being a crime victim and also can compare the probabilities for different demographic groups.

Another important advantage of victimization studies is that they permit us to gain some information about the characteristics of criminal offenders. However, this information is limited by the fact that the victim usually does not see the offender. Crimes in which the offender is observed are disproportionately violent crimes. Furthermore, information on offender characteristics is limited by the fact that victim perceptions are not necessarily accurate and by the fact that information about the offender is necessarily limited to such "obvious" characteristics as age, race, and sex.

A final advantage of using victimization data is that it provides some information on the costs of crime. However, this information is incomplete, since many important and expensive crimes such as arson are not easily handled in victimization studies.

2. WEAKNESSES OF THE VICTIMIZATION DATA

One problem that we encountered in our use of the victimization data was sampling error. While more than 4,000 interviews were done, each household was interviewed two or three times, making the actual sample much smaller. Further, since many individuals were not victimized the percent of victims reporting to the police was even smaller.

The sampling error problem is especially severe when one tries to compare rates for two years. For example, the estimate of violent personal crime for Massachusetts in 1975 is 3.3 per 100 individuals with a standard error of .4, giving a 95% confidence interval of 2.5 to 4.1. The rate for 1974 was 3.0. We therefore cannot be sure whether violent crime increased from 1974 to 1975 in Massachusetts.

A second question which must be raised in examining victimization data is whether victimization rates are unbiased estimates of true crime rates. A number of factors may bias the number of crimes reported. (a) Individual may forget about crimes that occurred, prior to the survey. (b) Individuals may report crimes that did not occur within the period about which they are being asked. (c) The individual may not wish to tell the interviewer about a crime. This is especially likely to be true for crimes like rape, which might embarrass the respondent. (d) The victimization interviewer does not attempt to verify the victim's report, so that an incident may be reported which the police would have found lacked grounds for a complaint. This could be due to lying on the part of the subject, the "selective telling" of an incident (as might happen if the subject had been involved in a fight) or might be due to a mistake on the subject's part (e.g., a subject may believe an item was stolen, which had in reality been misplaced).

In sum, the victimization data has serious limitations due to sampling error and its reliance on individuals' recollection and reporting of events.

COMPARISON OF VICTIMIZATION AND UCR DATA

One way of assessing the reliability and validity of a data set is to compare the data with other data sources to see how consistent they are. When several data sources are consistent, our overall faith in the measures is increased. When they are inconsistent, our confidence is weakened. We have therefore compared victimization data with UCR data in order to judge their consistency.

It must be understood that crime rates based on the victimization study are not directly comparable to the UCR crime rates for a number of reasons: (1) UCR crime rates are based on the number of crimes reported to the police within a given area, while the victimization rates are based on the number of crimes against persons over

the age of 12 (or households) residing in the area. Thus, if a non-Massachusetts resident is raped in Massachusetts it would be counted in the UCR rate, but not in the victimization rate. If, on the other hand, a Massachusetts resident is assaulted while out of the state, this would be counted in the victimization rate but not in the UCR rate. (2) Because of the survey techniques used in the victimization survey, no attempt is made to study personal crimes committed against children under 12. These are, however, included in the UCR figures. (3) The base figures used to obtain rates are different for UCR rates than for the victimization rates. For UCR rates, total population in the state is used. The rates for personal crimes in the victimization study are based on number of individuals over 12. For household crimes the base number is the number of households in the area. This number is, of course, much smaller than the total population in the state, thus making the victimization rates higher than they would be if based on total population. (4) The victimization rates available in this report do not include information on crimes against commercial establishments. Such crimes, however, are counted in the UCR rates. (5) The crime categories used by UCR are not always the same as those used in the victimization study. For example, victim reports on murder are obviously impossible and murder rates are therefore not included in the victimization study.

While the victimization and UCR rates are not directly comparable, it is possible to arrive at estimates for some of the crime rates, which we would expect to be similar, if measurements were perfect in both studies. To the extent that discrepancies arise in the rates, it indicates a weakness in our ability to measure crime.

The UCR index crimes include seven categories - murder, rape, aggravated assault, robbery, burglary, larceny and motor vehicle theft. Murder was not included in the victimization survey and comparisons are therefore not possible.

Since rape is by definition a crime against an individual, information on rapes in the victimization study should be comparable to the UCR information. The only obvious difference in definition between the two studies is that the victimization study includes homosexual rapes, while the UCR does not. Since all the rapes reported in the victimization study had female victims, however, this was not considered a problem. To make victimization rates comparable to UCR rates the total number of incidents reported was divided by the total population instead of the population over 12. This is equivalent to assuming there were a negligible number of rapes of individuals under the age of 12.[1] Since 41.5 percent of rape victims interviewed in the victimization study claimed to have reported the crime to the police, one would expect a UCR rate of .023/100 compared to the observed annual rate of .017/100 for 1974-75. Considering the rare nature of this crime and the relative inaccuracies of these estimates, these two rates are reasonably close.

1. The alternate assumption that those under 12 had a rate equal to those over 12 would provide an adjusted rate for rapes reported to the police of .028.

Aggravated assault is defined in the same way in both the UCR and the victimization studies. Since only individuals can be assaulted, the victimization data should reflect all cases of aggravated assault except those in which individuals under 12 are the victims. Dividing the number of aggravated assault incidents by the total population and then multiplying by the percent reporting to the police gives an aggravated assault rate of .291/100[1] considerably higher than the .174/100 rate obtained from the UCR data. There are several possible explanations for this discrepancy: (1) UCR rates may be underestimated due to the failure of the police to record and/or report some crimes to the F.B.I. (2) Victimization rates may be overestimating the crime rate. (3) The estimates of the percent of individuals reporting to the police may be high, perhaps because people are embarrassed about not reporting crimes. (4) We may not have made adequate adjustments to the two sets of figures. One thing which was not adjusted for was percent of cases reported to the police which were determined to be unfounded (i.e., the police decide that no crime had occurred). According to the 1975 Crime in the United States, "....a recent national survey revealed that police investigations unfounded 4 percent of all complaints concerning Crime Index Offenses...ranging from 3 percent in the larceny - theft classification to 15 percent in the forcible rape category." (p.10) This correction would explain only a small part of the differences in aggravated assault rates between the victimization and UCR studies.

The remaining UCR crimes (robbery, burglary, larceny, and motor vehicle theft) are all crimes in which a commercial establishment could be the victim. The national UCR study indicates that approximately 37 percent of burglaries and 27 percent of robberies nationally occur outside of the individual and household segments. These figures can be used to reduce the UCR rates for these crimes, though it is important to realize that these reductions are only approximate, since the distributions between segments in Massachusetts may be different from those in the United States as a whole. The rates computed, making this adjustment plus the other adjustments discussed above for aggravated assault, resulted in adjusted rates which are considerably higher for the victimization data than for the UCR data. The possible explanations for this discrepancy are the same as those set forth in the discussion of the discrepancies for aggravated assault.

In this section we have attempted a comparison of the victimization and UCR rates, making appropriate adjustments for some of the more obvious differences between the rates. These adjustments were feasible for 4 crimes-rape, aggravated assault, personal robbery and household burglary. All 4 comparisons showed higher rates based on the victimization data than the UCR data. This may, of course, be due to inadequacies in our adjustment techniques. It is, however, likely that either the UCR or the victimization data or both are not providing us with as accurate estimates of the extent of criminal incidents in Massachusetts as would be desirable.

COMPARISON OF PERCEIVED CHARACTERISTICS OF OFFENDERS IN VICTIMIZATION STUDY WITH OFFENDER CHARACTERISTICS BASED ON ARREST DATA

Another check on the accuracy of the victimization data is a comparison of the perceived characteristics of offenders with the characteristics of arrested offenders. This comparison is presented in Table II. Since most of the crimes in which the offender is observed are violent crimes, the arrest characteristics used are those for individuals arrested for violent crimes.

The comparisons in Table II show that the perceived characteristics of offenders conform fairly closely with the observed characteristics of those arrested. This is encouraging both because it increases our confidence in the reliability of both data sources and because it implies that demographic factors are not extremely important in determining who is arrested - at least for those violent crimes under consideration.

CONCLUSION

In sum, victimization data does provide us with some interesting information not contained in the UCR rates: (1) information about crimes unreported to the police; (2) information on an individual's probability of being a crime victim; (3) information about the characteristics of criminal offenders; and, (4) information about the costs of crime.

However, there are some serious problems with victimization studies: (1) Even with several thousand interviews a year, we were unable to make reliable overtime comparisons. (2) Because most people are not crime victims, sample size for many analyses is very limited. (3) Biases may well exist due to individual's inaccurate recollection of past events.

One way of assessing the validity of data is to determine whether different sets of data are consistent. Two such comparisons are made here. Victimization data give much higher estimates of crime rates than UCR data, even after corrections are made for the most obvious differences between the types of data. While we do not know whether the biases exist in victimization studies, UCR studies or both, this comparison underscores how limited our present knowledge of crime rates still is.

The second comparison made was between offender characteristics as reflected in arrest statistics and offender characteristics as perceived by crime victims. Victimization and UCR arrest statistics were consistent on this criterion.

TABLE I: Comparison of Crime Rates Based on Adjusted UCR and Victimization Data, Massachusetts, 1974-1975 Average

Crime	Adjusted Victimization Rate/100*	Adjusted Victim Rate/100 Reported to Police**	Adjusted UCR Rate/ 100***
Rape	.055	.023	.017
Aggravated Assault	.699	.291	.174
Personal Robbery	3.193	1.797	1.028
Household Burglary	.691	.344	.161

*These rates equal number of incidents divided by total Mass. pop.
**These rates equal the adjusted victimization rates times the population claiming to report the crime to the police.
***The UCR figures for robbery and burglary include commercial crime figures-approximately 37% of burglaries and 27% of robberies nationally are in this category. The adjusted rates are reduced accordingly.

