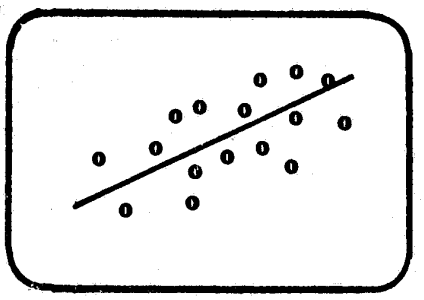

A CORRELATION ANALYSIS OF CRIMINAL JUSTICE AND DEMOGRAPHIC VARIABLES IN GEORGIA

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I. INTRODUCTION

Crime is an important social phenomenon that affects, either directly or indirectly, virtually all citizens. Over 227,000 serious crimes were reported in Georgia in 1975. The criminal justice system in the state that operates to prevent crime, apprehend criminals, prosecute and defend persons arrested for crimes, conduct trials, and incarcerate or rehabilitate offenders required over $2.5 billion in tax money in fiscal year 1974.[1]

Before criminal justice administrators, planners and governmental officials can maximize the results of these criminal justice expenditures and improve agency operations, they must first understand what factors might influence crime and how resources, such as manpower or finances, are related to agency performance.

This report represents an attempt to document for these persons some basic statistical relationships between crime and socio-economic and demographic characteristics, the resources, and the performance of criminal justice agencies. Within the constraints of available data, this report also describes the relationships between performance of agencies and their resources.

It should be noted that this report represents an initial study which can and will be used as a basis for more detailed statistical studies.

The ability to determine appropriate levels of resources, and to explain what effect a change in one variable will have on another is a primary objective of criminal justice researchers; but this objective cannot be undertaken until important variables and relationships are identified. The results of this study, and the availability of more detailed information, will hopefully allow the development of substantive research and planning efforts in this area.

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[1] Uniform Crime Reports - 1975, Federal Bureau of Investigation (Washington, 1976), p. 57 and Sourcebook of Criminal Justice Statistics - 1976, Law Enforcement Assistance Administration (Washington, 1977), p. 60.

The technique used to determine the extent of statistical relationships was correlation analysis. Section II of this report contains descriptions of this technique, the methodology used for this report, the units of analysis, and the variables used in the analysis.

The results of the analysis on crime and its relationships with socio-economic and demographic variables and agency performance and resource variables are described in Section III. Section IV contains a narrative description of the analysis on agency performance and its relationship with agency resources, crime, socio-economic and demographic variables, and other performance variables.

Because substantive deficiencies exist in the type of data needed for a complete analysis, Section V contains a summary of basic data needs. The details of the analysis are presented in tables in the Appendix.

Data analyzed in this report were collected from a variety of sources. Crime data were supplied by the Uniform Crime Reporting Section of the Federal Bureau of Investigation. Law enforcement manpower data, budget information, and arrest and clearance rates were supplied by criminal justice planners in the Area Planning and Development Commissions (APDC).

Information on the number of felony filings, dispositions, and backlogged cases was supplied by the Administrative Office of the Courts (AOC). Judicial and prosecution manpower and budget information was compiled by the State Crime Commission from the state budget and data supplied by the AOC and APDC planners.

The number of convictions resulting in incarceration or probation in the Georgia Department of Offender Rehabilitation was obtained from that agency, and socio-economic and demographic data were obtained from publications of the U. S. Bureau of Census. All juvenile system data were obtained from the Department of Human Resources and the state's juvenile courts. Unless otherwise noted, all data are for 1975.

It should be emphasized that much of the data needed to perform a thorough system analysis of law enforcement, judicial and correctional resource and performance variables are unavailable, and that the technique used in this report represents the most appropriate approach for an initial analysis, given the quality and quantity of available data. The reader should consider the relationships presented and discussed in this report as simply the best indicators of actual operations.

II. METHODOLOGY

The objective of this analysis was to determine those factors that are statistically related to crime and performance of criminal justice agencies. General hypotheses were devised that stated 1) crime is related to socio-economic and demographic characteristics of the population as well as the level of resources and performance of criminal justice agencies, and 2) the performance of agencies is related to the characteristics of the population, the level of resources of all criminal justice agencies, crime and other performance variables.

Informal, but more specific, hypotheses were then developed that contained different types of crime and performance rates. The statistical relationships between the crime and performance variables and those variables that were hypothesized to be related to the crime and performance rates were then measured in data pertaining to either 159 counties or 42 judicial circuits in the state.

Pearson product-moment correlation coefficients were used to determine the relationships. These coefficients indicate the degree to which variation in one variable is related to variation in another. The process summarizes strengths of association between a pair of variables, and enables a comparison of strengths between two different pair of variables.[2]

The detailed results of this analysis are presented in tables in the Appendix. Each crime and performance variable that was studied is presented in the left-most column of the table. The second column contains variables considered with the primary variable. The Pearson coefficient, or r, is presented for each variable pair if the relationship was statistically significant at the .05 level. For those variable pairs that fail the significance test, a "ns" is given for "not-significant." Presented in addition to the correlation coefficient is the number of cases used in the analysis of that variable pair (n), the significance level (p), and the coefficient of determination, or the proportion of variance in one variable explained by the other (v^2).

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[2]N. H. Nie, C. H. Hull, J. G. Jenkins, K. Steinbrenner and D. H. Bent, Statistical Package for the Social Sciences (New York, 1970), p. 276.

It should be noted that a correlation coefficient simply measures the degree of association between two variables: it does not indicate that the presence of one variable "causes" another to occur or that one variable directly affects another. The purpose of this preliminary analysis is not to determine cause-and-effect patterns, but to document and present the basic relationships so that additional research can study causal relationships.

Two units of analysis are used in this report out of necessity: the county and the judicial circuit. Crime, environment, and law enforcement data were collected on a county basis; however, prosecution and judicial data could only be obtained by judicial circuit. Therefore, when necessary (and possible) county data was aggregated by judicial circuit for analysis.

Crime data used in this analysis consists of index crimes only (homicide, forcible rape, robbery, assault, burglary, larceny, and motor vehicle theft.) County crime rates for each category were computed using 1975 population estimates. The index crime rate, violent crime rate, and property crime rate were also calculated for each county, as were population-at-risk rates for rape, based on adult females; burglary, based on total structures (households and businesses); and motor vehicle theft, based on total registered vehicles.

The socio-economic and demographic variables used in the analysis are listed below.

Socio-economic and Demographic Variables

population, 1970, 1975
percent change in population, 1970-1975
population density, 1970, 1975
percent change in population density, 1970-1975
black percent of the population, 1975
juvenile percent of the population, 1970
median income, 1970
percent of the households receiving aid to families with dependent children (AFDC), 1975
percent of the population receiving food stamps, 1975
unemployment rate, 1975
juvenile population, 1975

Although this list does not cover all of the criminogenic factors which have been found to explain crime,[3] they do represent the best social indicators presently available on a county basis.

The resource variables include budget and manpower data for law enforcement, prosecution, and judicial components of the criminal justice system. Also, workloads and ratios of budget per capita and manpower per capita were calculated for each of the components. Listed below are the resource and workload variables.

Resource and Workload Variables

County-based

law enforcement budget
law enforcement budget per capita
law enforcement officers (full-time)
law enforcement officers per 10,000 population
square miles per law enforcement officer
number of sentencing alternatives in community (juvenile system analysis only)
number of juvenile investigative and probation officers (juvenile system analysis only)

Circuit-based

prosecution budget
prosecution budget per capita
prosecutors
prosecutors per 10,000 population
felony filings per prosecutor
prosecution cost per disposition
prosecution cost per felony filing
superior court budget
superior court budget per capita
superior court judges
superior court judges per 10,000 population
felony filings per superior court judge
superior court cost per disposition
superior court cost per felony filing

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[3]Gwynn Nettler, Explaining Crime (New York: McGraw Hill, 1974). Nettler lists nine criminogenic conditions which consistently correlate with crime. They are: the movement of people, crowding, social mobility, relative deprivation, child neglect and misuse of youth, mass media, comforting chemicals, anarchy and authority, and laws and their enforcement.

Finally, performance measures (or indicators) were computed for various points in the criminal justice system from other data; i.e., arrests, clearances, indictments, etc. In some cases the indicators are actually surrogate measures and the variables used in their calculation are listed below.