TABLE II: Comparison of Perceived Characteristics of Offenders With Characteristics of Offenders Arrested for Violent Crimes

Age	Victimization Single Offenders	Victimization Multiple Offenders	Arrested For Violent Crimes
Under 12	.8%	2.1%	1%
12 - 20	31.9%	54.3%	46%
21 +	65.2%	26.7%	53%
Mixed	-	13.6%	-
Total	97.9%	96.7%	100%
Sex			
Male	91.8%	81.4%	93%
Female	6.5%	7.1%	7%
Mixed	-	11.5%	-
Total	98.3%	100.0%	100%
Race			
White	70.9%	51.4%	65%
Black	23.9%	40.4%	32%
Other	1.5%	2.2%	3%
Mixed	-	4.9%	-
Total	96.3%	98.9%	100%

THE TEXAS CRIME TREND SURVEY: METHOD, COSTS AND BENEFITS OF VICTIMIZATION DATA

by

Alfred St. Louis
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ABSTRACT

The methodology, costs and benefits of conducting a statewide, mail victimization survey are presented. The methodology includes up to 4 mailings, an original letter with 3 follow-up communications, and a final telephone contact to estimate the non-response effects. The response rate continually averages about 85%. The costs include staff time to handle the personalized letter format, and the data processing of the questionnaires. The benefits include the public interest in the data, the availability of timely data for reports, and the uniqueness of the victimization data in the criminal justice statistical environment. The victimization data provide a unique role for the statistical analysis center.

The Texas Crime Trend Survey is a semi-annual sample survey of Texas Drivers. The initial sample was surveyed in early 1976 to establish 1975 as the baseline year for statewide victimization data. At the time of this presentation the fifth sample of data is being collected. The data collected to date cover the years 1975 through 1977. The current sample size is 1000, but future samples will be expanded in size to provide greater accuracy in measurement.

The purpose of the Texas Crime Trend Survey is to estimate the change in the level of crime in the state as reported by the public. While other measures of crime are available from police reports, the Crime Trend Survey measures both crimes reported to the police and those crimes not reported. By measuring crime directly from the public the extent of reporting and non-reporting can be determined. Also, the survey of the public permits estimates of public expectations such as the fear of crime, and future expectations of becoming a victim of crime. This information is useful for criminal justice planning, especially when trend data are available to measure changes every year. The crime trend information is distributed to criminal justice agency administrators and planners, and interested public officials for the purpose of assisting the formulation and development of public policies toward crime, victims, and criminal justice issues such as victim restitution and citizen cooperation with the police, prosecution, and courts.

THE SAMPLE

Samples are randomly selected from the Texas Drivers License file. The age of the respondents is 16 and older. Each person in the sample is contacted by mail with three follow-ups and a final telephone follow-up. The response rate to the survey is very high, averaging 85% for each survey that was conducted between 1975 and 1977. The excellent response rate, which is an indication of the cooperation and interest of the citizens who participated in this sample survey, helps to overcome the possibility of some bias in the sample because having a drivers license is necessary to be sampled. The driving public in Texas represent approximately 85 to 90% of all adults in Texas. Therefore, only a small percentage of the public is eliminated from the sample because they do not have a drivers license. However, because the response rate is so high and correction factors are developed for those who refuse to cooperate with the survey the confidence in the results presented is also high. The Drivers License bias is not large enough to drastically skew the results. The classic example of sample selection bias, the 1936 Literary Digest telephone poll, has recently been reanalyzed.[1] The telephone bias in the Digest poll was judged to be less of a weakness in the design than the very low response rate. Of 10 million people mailed surveys in the 1936 poll, only 2.3 million responded, for a response rate of only 23%. It is doubtful that the non-driving

1. Bryson, Maurice C., The Literary Digest Poll: Making of a Statistical Myth. The American Statistician, November, 1976, pp. 184-5.

public could have a substantial effect on the data, but that is a question for future research to resolve.

The sample of respondents to the Texas Crime Trend Survey is selected randomly from the Texas Drivers License file which is a computerized file maintained by the Texas Department of Public Safety. The procedure by which the sample is selected is technically known as a systematic random sample. The term systematic refers to the fact that each case selected for the sample represents 1 out of 8,750 Texas licensed drivers. While the logic of sampling may indicate that 1 out of every 8,000 or 9,000 Texans is a small sample, the use of scientific methodology and statistical probability theory can assist in the interpretation of the results so that the accuracy and the error are both known and calculable. Approximately 85% of all respondents in each survey cooperate to the extent of returning a completed questionnaire booklet with 39 questions that was mailed to each person in the survey.

For those people who refused to return a booklet, a follow-up telephone call is placed to them in an effort to learn whether or not they were victims of crime in the past year and also, if the crime was reported to the police. The telephone follow-up information is used to estimate the non-response effects in the survey sample. Therefore, the thorough and complete accounting of all respondents in the sample leads to a relatively accurate and complete measurement of the crime experience of a sample of Texas Drivers. This information can then be confidently used to project and estimate the experience for the state population as a whole. Because the sample survey is relatively new and still in the developing phases, however, the reader is urged to use caution in interpreting the statements and conclusions in this report.

More sampling and continued testing and experimentation with survey results will lead to a more refined and full developed sample survey method of collecting crime and victim information. The advantage to collecting crime and victim information by sample survey and especially by mail survey, is the very low cost of this methodology. The labor costs of collecting this information are transferred primarily to the public. The excellent participation by the public is the main factor in keeping the cost of this data collection to a minimum. The estimated cost of collecting a completed booklet of information is $3 per person. This cost compares very favorably with both telephone sampling which has been estimated at $25 to $30 per person, and also with the more expensive face to face interview, which runs as high and over $100 per person.[2] Therefore, the sample survey by mail is a very promising development in the collection of crime and victim information as it is extremely cost effective.

2. Tuchfarber, Alfred and Klecka, William R. (1976), Random Digit Dialing: Lowering the Cost of Victimization Surveys, Washington, D.C.: The Police Foundation.

COST OF CONDUCTING A MAIL VICTIMIZATION SURVEY

The cost of conducting a mail victimization survey for a statewide mailing include the staff time to type addresses and mail the questionnaires to the public, the data processing including coding, keying, retrieval and output computer runs, analysis of data, and the printing of the final reports. The main cost in terms of staff time is the mailing of the questionnaires. Currently efforts are under way to computerize the mailing so that typing time is at a minimum, yet personalized letters are maintained. The present process for conducting the Crime Trend Survey mailing is not completely computerized. However, when technical problems are overcome it is anticipated that the computerized drivers license file can be connected to a typewriter to type the names and addresses on the letters directly without staff typing time. This would expedite the mailing process. Other areas that require labor include the handling of the questionnaires when they are returned by mail. This process can also be automated to a considerable extent by keying the data directly into the computer from the questionnaires. Additional areas of staff time include analysis time which is currently conducted using the Statistical Package for the Social Sciences SPSS programs. The use of package programs keeps the cost of computer programming time to a minimum. The SPSS runs require additional analysis to prepare written reports. After the analysis phase is complete then the printing and graphics work needs to be done. The final phase includes review committee procedures and preparation of a press release for the public at the time the report is released to the media. In summary, the main bottlenecks to speedy output of the reports are currently the data processing of the questionnaires after they are returned. In terms of additional staff time the mailing is a considerable burden on the staff also.

THE BENEFITS OF VICTIMIZATION DATA

The benefits of conducting the Texas Crime Trend Survey are numerous and outweigh the investment in staff time and labor. Perhaps the primary benefit of conducting the victimization survey at the state level is the instant visibility of the survey data to the Criminal Justice community and the public at large. The data are of great interst to professionals in the field of Criminal Justice and also to the public at large. The reports that have released to date have attracted instant attention from the press. The interest from the press includes interest from newspapers, television and also from radio. The newspapers summarize the data from the report in articles occasionally reaching the front pages or the editorial page. The television and radio stations have also summarized highlights of the reports. This kind of visibility from the media helps to make the public and Criminal Justice agencies aware of the work that is being done by the Statistical Analysis Center.

The most interest in the data from the victimization survey comes from police agencies. Police are naturally interested in crime and victimization data. The victimization data are very similar to the uniform crime reports, and therefore, these data are very familiar to police. The familiarity of this data makes their understanding and interpretation relatively easy for police officials. However, the presentation of the data requires considerable explanation about the differences between the survey data and the traditional uniform crime report data. The main problem area is the confusion between the survey data and the agency data collected by the uniform crime reports. If the differences between the two sets of data are properly explained then the confusion about the meaning of the data can be minimized considerably.

Interest in the victimization data has been expressed from members of the legislature who are interested in updating or revising legislation to cover victims of crime. Currently the issue of victim compensation or restitution is emerging as a public issue. Political campaigns now include the issue of compensation or restitution to victims as an issue in campaigns. As a result of this emergence of the victim as a political campaign issue the interest from politicians is increasing. The Texas Legislature in 1977 passed some legislation that improves the situation of victims. However, more legislation aimed at improving the plight of the victim is anticipated in future legislative sessions.

The interest from academics in the victimization survey data is primarily as a research data base. Several universities in Texas have expressed interest in the data base and several students have begun research projects using the data from the Texas Crime Trend Survey. Additionally professors have used the data from the reports on the Texas Crime Trend Survey to present information about crime victims to their classes. The victimization data are new and unique to the statistics on criminology, and therefore, this in itself attracts attention from professors and students of criminology.