Performance Variables

Arrest rate	Arrests per 100 crimes
Clearance rate	Clearances per 100 crimes
Indictment rate	Indictments per 100 arrests
Prosecution rate	Felony filings per 100 crimes[4]
Conviction per filing rate (circuit-based)	Convictions per 100 felony filings[5]
Conviction per crime rate (circuit-based)	Convictions per 100 crimes
Conviction per arrest rate	Convictions per 100 arrests
Incarceration rate	Incarcerations per 100 convictions
Probation rate	Probations per 100 convictions
Superior court backlog	Felony filings - dispositions
Percent court backlog	Backlog cases per 100 felony filings
Juvenile referral rate	Referrals per 100 juveniles
Juvenile petition rate	Petitions per 100 referrals
Juvenile detention rate	Detentions per 100 referrals
Juvenile probation rate	Probations per 100 referrals
Juvenile commitment rate	Commitments per 100 referrals

Arrest, clearance, and indictment data were available for only a minority of the counties. Therefore, the corresponding rates could not be computed on a circuit basis. This, obviously, prevented analyzing these measures with judicial circuit measures and thus limited the scope of the systems analysis. The incomplete data also jeopardizes the credibility of the correlations

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[4]Ordinarily the prosecution rates would be computed as felony filings per 100 arrests; therefore, this is a surrogate measure.

[5]Convictions include incarceration and probation only. The term does not include cases of fines, suspended sentences, and other non-supervised sentences.

between these performance measures (arrest, clearance, and indictment) and the other variables since they represent essentially a biased sample; however, the relationships will be noted. In summary, the data collected and used for this analysis leaves much room for improvement but is representative of the general condition of criminal justice information systems under development.

III. CRIME CORRELATES

Informal research hypotheses were established concerning possible relationships between crime rates and socio-economic, demographic, resource, workload, and performance variables. The relationships were examined for 13 crime rates using the procedure outlined above. The results of this analysis are presented in Table A in the Appendix by crime rate. The reader should note that two rates are presented for rape, burglary, and motor vehicle theft. The first is based on total county population and the second on population at risk; e.g., rapes per adult females.

The analysis indicates that each crime rate, except homicide, covaries positively with population, density,[6] and income (r^2 range: .03 to .66). This phenomena reflects the generally accepted notion that urban areas have substantially more crime and thus worse crime problems. However, it could, to an extent, represent a better system of reporting crime in urban areas.

The homicide rate, which has very little association to these variables, has a weak positive correlation with black percent of the population (r^2 = .06), percent of the population receiving food stamps (r^2 = .04), and unemployment rate (r^2 = .03). It also correlated negatively with median income (r^2 = .06). This combination implies that homicide is not predominately an urban offense, as might be expected.

The percent change in population and density variables correlate negatively with violent crime rate (r^2 = .03 and .04) and motor vehicle thefts per 1,000 registered vehicles (r^2 = .05 and .05). This indicates that counties which experienced the greatest increase in population and density between 1970 and 1975 tended to have lower violent crime rates and motor vehicle theft rates in 1975. This finding might be influenced by the fact that the 1975 population data were estimates, but is nontheless surprising in view of the previously cited phenomena of crowding as a criminogenic factor.

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[6]Population density per square mile is used as a surrogate measure of crowding, which Nettler showed to be a crime indicator in Explaining Crime.

Property crimes show a strong positive correlation to population (r^2 = .40) and income (r^2 = .35) and a mild negative correlation with black percent of the population (r^2 = .03) and percent of the population receiving food stamps (r^2 = .10). Since the latter two variables correlate negatively with population density also (r^2 = .09 and .03), this indicates that the urban counties tend to have proportionately fewer blacks and fewer people receiving food stamps as compared to counties having lower densities. This association between property crimes and urbanism may support two criminogenic factors cited in earlier research: relative deprivation and mass media.[7] This theory states that exposure to advertisements, television, movies, etc. combined with the proximity of economically dissimilar neighborhoods or access to commercial areas and stores make urban counties more susceptable to property crimes.

The associations shown between crime rates and resources are strong and positive (r^2 range: .03 to .77) with few exceptions. This further supports the notion that, in general, crime problems are more prevelant in urban areas and require more law enforcement expense and manpower per capita. The exceptions include non-significant correlations for homicide rate, burglary rate (burglaries per structure), and motor vehicle theft rate (thefts per registered vehicle) with law enforcement expenditure per capita. Also, the homicide rate and rape rate (rapes per adult female) were not significant with law enforcement officers per population.

Since resources per capita apparently increase with urbanism, the homicide rate, as explained previously, would not show the normal pattern of increased population, increased crime, and increased expenditures. As for the population-at-risk rates for rape, burglary, and motor vehicle theft, the normal pattern is evidently weakened when the direct influence of population is removed from the crime rates. The population-at-risk rates are logically a more accurate reflection of the crime problem than the more common method of using the total population.

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[7]Nettler, Explaining Crime.

All of the statistically significant correlations between crime rates and performance variables are negative. Conviction rate (convictions per crime) and arrest rate, at the county level, tend to decrease as crime rates increase. At the judicial circuit level, crime rates in general had no association with court backlog or percent court backlog of felonies with the exception of property crime rate. Percent court backlog and property crime rate correlate negatively ($r^2 = .11$). These findings indicate lower performance rates in some areas of urban criminal justice components and may reflect a larger proportion of non-criminal activities required of criminal justice personnel in urban counties. Additional correlations between performance and crime rates are presented in Section IV.

In summary, the most significant phenomenon revealed by this analysis is the contrast between correlations or patterns regarding the homicide rate and those of other crime rates.

IV. PERFORMANCE CORRELATES

The performance measures, described in Section II, were computed in order to evaluate the response of the substate components of the criminal justice system to their corresponding crime problems and workload. Although sufficient data necessary to provide a complete assessment of the system was not available, some basic measures were available and are used in this portion of the analysis. The reader should be reminded that arrest, clearance, and indictment data were available for only a small portion of the state; therefore, the associations which are indicated below should not be used as inferrential statistics.

Again, informal research hypotheses were employed as a basis for examining the relationships between performance variables and resources and also their association with other performance variables, crime variables, and socio-economic and demographic variables. The correlations are presented in Table B in the Appendix for each performance measure.

Based upon the limited mumber of cases where arrest, clearance, and indictment data were available, there does not appear to be a discernable association between the corresponding performance rates and law enforcement resources. Due to the non-randomness of the available cases, however, it cannot be assumed that this would hold true for the entire population (all counties). Again, these performance rates could not be analyzed in conjunction with the resource data collected on the judicial circuit level due to the small number of cases available at the county level. The primary value of the results of the correlations for index arrest rate, index clearance rate, and index indictment rate would be to provide information on which to formulate future hypotheses concerning these or similar relationships when either a complete enumeration or random sample is available.

The index prosecution rate, in the absence of arrest data, was computed as felony filings per index crime. This formulation creates a multiplicity of problems, so although the approach of using a surrogate measure of prosecution rate was tried in the analysis, the outcome is deleted from the analysis to prevent possible misinterpretation. The prosecution rate is a function of arrest rate and arrest rate correlates negatively with crime rates. Therefore, associations using the surrogate methods might well be spurious. This portion of the analysis must be deferred until arrest data is available.

An analysis of the conviction per filing rate shows significant, positive relationships (r^2 = .15 and .11) with the expenditures per felony filing for both the prosecution and the judiciary. These relationships would be expected, especially in the area of prosecution; however, it would likewise be expected that prosecution workload would be related to the conviction per filing rate, which is not the case. The felony workload of the judge is, however, negatively related to the conviction rate (r^2 = .10). The conviction per filing rate, as expected, is positively associated with guilty plea rate at a moderate level (r^2 = .25).

The conviction per filing rate is not related to the index crime rate, although population and density correlate positively (r^2 = .11 and .10) with conviction rate. The patterns seem to indicate that conviction per filing rates increase in areas of greater density where the costs of prosecuting and convicting felons are higher.

The sole significant correlation for index incarceration rate and index probation rate was with index clearance rate. Since there is no theoretical link between these rates and the fact that the correlations are based on only 34 cases, this association should be considered spurious.

An analysis of the percent of felony filings which were backlogged in the courts results in correlations which are opposite in direction from what would be expected. The negative association (r^2 = .11) with crime rate indicates that as crime rates increase in the judicial circuits the relative backlog is reduced. Other correlations indicate that as the number of judges per unit of population increases and the workload of the judges decreases, the relative court backlog increases. These patterns elude interpretation since there are no other significant correlations, particularly among geographical factors.