Additional interest in the Texas Crime Trend Survey has been expressed nationally from criminal justice planners. Numerous state agencies have inquired about the Texas Crime Trend Survey for the purpose of considering the development of their own statewide victimization survey. Several states have used the Texas Crime Trend Survey or slight modifications of the survey methodology to implement their own surveys. However, it remains to be seen that other states will utilize the survey approach as an ongoing management information system. Interest to date seems to be of the single study type for conducting one statewide survey with no plans for a regular ongoing survey. Several requests have been received within the state by local planners to conduct victimization surveys in their own jurisdictions. What seems to be happening is that the national data has attracted the attention of state agencies in developing their own victimization surveys, and this has triggered interest in local criminal justice planners to develop surveys for their local jurisdictions. This process is an analogous to a snowball process and it is expected to continue in the near future as more and more people develop interest in statistics relating to the

victims of crime. To summarize, among the benefits of the victimization survey are the interest of the variety of the potential users of the information obtained.

The value of collecting victimization data is enhanced because of the uniqueness of the data. Currently the LEAA Census National Crime Panel data are available for the nation as a whole, selected large cities, and some limited information is available for the ten largest states. However, these data have generally not been available on a timely basis. The National Crime Panel data contains a built-in six month delay in the data collecting process. That is the panel design of the national data contains a design that requires six months of additional interviewing past the time for the end of a year. For example, the December data is collected as late as June of the following year. As a result the national crime panel data are late or nearly out of date when ready for use by local or state users. The time lag for locally collected data such as the Texas Crime Trend Survey is considerably less. The Texas Crime Trend Survey currently has a built-in delay of two months to collect the data. Therefore, the value of collecting statewide data is that the data will be available, and the data will be available for timely reports to be released to criminal justice agencies and also the public. The yardstick for measuring acceptable time lags in the release of victimization data is the time lag currently in operation with the uniform crime reports. The UCR time lag is three to four months for large cities and eight to ten months for the annual report. Therefore, if the victimization data cannot meet similar time standards, then the data will be perceived as out-of-date. Therefore, the primary value of collecting the victimization data is the assurance that first, the data will be available if the geographic area is not covered by LEAA National Crime Panel data, and second, the data will be available for a timely release.

Another value to collecting statewide victimization is the control over the data and the communicability of the data to both criminal justice agencies and the public. The National Crime Panel data are difficult to communicate because of the technical complexity of the study design and also the report production. The National Academy of Sciences' report entitled, "Surveying Crime", notes the problem of the communicability of the national crime panel data to the public.[3] The Texas Crime Trend Survey data are communicated and summarized in a simple format that is relatively easy to understand. This is an advantage because the study results are perceived as useful only to those who can understand what the data are about. If people cannot understand what the significance of the data is then this is a serious shortcoming to the research.

Another value to collecting criminal victimization data is that data can be used to construct a unique and new measure of crime. The Texas data have been used to construct the Texas Crime Victim Index which is an index that is comparable to the uniform crime reports

3. National Academy of Sciences (Panel for the Evaluation of Crime Surveys) Surveying Crime (1976). Washington, D.C.

index of serious crime. The Texas Crime Victim Index is displayed in Graph A. The unique measure of crime has value as it measures crime from a different perspective then the uniform crime reports. The uniqueness itself attracts attention, and the fact that the perspective is from the victim and emphasizes the risk of the public to crime events is also very attractive.

Finally, another value to collecting statewide victimization data from the point of view of a statistical analysis center is that the victimization data provide a unique role for the centers in the criminal justice statistical environment. No other traditional criminal justice agency collects and publishes victimization data. Therefore, the statistical analysis centers can carve out a unique niche in the criminal justice statistical environment by collecting and publishing reports on victimization data. Since much of the statistical analysis centers work will involve the use of data from other criminal justice agencies (corrections, police and the courts) there is always the potential for conflict and misunderstandings involving the use of another agency's data. However, the victim data are unique and the risk of conflict about ownership and use of data is minimized.

The Texas Crime Trend Survey data have been compared with some of the National Crime Panel data. The pattern of crime found in the Texas Crime Trend Survey is very similar to the pattern of crime found in the National Crime Panel data. This comparison is illustrated in Graph B. The data for Texas collected by the National Crime Panel data have been received for the years 1974, 1975, and 1976. This state breakdown of the National Crime Panel data is part of the LEAA program to provide the ten largest states with National Crime Panel victimization data. Efforts are now under way to compare the LEAA National Crime Panel data for Texas with the Texas Crime Trend Survey data. However, the comparison will be difficult because of the completely different formats for processing the two sets of data. The Texas Crime Trend Survey data is victim based. The LEAA census National Crime Panel data is incident based. The differing units of analysis provide a number of methodological problems with direct comparison. The difficulties are almost as formidable as the comparison of the uniform crime reports with the National Crime Panel data. However, attempts will be made to compare the two sets of data to see if the rates and patterns of crime similar when collected by two completely different methods with different sample sizes.

In summary, the benefits of the victimization data collected by the Texas Crime Trend Survey greatly exceeds the costs invested in developing the project. There are other considerations to states or local agencies interested in developing similar victimization projects besides the benefits of a program. The staff must include the skills of a survey research specialist. Access to data processing is a must, as the costs of developing original computer programs can be high. Also, the contexts of the agency's other projects and workload must be considered so sufficient staff time is allocated to maintain the victimization project at an optimum level. Finally, the project needs political support from the Advisory Board to be successful. If these conditions are met then the payoff from a successful project will be high, and the agency can take pride in making a contribution to advance the statistical interpretation of crime and justice.

VICTIM PROFILE STUDY
HILLSBOROUGH COUNTY, N.H.
A STUDY IN METHODOLOGY

by

Robert Allison
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Concord, N.H.

PURPOSE

This study was undertaken with the primary purpose of exploring alternate data gathering methodologies for use in conducting victimization surveys. Additionally, the goal was to gauge the viability of those methodologies which would have particular applicability for states such as New Hampshire, with a relatively diffused population and with a mixture of urban and rural population.

The problem, of course, is cost. Victimization studies conducted to date have, for the most part, involved cities with dense populations and relatively high crime rates. Even in this situation, use of standard, accepted data gathering methodologies (primarily block sampling, door-to-door personal interview) results in costs which are difficult to justify, especially in view of the large samples necessary to provide any measure of reliability. In areas such as New Hampshire, with relatively low crime rates and low population density, the costs for such procedures would be impossible to justify.

As part of this methodological evaluation, it was also our objective to learn as much as possible about the numbers and characteristics of victims in the survey. The universe selected is Hillsborough County, New Hampshire, and the time frame is calendar 1976.

FINDINGS

Of the methodological techniques examined, Quota Sampling shows the most promise. Where block sampling may involve direct costs of as much as $30 per case, comparable quota sampling may be done for a fraction of that cost. Perhaps as little as $2 per interview. Results, generally, are felt to be reliable, and with some refinements, future efforts may produce samples which are sufficiently representative so as to be useful.

Mail Sampling, as employed in this study, is regarded to be wanting. Failure on the part of any substantial proportion of respondents to complete and return questionnaires not only skews sample design, but renders all data questionable because it is not possible to know whether non-responders are different in any important characteristics including their experience with victimization. Properly executed, mail sampling can be inexpensive, but until ways can be found to guarantee very high completion rates, results must be regarded as inconclusive.

Random Digit Dialing, where WATS lines are already available, can also be accomplished inexpensively ($2 per case or less). There are some problems, primarily involving the willingness of respondents to testify. Samples drawn are reasonably representative of the population.

Weighting by Over-sampling high incidence components of the population can be an effective way of minimizing costs, since the sample produced (after de-weighting) may actually be more reliable than a representative sample of the same size, so that it may be possible in some instances to interview fewer people.

With respect to victims themselves in Hillsborough County, the striking impression conveyed by a profile of their characteristics is the considerable similarity to the known characteristics of offenders. In every instance where a characteristic of the victim (and of the offender) differ from that of the general society, the factor involved appears to be one commonly associated with stability. Victims (and offenders) tend to be:

- Young (15-29)
- Unmarried
- Not Head of Household
- Downscale - Socioeconomically

It would appear that most victimization is intra-societal, including household victimization. The image of bands of youthful offenders victimizing helpless older people, however egregious when it does occur, appears not to be valid for Hillsborough County. Nor is it true that more densely populated areas suffer markedly higher levels of victimization.

RECOMMENDATION

Clearly, both Quota Sampling and Random Digit Dialing are highly cost-effective. What is not known is the extent to which results from these methodologies are different from or similar to those results which would be produced by traditional sampling methods.

It is recommended, therefore that three parallel studies be undertaken simultaneously.

1. Block Sampling, Door to Door, Personal Interview;

2. Random Digit Dialing; and,

3. Quota Sampling, Personal Interview.

It is vital that all three approaches be implemented for the same universe at the same time so that the Block Sampling technique may serve as a control for purposes of evaluating the two experimental methodologies.

In this way it can be determined finally the extent to which results from the two experimental techniques correlate with those from traditional methodology. If results warrant, new, inexpensive procedures will be made available for many localities nationally.

CRIMINAL JUSTICE MODEL METHODOLOGY FORUM

10:00 - FRIDAY

FEBRUARY 24, 1978

MODERATOR - MICHAEL DEVINE

DIRECTOR, SAC

ALABAMA

CRIMINAL JUSTICE MODEL METHODOLOGY FORUM

PARTICIPANTS:

Michael D. DeVine - Alabama - Moderator
Benjamin Renshaw - NCJISS
Michel Lettre - Maryland
Stuart Hall - New Hampshire

The forum began with presentations by Michel Lettre, Benjamin Renshaw and Dr. Stuart Hall concerning the methodology and potential uses of the models employed in Maryland, Alaska and New Hampshire, respectively.