An analysis of law enforcement turnover rate indicates that no significant correlations exist with resource data, crime data, or population. It is unfortunate that performance data, such as arrest or clearance rates, are not available, since existing data reveal no patterns. The reader is reminded that certain administrative policies or practices, such as the establishment of recruitment or incentive programs, were not related to eigher high or low turnover rates but that the possible benefits of these policies are expected to include more than a reduction of personnel resignation.

Correlations involving juvenile system performance and resource variables are similarly limited due to lack of statewide data. Referral, petition and commitment data were obtained for each county, but probation, detention and investigative caseload data were available for less than 22 counties. As was the case for the adult system, these associations should not be used as inferrential statistics.

The total number of treatment alternatives located in a community was found to be positively related to referral rate. Surprisingly, no significant relationships existed between the number of alternatives and the petition rate, detention rate, commitment rate or probation rate. Other resource variables, such as the number of probation or investigative officers, were not related with any performance rates, although the availability of resource information was limited.

Several significant and interesting relationships are evident when comparing different performance rates. The referral rate correlated negatively and weakly with petition rate but more strongly with commitment rate, and probation rate. Yet, the petition rate correlated positively with the commitment and probation rate. This indicates that in counties with low referral rates to the juvenile courts, court personnel are more likely to petition the court alleging delinquency, dependency or neglect, and that these courts have usually higher commitment and probation rates. Conversely, areas with high referral rates have generally fewer petitions and commitments or probations.

Similar to the adult system where population correlated positively with crime rates, the juvenile population is positively related to the referral rate. This comparison is made because reliable information on the volume of crime committed by juveniles is not available.

It was also determined that the type of court that processes juvenile cases is related to several processing rates. Table 1 indicates that counties with juvenile courts have much higher referral rates but lower commitment and probation rates than superior or state courts. It should be noted that juvenile courts are generally limited to the more populous and urban areas of the state and, as previously noted, areas with higher numbers of juveniles tend to have higher referral rates. Consequently, one should not deduce that the existence of a juvenile court results in higher referral rates. The values presented in Table 1, however, certainly suggest that research in the differences of operation between superior, state and juvenile courts is warranted.

TABLE 1

Average Referral, Commitment and Probation Rates in Courts Processing Juvenile Cases

Type of Court	Average Referral Rate	Average Commitment Rate	Average Probation Rate
Superior	9.5	14.5	49.5
State	18.6	7.5	36.1
Independent Juvenile	24.4	6.1	24.4
DHR Juvenile	19.4	6.6	14.5

The analysis of the adult and juvenile system's response is unfortunately shallow, not so much due to the quality of the data but simply because of its incompleteness. More detailed information is essential to such an analysis. Likewise, additional performance and workload data, although not as essential, would greatly enhance the capacity to analyze the criminal justice system, subsystem components, and substate systems and components.

V. DATA NEEDS

In reviewing data on crime and the response of the criminal justice system to its occurrence, it is obvious that all information necessary to adequately define problems is not presented. Basic data on the incidence of crime and resources in the main components of the system are available and are presented, but much more detail is needed. Also, only limited information on the performance of the system and each of its components is available. In many cases, surrogate measures of performance are introduced which offer some insight into the system's operation, but which do not enable the identification of specific problem areas.

These data deficiencies are mentioned throughout this report. This section explains several factors concerning the nature and extent of data deemed to be necessary for a proper analysis. These factors include the types of data; their relationships; the level at which they are collected, e.g., on a sample basis or from the universe; data quality; frequency of data collection; and methods of collection.

At this point it should be noted that all types of data necessary for every criminal justice analysis cannot be determined. Specific information needs will arise that may require research projects to collect detailed data which could not be supported in statewide systems. Also, evaluation will require data needs of a more specific nature than those described below. The following paragraphs represent a minimum description of the major components of the adult criminal justice system, and are not intended to be inclusive of all research data needs.

Types of Data and Analysis

In discussing analytic techniques and results of analyses of criminal justice data, one can often become easily confused due to the lack of consistent definitions. Analysts, planners and observers often seem to have divergent views on what "crime analysis" represents. To some, the term represents a descriptive type of analysis on crime trends and characteristics. To others, it represents a similar form of statistics describing, usually in tabular form, the resources of the criminal justice community. Others view the term in a general sense and infer an analysis of the entire system's performance as it relates to crime reduction or control.