Mr. Lettre and Mr. Renshaw presented models based upon the JUSSIM model, an interactive simulation model, and Dr. Hall presented a systems dynamic analytical model.

Benefits of using and/or developing a system model were as follows:

1. Use of a simulation model forces examination of a maximum number of decision points, not just those which are easy to identify.

2. The simulation model provides a broader and more accurate perspective for the planner.

3. The systems model forces the criminal justice system to be viewed as a unit rather than as a series of partially related sub-systems.

4. By using system's model, the effect of modification of one sub-section of the system may be anticipated before the modification is actually made and valid decisions made as to the desirability of the modification.

SYSTEM DYNAMICS SIMULATION MODEL OF THE NEW HAMPSHIRE CRIMINAL JUSTICE SYSTEM: RATIONALE AND METHODOLOGY

by

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ABSTRACT

The rationale for applying system dynamics methodology to develop a simulation model of the criminal justice system is discussed. The capability of modeling complex systems in which rates of change are modulated in accordance with other system variables is stressed. The DYNAMO simulation language is described, and a brief description of the model under development is given.

INTRODUCTION

The New Hampshire Statistical Analysis Center has been working closely with a group from the New Hampshire College Management Information Systems Department which is developing a system dynamics model of the New Hampshire Criminal Justice System.* A complete discussion of the rationale for applying system dynamics methodology to criminal justice systems may be found in Shaffer (1976).

System dynamics is an application of feedback systems analysis to business, economic, and social problems (Forrester, 1969). A computer simulation language, DYNAMO, has been developed specifically for the modeling of multilooped feedback systems with large numbers of interdependent variables (Pugh, 1976).

Although criminal justice agencies are not integrated into one formal system, these agencies do interface with one another. Decisions are made within a context of often conflicting pressures, and the various components can affect one another both directly and indirectly. Such a system can exhibit properties which would be difficult to anticipate by intuition alone. Policies implemented to solve an immediate problem in one sector may set into motion compensatory or counterproductive processes in other sectors.

A system dynamics model can help develop understanding of the interactions among decisions, personnel, facilities, and flow of offenders. Experimentation can reveal which policies have the most impact on the total system. The model can provide a frame of reference for data collection and program evaluation in terms of which variables should be tracked and what time delays should be expected.

A dynamic model may be developed to reflect years of detailed data, but the model does not contain a data base. In fact, the only raw data in a DYNAMO program is in the form of initial values and constants. (In certain cases, a detailed exogenous input might be included.) During a simulation run, the internal dynamics of the model generate the output. The correspondence between this output and actual data is one criterion with which to evaluate the validity of the model. The gain in understanding of system characteristics may involve a compromise in that detailed data is grouped into aggregate flows of people, information, facilities, or money. Thus the model is neither a data base nor a means of making detailed projections.

System dynamics practitioners maintain that qualitative model behavior is relatively insensitive to the precise values of most detailed parameters. The early indications of which areas of the model are most critical and sensitive can guide the collection of future data, in a long term cycle of model development and refinement of needs for data.

*This project supported by LEAA Discretionary Grant #76-SS-01-0006.

METHODOLOGY

DYNAMO is a compiler for translating and running multilooped feedback systems. The basic mathematical process is one of approximate integration by successive iterations. Rates of change are computed for a time interval, adjustments are made in levels, and the process repeats itself. The compiler automatically executes the proper sequence of computations based upon a system of equation types and time subscripts.

The equation types are levels, rates, auxiliaries, initial values, and constants. Levels are accumulations of flows, such as prison population, trial backlog, personnel, or capacity. Rates are flows that enter and leave the levels during a time interval, such as cases entered, prisoners released, or personnel acquired. Auxiliaries are frequently used in rate equations. In this way, information about the state of various parts of the system is used as feedback to a simulation; e.g., initial prison population, initial number of local police. Constants do not change over the course of a simulation; examples include normalized rates used in rate equations, or arbitrary adjustment factors. In the current model, a number of constants are set to unity, increasing flexibility by providing valves for later experimentation.

DYNAMO contains a number of functions, including delays, and ramp, step, and pulse inputs. In addition, user-defined table functions allow the specification of complex non-linear relationships between independent and dependent variables. These table functions, used in conjunction with auxiliaries, allow the introduction of non-linearities into the feedback loops. In the present model there are over forty tables, among five hundred equations. Many of these are relatively insensitive; i.e., the dependent variables are close to or equal to unity throughout the range of the independent variables. However, their inclusion in the program adds further flexibility--modifying a table requires changing one, or at the most, two statements.

Figure 1 shows a sample DYNAMO program listing and plotted output. There is also a printed output option. The equation listing includes an initialization (N), constants (C), rate equations (R), level equations (L), auxiliaries (A), a table function (T) involving lines 180 and 190, a pulse function (line 170), and specification and plot statements. The compiler selects a scale so that the variable peing plotted, Level = L, does not go off scale. In this program the system is in equilibrium until a disturbance (the pulse function) occurs. Following the pulse, a positive feedback loop causes accelerating growth. No explicit programming is required to control the iterative computational sequence, other than to adhere to the system of equation types and time subscripts (J, K, L), and to supply a specification statement. Figure 2 is a flow diagram for this sample system.

A more complex system is shown in Figures 3 and 4 to illustrate the kind of interdependencies DYNAMO can model. In this system there are two levels: LEV1 plotted as L, and LEV2 plotted as M. As in the previous model, a pulse causes LEV1 to begin growing in a positive feedback loop. The system is structured so that LEV2 tries to track LEV1, but receives delayed information about the state of LEV1. This delay can be varied by adjusting the constant, T. The shorter the delay, the more rapid is the response of LEV2 in tracking LEV1. Finally, the amount of positive feedback controlling the growth of LEV1 is dependent upon the ratio of LEV1 to LEV2. Therefore, when LEV2 responds quickly it restrains the growth of LEV1. A sequence of three progressively longer information delays is shown in Figures 3 and 4. When T = 5, LEV2 responds quickly enough to restrain the growth of LEV1, and both level off. When T = 20, both LEV1 and LEV2 grow linearly. When T = 50, LEV1 exhibits accelerating growth similar to that seen in Figure 1. This sequence of model runs shows that an information delay can radically affect the magnitude and pattern of changes in a system.

NEW HAMPSHIRE CRIMINAL JUSTICE MODEL

The New Hampshire criminal justice model is being developed to reflect five years of data, for five sectors: police, courts, corrections, funding, and crime-population. Within each sector the flow of personnel and facilities, as well as offenders, is included. It is intended to disaggregate police into state and local; courts into Superior, Municipal and District; corrections into State Prison, Houses of Correction, and Youth Development Center; and population into age groups, general population, and ex-offenders.

One of the major feedback loops will include the influence of saturation of police, courts, and corrections sectors upon deterrence. A related loop is formed by the re-entry of ex-offenders into the system. In this schema, a positive feedback loop relates growth in crime rate to saturation of facilities and capacity to process offenders. Another series of loops will portray the interactions among delayed perception of needs and funding considerations to modulate the acquisition of facilities and personnel. Within the police, courts, and corrections sectors, the effects of workload upon efficiency and method of processing offenders will be modeled.

The model is being developed so that we may ask "what if" questions to compare sensitivity to various policy alternatives. Such questions could include the effects of acquiring additional police, court personnel, judges, probation officers, parole officers, or corrections capacity. Other questions could involve changes in the policies for processing offenders, such as plea bargaining, diversion, court scheduling, mandatory sentencing or restrictions on parole. Of particular interest would be the question of whether sudden increases in system capacity could

result in less capacity being required in the long run by comparison to a simulation run using normal system delays.

APPRAISAL OF DYNAMIC MODELING

The major advantage of dynamic modeling is the capability of simulating complex systems with time delays and rates modulated internally by any number of relationships to other system variables. A related advantage is the flexibility of the user-oriented DYNAMO system. This allows routine testing of alternative policies, and model modification without extensive re-programming.

A limitation is that system dynamics deals mainly with aggregate flows; there could be a problem translating implications for specific institutions, age groups, types of crime, or geographical locations. A similar consideration is that the internal dynamics of these models can be relatively abstract ratios and table functions. Both of these factors could impede communications between model builders and practitioners in the field, and interfere with the ideal implementation strategy of successive use and refinement.

```
LIST

DEMO       14 FEB 78   18:13

100 N LEVEL=LEVELI
110 C LEVELI=100
120 L LEVEL.K=LEVEL.J+(DT)(IN.JK-OUT.JK)
130 R IN.KL=LEVEL.K*INN*AUXFB.K*(1+AUXPL.K)
140 C INN=.1
150 R OUT.KL=LEVEL.K*OUTN
160 C OUTN=.1
170 A AUXPL.K=PULSE(2,4,100)
180 A AUXFB.K=TABLE(AUXFBT,AUX.K,0,5,1)
190 T AUXFBT=1/1/1.5/2/2.5/3
200 A AUX.K=LEVEL.K/LEVELI
210 SPEC DT=1/PLTPER=1/LENGTH=25/PRTPER=1
220 PLOT LEVEL=L
230 PRINT LEVEL/AUXFB
READY

LEVEL=L
```

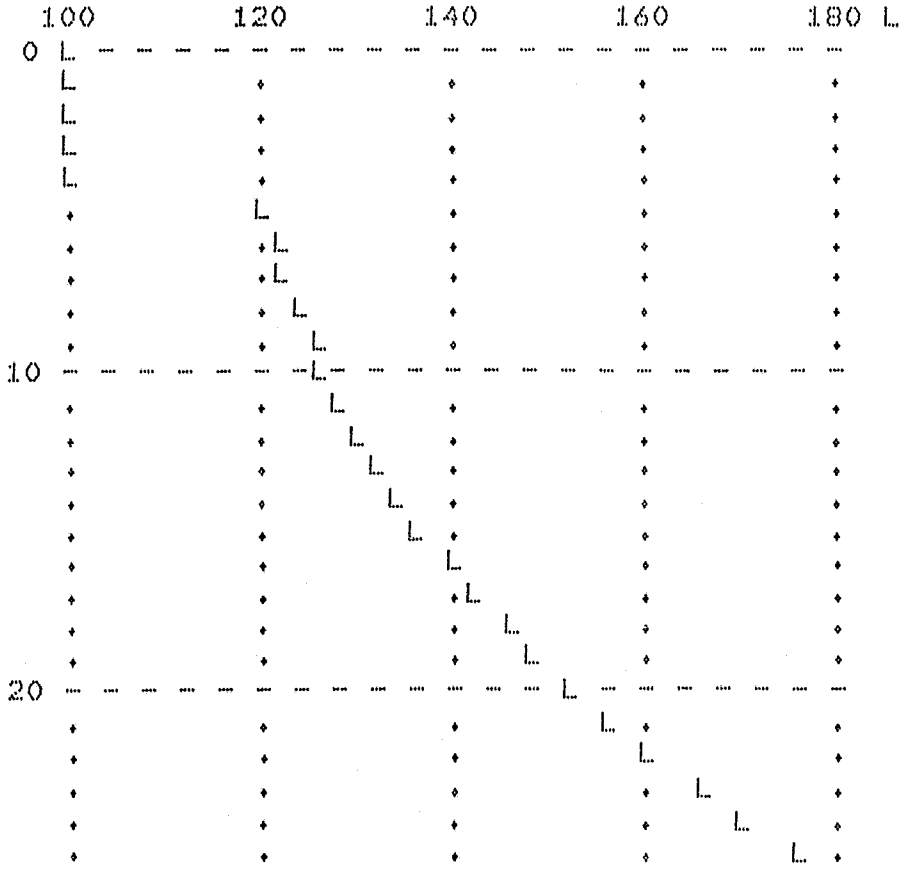

Figure 1. Sample DYNAMO Program and Output.

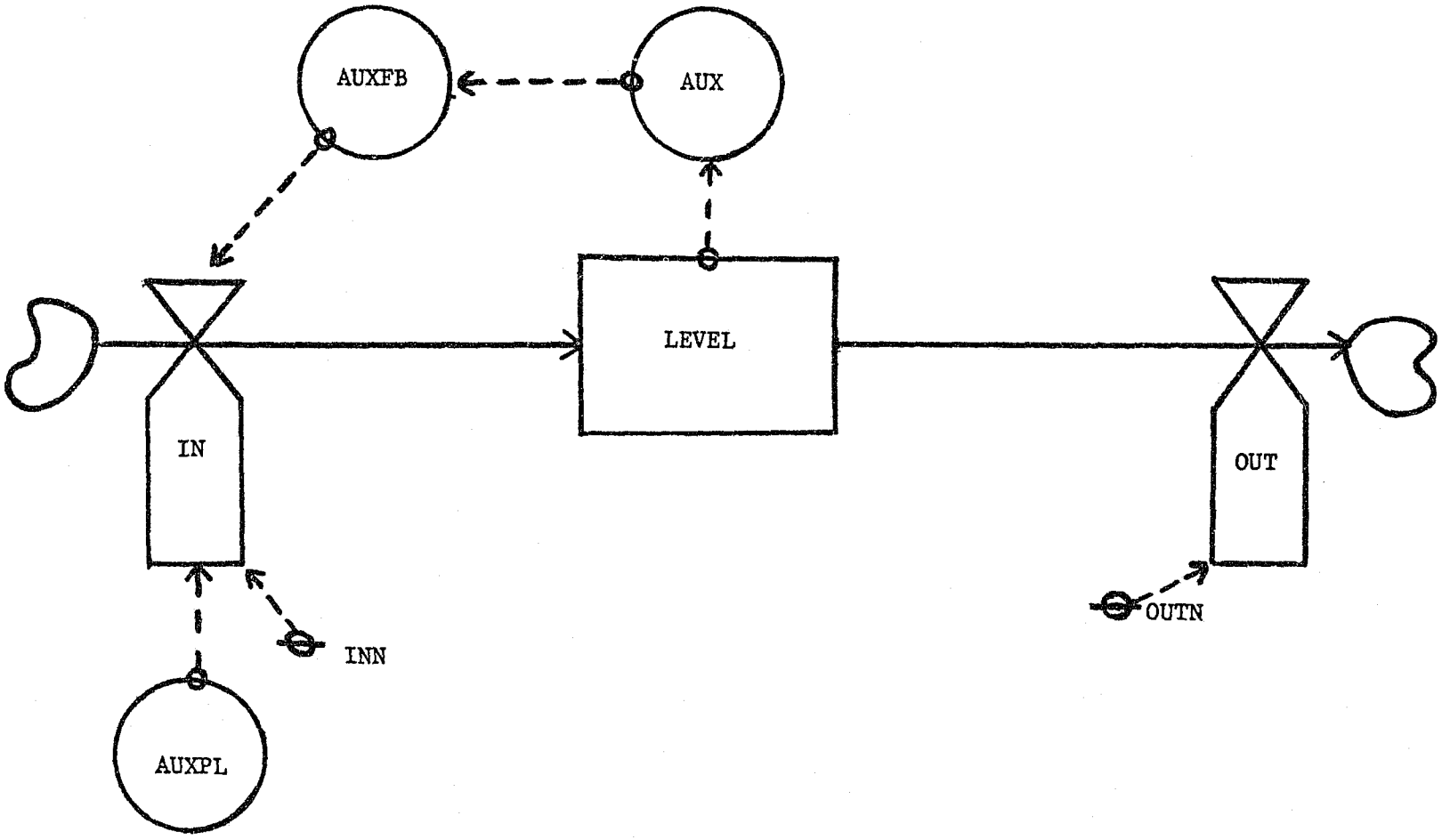

Figure 2. Flow Diagram of Program Shown in Figure 1.

```
LEV1LEV2  14 FEB 78  19:24

100 N LEV2=LEV2I
110 C LEV2I=100
120 N LEV1=LEV1I
130 C LEV1I=100
140 L LEV1.K=LEV1.J+(DT)(IN1.JK-OUT1.JK)
150 R IN1.KL=LEV1.K*INN1*(1+AUX1.K)*AUX3.K
160 C INN1=.1
170 R OUT1.KL=LEV1.K*OUTN1
180 C OUTN1=.1
190 A AUX1.K=PULSE(2,4,100)
200 A AUX3.K=TABLE(AUX3T,AUX2.K,0,5,1)
210 T AUX3T=.1/1/1.5/2/2.5/3
220 A AUX2.K=LEV1.K/LEV2.K
230 L LEV2.K=LEV2.J+(DT)(IN2.JK-OUT2.JK)
240 R IN2.KL=SMOOTH(LEV1.K,T)-LEV2.K
270 C T=5
280 R OUT2.KL=OUT2N
290 C OUT2N=0
400 SPEC DT=1/PLTPER=1/LENGTH=25/PRTPER=1
410 PLOT LEV1=L,LEV2=M
READY
```

LEV1=L,LEV2=M

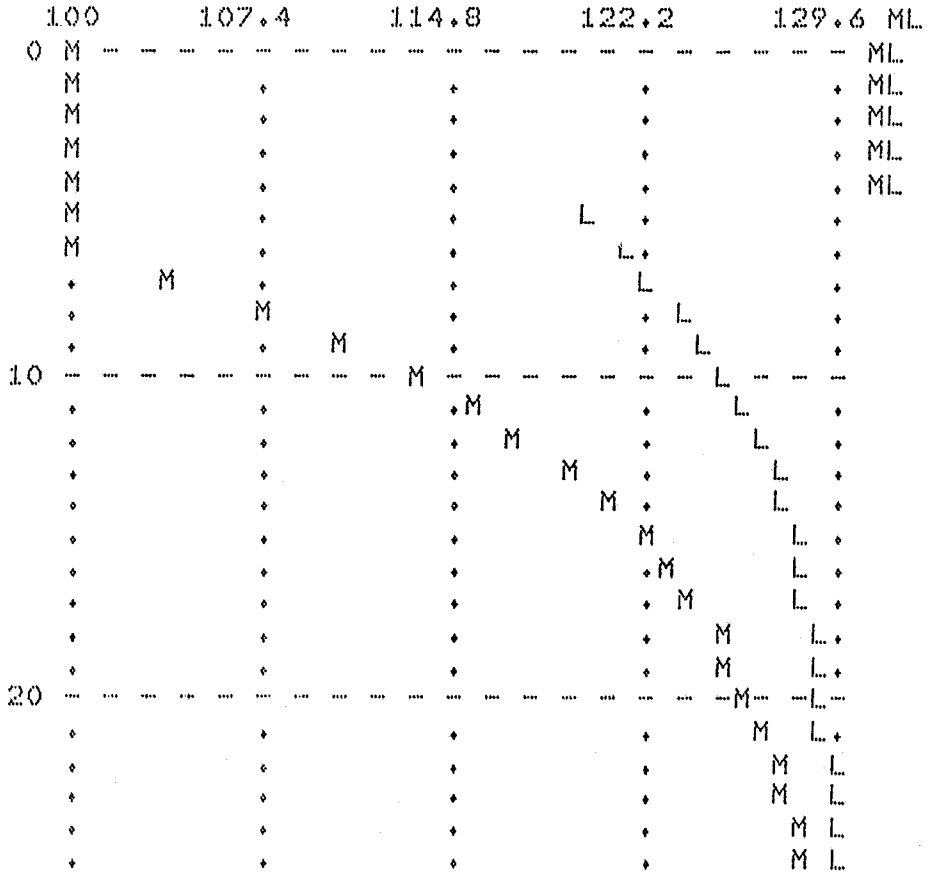

Figure 3. Two Interacting Levels. T = 5.