Due to this confusion, several types of data are herein described and defined as they relate to two basic types of analysis--crime analysis and systems performance analysis. Crime analysis includes descriptive statistics of crime and crime rates, trends, and characteristics. The term also applies to the analyses describing the statistical relationships between socio-economic and demographic characteristics and crime rates. Tabular presentations of resources are not considered as analyses. Statistical relationships between the performance of the system or any of its components are described as system performance analyses. After a description of the types of data, system performance analyses will be described more thoroughly.

Resource Data

Of major importance to planners and analysts is knowledge of resources available in the system. These data represent the total effort available to perform the tasks required of each component. The primary resource elements are manpower, and total budget. Manpower must be detailed to distinguish between line and staff operations. For example, in law enforcement agencies the line personnel, or the sworn officers assigned to enforcement duties, must be separated for analytic purposes from supportive services personnel, such as persons in dispatching, records keeping or property accounting. Budgetary needs of personnel must also be separated from the total budget.

These distinctions enable one to determine the total cost, as well as the amount of service actually available for the primary task of the agency or the component. At a minimum, these data, as well as all subsequent types of data, are needed for law enforcement, prosecution, judicial and correctional agencies whose primary purposes are detention or rehabilitation.

Resource data of a secondary priority include detailed budgets allocated for non-personnel items, such as construction or operating expenses.

Workload Data

Once the number of persons available in each component to do the component's work is known, the component's work must be quantified. This must be expressed in units which are different in most areas. For example, in law enforcement, the workload units include offenses and persons arrested. For prosecutors, workload consists of cases and filings.

In most instances, these categories must be further divided to distinguish between offenses or cases of a serious nature from those of a less serious nature. Felonies will likely require more time of a prosecutor than will misdemeanors, and cases with four defendants will require more time than cases with a single defendant. The number of each major type of workload must therefore be described.

In defining "major" type of workload, priorities must again be established. The highest priority should be assigned to index offenses and felony cases. The less serious offenses and judicial cases (which may require more time than index crimes or felony cases), as well as information on non-criminal aspects of workload (such as agency administration, preventive patrol, traffic control, civil trials, etc.) must be quantified, but only after information from priority one is secure.

Capability Data

The third major type of data required for a proper analysis of the criminal justice system represents the capabilities of the system. This entails knowing how much time and effort is necessary for each unit of workload to be processed, and distributing these time requirements among the personnel available to perform the work. Another method of describing these relationships is:

available resources $\div$ workload requirements
= capabilities

Hence, if a prosecutor's office with two prosecutors wishes to devote five man-days of prosecution time to each felony case with two defendants, a maximum of 100 such cases can be handled in one year, assuming that both prosecutors did nothing but prosecute two-defendant felony cases. (Two persons times 250 days a year divided by five days per case = 100 cases). With this assumption, the capability of this office is 100 cases.

This is obviously an over-simplified example to briefly illustrate the relationships between manpower, workload units, workload time units and capabilities. In reality, prosecutors must devote time to felony cases and misdemeanor cases, with each type having single or multiple defendants. In these cases, linear programming techniques must be employed to develop capabilities based on maximized work effort and manpower and time constraints.

This approach requires a key element which is infrequently used--time standards. Very little documentation exists concerning how much time should be devoted by a prosecutor to a two-defendant felony case, or by an officer investigating a property crime. It appears prudent to assume that all available time in criminal justice agencies is devoted to the workload, and that the more serious cases receive more attention based on the judgement and expertise of the personnel. When the workload gets too great for all cases to receive adequate attention, either some cases are not accepted or a less-than-adequate amount of time is allotted to some.

By applying the concept of time standards, the capabilities of each agency or component can be determined for the existing personnel. These capabilities can then be compared with actual workload, and the need for additional resources can be documented. In the example of the prosecutor's office with a capability of 100 two-defendant felony cases, actual workload might be 150 two-defendant felony cases. If each case required 5 man-days, three prosecutors, instead of the existing two, would be required. (150 cases per year times 5 man-days per case divided by 250 man-days per year per prosecutor = 3 prosecutors). If an additional prosecutor could not be obtained, this information would be used in management decisions to either change the workload-time requirements or the workload or both so that existing resources could be allocated most effectively.