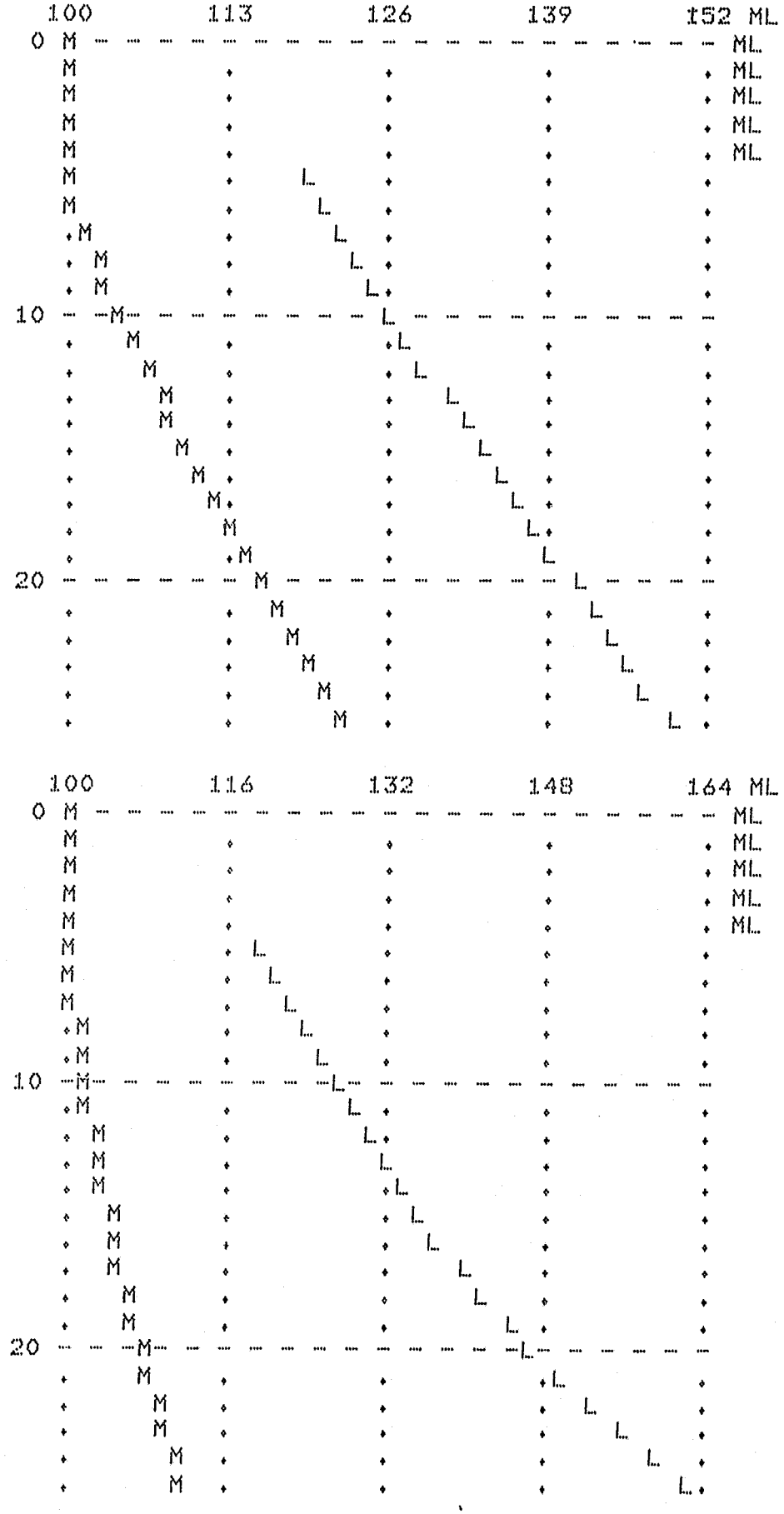

Figure 4. Two-Level Model. Above: T = 20. Below: T = 50.

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OVERALL MODEL FOR THE MARYLAND CRIMINAL JUSTICE PLANNING PROCESS

by

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ABSTRACT

The criminal justice system planning process necessitates the ability to describe the existing system, to identify problems in the existing system, to establish standards and objectives for system improvement, to select among alternative approaches for meeting identified objectives, and to assess the impact of the implementation of the selected approaches. The State of Maryland has initiated as part of its planning process the use of the JUSSIM Model, an interactive computer program which describes the criminal justice system by means of a flow diagram showing offender flow between stages, the accompanying system resources consumed, and the associated resource costs and workloads. The paper reports on the manner in which such a model is being used in the State of Maryland in the criminal justice planning process.

Since December of 1973, the Maryland Governor's Commission on Law Enforcement and the Administration of Justice has been involved in the development of an overall model of the criminal justice system in Maryland. This overall model consists of:

1. A description of how the system processes offenders and the associated system resources, workloads, and costs;

2. A timely description of what is currently happening in the system at critical processing points (i.e., indicators of system activity); and,

3. A projection of forecast of what the system would look like at some future point in time.

Given this model of the system, it is anticipated that, at a minimum, short run system trends and activities can be assessed and improved planning decisions made. In addition, such a model can improve the ability to identify system problems and to assess alternative strategies for impacting on the problem area.

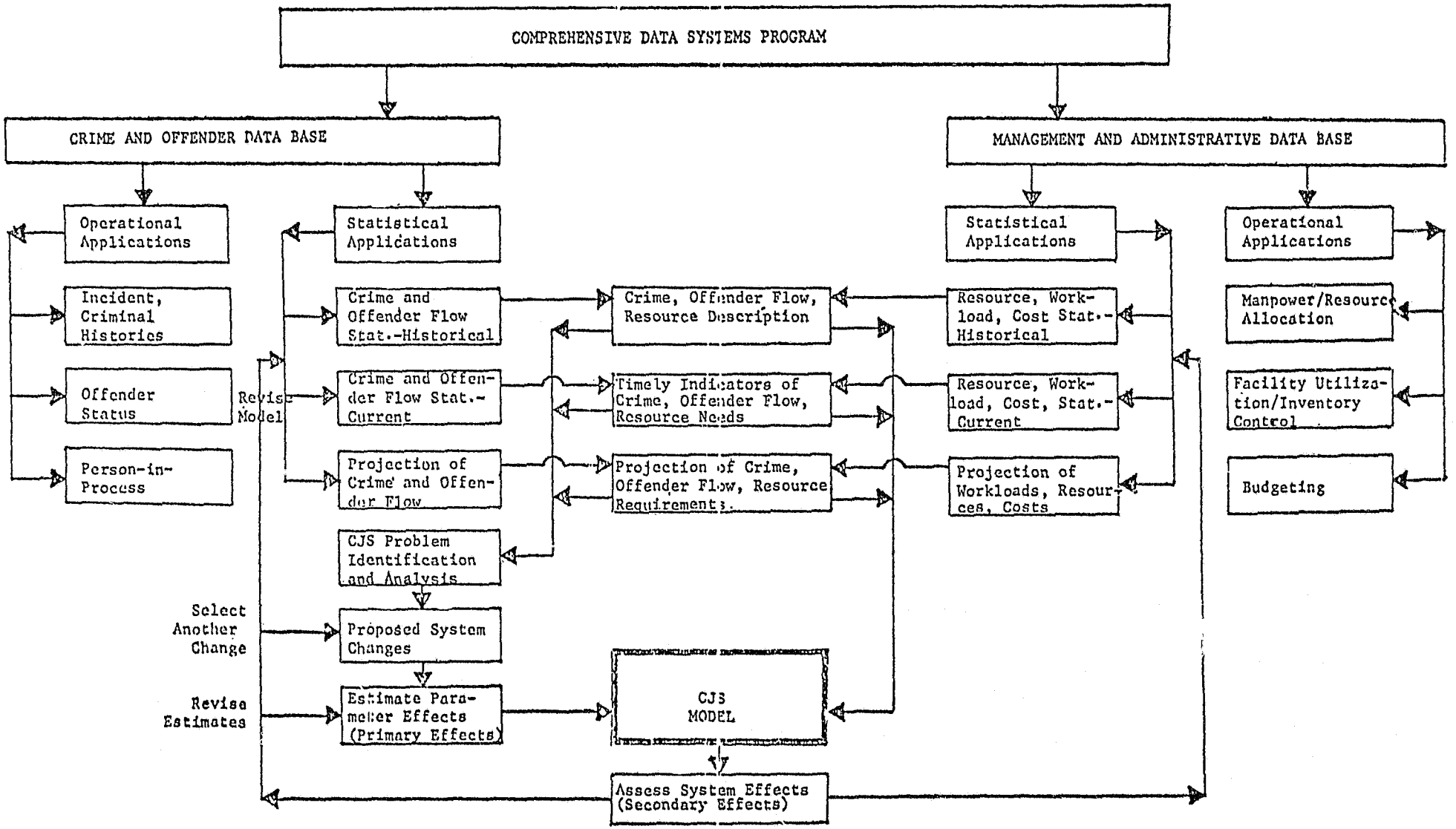
Necessary to the development of such a model is the development of a statistical data base which can support a description of crime and offender processing as well as a description of the system resources and facilities available to address crime and offender processing. The manner by which we envision such a data base being used to support development of an overall criminal justice system planning model is reflected in Figure 1.

The primary tool and guide which we are using in support of the development of the statistical data base and overall model of the criminal justice system in Maryland is the computer simulation model known as JUSSIM (Justice System Interactive Model).

JUSSIM is an interactive computer program in which the criminal justice system (CJS) is represented by a flow diagram with each stage (represented by a box) typically representing a processing point in the CJS (e.g., "arrest" stage, "trial" stage, "sentence" stage) and the connecting paths (represented by lines of flow connecting or exiting from stages) representing the alternative ways in which individuals flow through the stages. The flow diagram is used to represent the flow of "offenders" through the system (separate flow descriptions are provided by crime type) and "resources" (e.g., policemen, prosecutors, judges, detention beds, probation officers) are applied to the appropriate stages and flows to determine the number of resources and associated costs incurred in processing the "offenders" through the system.

The development and use of JUSSIM in Maryland has been undertaken with the following principal objectives (related to the development of the overall model) in mind:

FIGURE 1. TITLE: CRIMINAL JUSTICE SYSTEM DATA BASE DEVELOPMENT AND THE PLANNING PROCESS



STATEWIDE FY 1977

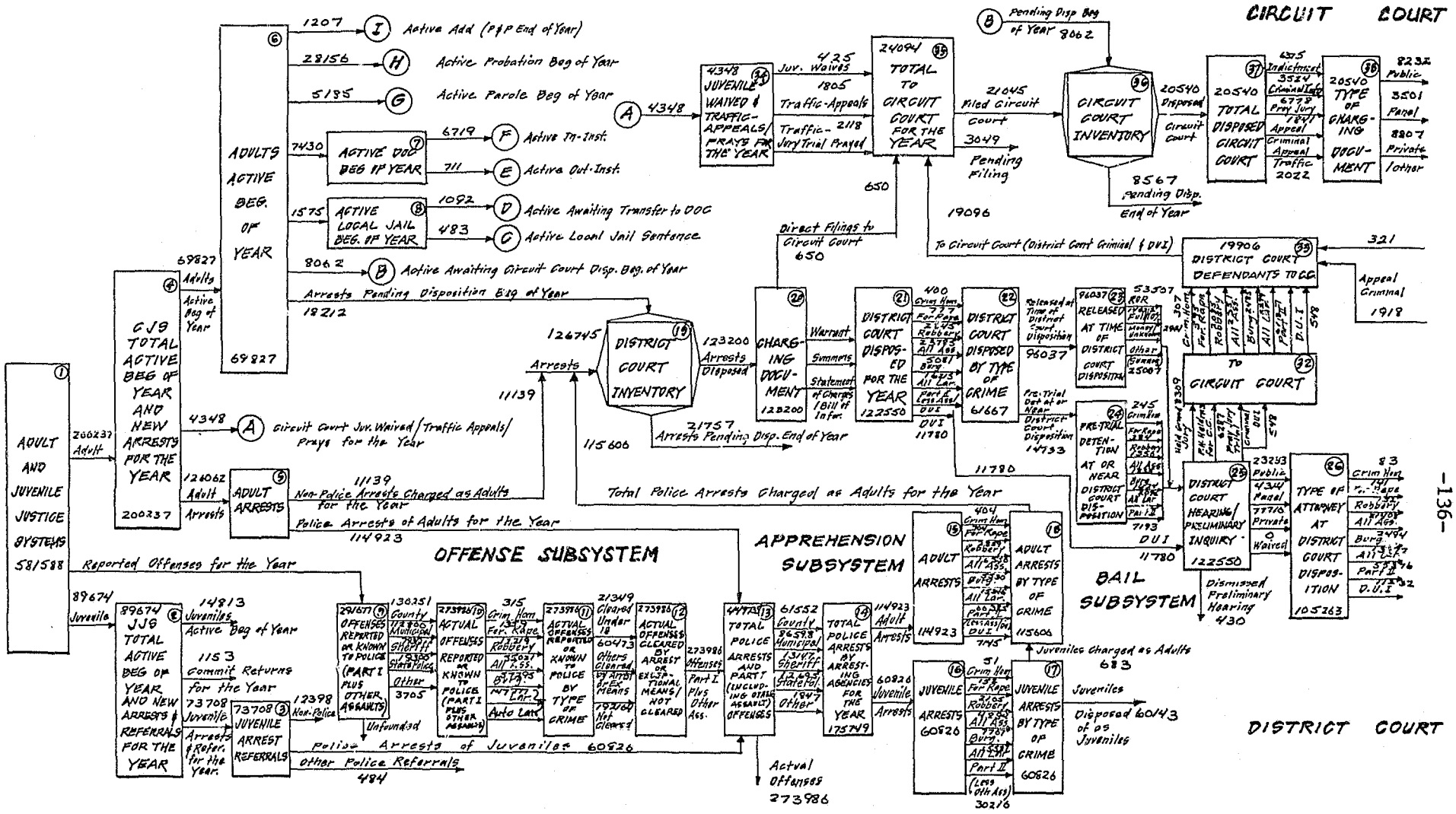


FIGURE 2

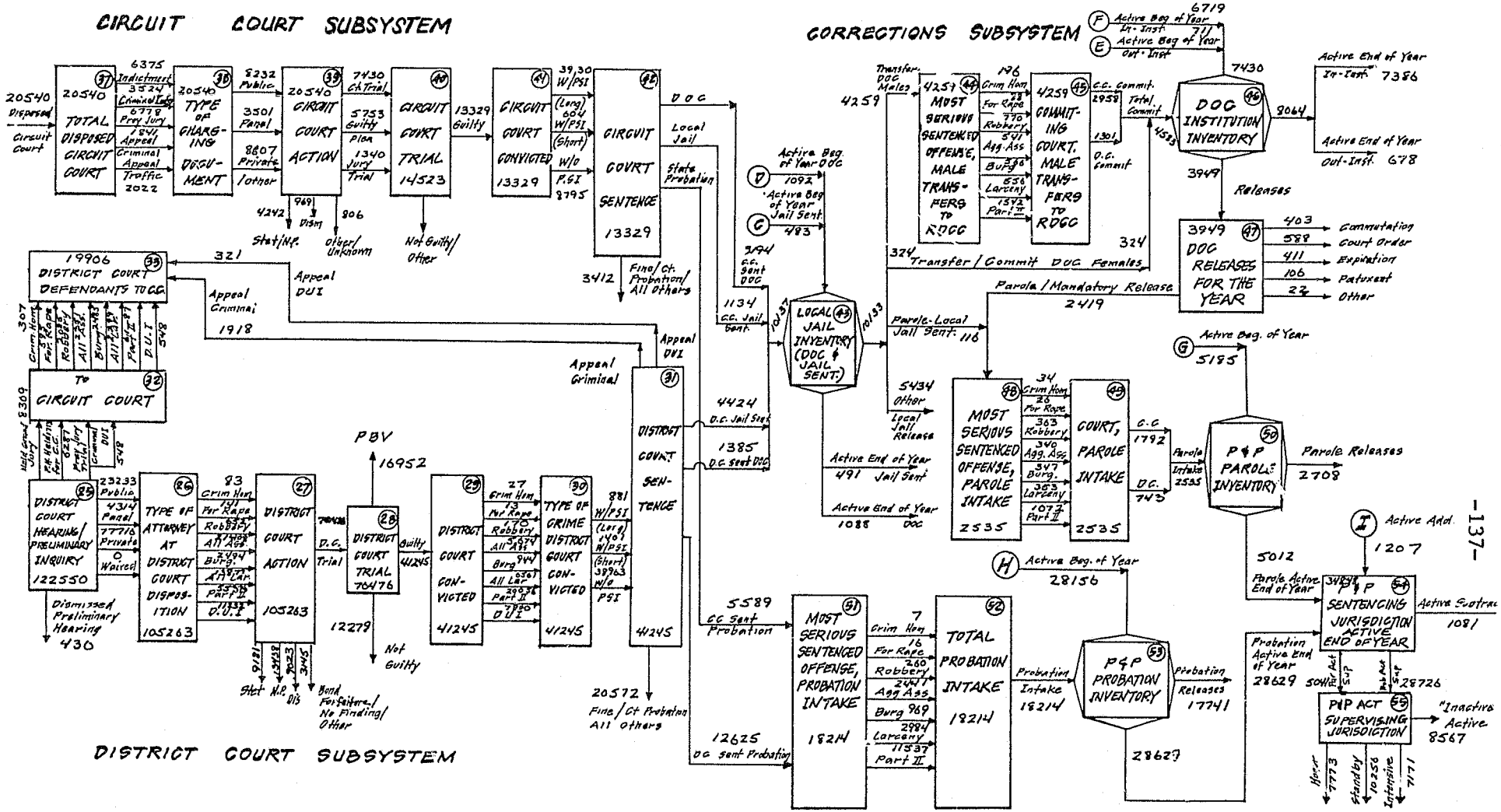


FIGURE 2 (CONTINUE)

1. Provide a rational and organized framework for representing a large volume of data describing the existing criminal justice system in terms of how the system processes the offender and the resources and associated costs to the system of processing offenders.

2. Provide a baseline description of the existing criminal justice system that shows the interrelationships and interdependence of the functional components of the system (e.g., police, detention, courts, corrections, juvenile) on one another and to use such a description as an aid in:

   a. documenting the extent of known successes and problems in the system and suggesting directions for change that might improve the operation of the CJS; and,

   b. providing a framework from which to draw more detailed descriptions and analyses of component parts of the system that are of particular interest.

3. Provide a baseline description of the criminal justice system which in conjunction with an indicator system (i.e., more frequent readings, for example, quarterly, on changes in processing at critical points in the criminal justice system) can be used to monitor the short term activities and needs of the criminal justice system.

4. Provide baseline data which in conjunction with techniques for projecting crime trends can be used to measure anticipated future resource needs of the criminal justice system.

5. Provide a tool to be used in the planning process, i.e., analysis of the impact of alternative choices (e.g., policy, programmatic, legislative) on the criminal justice system. This can be done with the JUSSIM Model by estimating the parameter effects of an alternative choice on the criminal justice system (as described by JUSSIM) and measuring the consequences (e.g., impact on offender flow, resources, costs) on the justice system.

The JUSSIM Model contains three basic elements: processing stages, flow paths exiting or connecting stages, and resources utilized at each stage or flow path. Each of the processing stages, with the exception of the initial stage, is characterized by input and output flow paths. The output flow paths are called <u>branching ratios</u> and represent the probability that an offender will follow a

particular path upon exiting a stage (the sum of the flow path probabilities from each stage always equals 1). Each resource utilized at a given processing stage or flow path is designated in the model along with the corresponding unit workload (the amount of resource required to process a unit of offender flow at any stage or flow path, for a given resource "workload", e.g., number of hours a judge is available to work per year), and a capacity constraint (the number of available units of resource available in a year, e.g., number of judges). The model allows each of the flow and resource attributes which describe the system to be specified by crime type (e.g., robbery, burglary, assault, larceny). Since resource utilization and offender flow vary widely by crime type, this ability to specify the model attributes by crime type greatly enriches the model's description of the criminal justice system.

In addition to this "crime type" format for the JUSSIM Model, the Maryland Statistical Analysis Section has changed this format so that each of the flow, resource, and cost attributes can be used to describe an individual jurisdiction (e.g., county, city). With such a "jurisdiction" based description, crime type information can be included but only in the form of output flow paths from designated stages (see Figure 2). With this "jurisdiction" based model comparisons of offender flow and system resources and costs can be measured in relation to a given geographic area or grouping of geographic areas. A jurisdiction based description of criminal and juvenile processing for FY 1977 has been completed by the Maryland Statistical Analysis Section.

Once the system attributes are collected for some historical period and are placed in the model data base, they become the basic parameters by which JUSSIM can calculate a quantitative description of the criminal justice system. Among the output descriptions available are:

1. The flow through each processing stage;

2. The costs associated with each stage for any grouping of stages into specified "subsystems" (e.g., police/apprehension subsystem, detention subsystem, court subsystem(s), corrections subsystem) including a complete aggregation into the "total system";

3. Resource costs, indicating the costs associated with each of the workloads associated with a given resource (e.g., judge costs), including a completion aggregation of all the workload costs for a given resource; and,

4. Resources required, the number of each of the specified resources required to handle a given workload or grouping of the workloads associated with a given resource. Depending on the

model description selected these output measures may be characterized by crime type or jurisdiction or any desired grouping or aggregation of the crime types (e.g., index offenses, Part II) or jurisdictions (e.g., planning regions, urban, non-urban).

The JUSSIM Model, in addition to providing a data base which describes and allows one to monitor criminal justice system activity can be used in the planning process for assessing anticipated program impact. The model in its operational mode provides the user with a base case (i.e., existing description of the criminal justice system) and allows the user to create a test case (i.e., the entry of anticipated system parameter changes, e.g., changes in volume or manner of offender flow, changes in resource workload, cost, or annual availability). Once the user has specified and entered the desired parameter changes the model outputs may be specified. The resulting outputs compare the way the system looked (i.e., base case description) to the way the system now looks (i.e., test case description).

The model user is required to develop external to the model all anticipated system parameter effects. Typically, this is done by identifying some problem in the criminal justice system, proposing a set of solutions to that problem (e.g., policy, administrative, legislative, programmatic changes), and then characterizing those solutions in terms of the model's attributes or parameters (i.e., estimates of primary effects). The model then simply acts as a calculator in assessing the parameter effects on the criminal justice system (secondary effects). The user is free to revise the parameter effects for a given system change, or to select an alternative system change to be analyzed, or finally, to revise the model to more adequately reflect the attributes of the system to which system change is to be introduced (see Figure 1). The "art" of using the model in planning process, thus, rests with-1) the ability to characterize the system in a manner which is meaningful to the kinds of system changes to be analyzed, and, 2) the ability to estimate those parameter effects of a given "solution" so that the impact of the "solution" on the system can be assessed via the model.

The model's description of a criminal justice system can be further enhanced where data is available to support-1) updates of those attributes of the system which are most subject to change, and, 2) projections of estimates of future inputs (e.g., police arrests) or changes in the operation of the system (e.g., conviction rates). As stated previously, these two aspects are part of the overall model of the criminal justice system currently being developed in Maryland.

In support of (1) above, namely, updates of those attributes of the system which are most subject to change, the Maryland Statistical Analysis Section has been collecting since January, 1976,

indicators of criminal and juvenile justice system activity by major functional area (i.e., law enforcement, courts, corrections - custody, parole and probation, juvenile justice). From these indicators of justice system processing, a quarterly report entitled "Criminal and Juvenile Justice System Stats" is prepared and disseminated. This report provides a set of statistical displays summarizing system processing activity and changes over time in processing activity for each of the major functional areas. It is hoped that the statistical displays will, in conjunction with the baseline description of the CJS given by the JUSSIM Model, aid in-1) monitoring current and anticipated future system needs and requirements, and, 2) recognizing potential problem areas in system processing.

The final aspect or segment of the overall model consists of what the system would look like at some future point in time. Since the criminal and juvenile justice planning process is involved with change and since any changes should be evaluated not only in light of the existing system but also in light of the anticipated future system, it is desirable to be able to project the description of the current system to the future. To do this involves the development of techniques for forecasting anticipated arrest and referral rates, as well as projecting the future behavior of the criminal and juvenile justice system (e.g., will judge sentencing policies remain constant in the future?).

The model used in Maryland in the past to specify future arrest, for a certain year, say 1980, will not be described here; however, a detailed description of this arrest projection model is available and the interested reader can request more information concerning it from the Maryland Statistical Analysis Section. When the initial projections were made only one year of UCR arrest data was available, namely 1975. This data is categorized by age, sex, race and crime type. Since we now have available three years of UCR arrest data, the arrest projection model will be updated and improved. The exact format for the arrest projection model to be used has not been determined yet, but will be some variant of the one used previously (see Appendix A).

In brief, the basic assumption used in developing the arrest projection model is that police arrests have historically had a numerical relationship with certain variables. These variables are arrests by types of crime and population composition, as well as changes over time in the demographic composition of the State's population. These variables were selected based on their apparent numerical relationship to current arrests and their current ease of availability and collectability. It should be noted that while there has been a numerical relationship between these factors, there is no known causation. Therefore, it cannot be determined whether this relationship will continue in the future. There are, no doubt, other variables which may have a significant influence on the number of current as well as future arrests. However, information on age, race, and sex are the only readily available variables describing the State's population mix and crime mix by geographic area. In

addition, while arrest data by type of crime and sex is available by age groupings, only aggregate data on arrests by type of crime and race is available from the State's Uniform Crime Reporting program. All of these factors must be considered when determining the final format of the arrest projection model.

In summary, we are working toward projecting future arrests for each county in Maryland. These projected arrests can then be used as the starting point in the JUMMIS Model for projecting future resource needs and costs of the criminal and juvenile justice systems. If we assume that the remaining parameters in the model (e.g., manner of offender processing) will remain relatively stable over time, downstream effects of the projected arrests can be determined. While clearly the behavior of the criminal and juvenile justice system does not remain completely stable over time, its behavior would probably not change very much over the next year or two. The projected arrests for 1978 and say 1979, at a minimum, could be used in conjunction with the 1977 JUSSIM data to measure system impact.

It should be stressed that the assumption of stability of the CJS cannot be made for an extended number of years without more involved analysis of the parameters involved. An effort should be made to assess anticipated policy, programmatic, administrative and legislative changes that might affect the stability of such parameters. If possible, these changes should be quantified and used to adjust JUSSIM system parameters. In this way the Maryland Statistical Analysis Section is working on developing a dynamic and "policy" sensitive model for improved criminal and juvenile justice planning.

APPENDIX A

The general formula for determining the 1980 adjusted projected arrests for a specific type of crime (C) and age grouping (A) is:

Adjusted 1980 Arrest Project for C and A =

$$\left(\begin{array}{l}\text{1980 Projectes Arrests} \\ \text{for C and A}\end{array}\right) \quad X \quad \left(\begin{array}{l}\text{Adjustment Factor for} \\ \text{Arrests for C and A}\end{array}\right)$$

Where

1980 Projected Arrests for C and A =

$$\frac{\text{1980 Population for A*}}{\text{1975 Population for A}} \quad X \quad \text{1975 Arrests for C and A}$$

And

Adjustment Factor for Arrests for C and A =

$$\frac{\left(\begin{array}{l}\dfrac{\text{1980 w Pop for A}}{\text{Total 1980 Pop for A}} \\ \text{X 1975 w Arrest Rate for C}\end{array}\right) + \left(\begin{array}{l}\dfrac{\text{1980 N-W Pop for A}}{\text{Total 1980 Pop for A}} \\ \text{X 1975 N-W Arrest Rate for C}\end{array}\right)}{\left(\begin{array}{l}\dfrac{\text{1975 w Pop for A}}{\text{Total 1975 Pop for A}} \\ \text{X 1975 w Arrest Rate for C}\end{array}\right) + \left(\begin{array}{l}\dfrac{\text{1975 N-W Pop for A}}{\text{Total 1975 Pop for A}} \\ \text{X 1975 N-W Arrest Rate for C}\end{array}\right)}$$

W = White
NW = Non-white

*State-wide population data by age grouping and within each age grouping by sex and race was available from the Maryland Department of State Planning (this data was available for the period 1970 projected through 1990).

END