In reviewing the resource, workload and capability types of data, it is important to note that from an analyst's perspective, it is the capabilities that should be maximized, and not resources, since the resources are considered to be constraints.

Performance Data

Performance data expresses how well the components of the criminal justice system are working, both as separate entities and in relation to each other, and how well the entire system is working. Performance information is usually expressed in percentage or rate form to facilitate comparisons.

In reviewing the performance of agencies, components, or the entire system, one should remember that performance is often calibrated by effectiveness and efficiency measures. Effectiveness can be considered as the extent to which functions are performed, and efficiency as the level of output obtained for a given level of input, or resources.

In mechanical systems, considerable effort is devoted to improving the efficiency levels so that for a given effectiveness level, operating costs or input resources can be minimized. In social systems, it is likewise important to reduce operating costs and resources, but the level of effectiveness becomes much more important.

As an example, in the judicial system, effectiveness could be measured as the degree to which guilty defendants are convicted and innocent defendants are exonerated. Efficiency could be measured as the number of cases processed by the court during a period of time. An extremely high efficiency level in this instance would not be too gratifying to the taxpayer-victims of guilty defendants who were acquitted or released, and would certainly not be too comforting to the innocent defendants that were convicted.[8]

Consequently, in analyzing the performance of the criminal justice system, one must be cognizant of both effectiveness and efficiency measures. Low efficiency measures might lead one to suspect poor performance, but in reality might be a requirement of high effectiveness. High effectiveness might be a noble goal, but might require a level of resources that taxpayers are not willing to support. The relative importance of the two measures--effectiveness and efficiency--is an issue of policy that is more complex than perhaps any other issue in the statistical analysis of the system.

In actually measuring performance, intra-component and inter-component rates must be calculated. Inter-component rates are those that measure the flow of offenders through the system. Offenders, or defendants, must be used as the unit of count since this is the only unit that is consistent throughout the system. Examples of inter-component rates are the grand jury-to-Superior Court rate, which is the number of indicted persons that have their cases filed in the court docket divided by the total number of persons indicted; and the commitment hearing-to-grand jury rate, which is the number of persons bound over to the Superior Court that are presented to the grand jury divided by the total number of persons bound over.

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[8]Stevens H. Clarke, "Toward Understanding the Outcome of Serious Criminal Cases in the Courts: Some Thoughts About a Statistical Reporting System." University of North Carolina at Chapel Hill, 1973.

Intra-component rates must also be measured. These relate to actions taken within a component, such as an indictment rate, which is the number of indictments divided by the total number of persons presented to the grand jury, or an incarceration rate, which is the number of convicted persons receiving incarceration divided by the total number of convictions.

Time required to process cases must also be measured between each major processing step.

Although it does not measure performance of agencies or components in achieving their main objectives, personnel turnover rate is an important measure, since it contributes heavily to re-training cost and perhaps to performance measures. Consequently, it too is offered as a measure of performance, and as an introduction to the next type of data requirement.

Administrative Data

Information in this category describes the personal characteristics of criminal justice employees and the policies and procedures of the agencies. Certain employee characteristics, such as training or experience, likely influence performance rates or capabilities and should be quantified. Certain agency policies, such as the establishment of promotion plans or fringe benefits, might influence turnover rates or even performance.

Other types of administrative policies must be measured since they could severely affect the determination of agency capabilities. Policies to either disregard or concentrate on certain types of cases, crimes or offenders, for example, would change the workload and time requirements.

Socio-Economic and Demographic Data

Since the criminal justice system functions as a result of crime, and since people cause crime, it is entirely possible that different types of people commit different types of crimes, which in turn require different responses from the system. Also, attitudes concerning such topics as punishment or rehabilitation might differ substantially in different localities, and

these differences must be known in standardizing performance rates or workload. Basic information on population, density, age, etc. in the regions are necessary for these purposes, and also for standardizing resource and workload data for comparitive purposes. To facilitate inter-state or inter-regional comparisons of crime problems and conditions, national research should indicate which specific factors should be used.

Crime Characteristics

The seventh and final type of data includes the characteristics of crimes necessary for crime analysis. These elements include information on the extent of crime, trends in its occurrence, the victim, the offender, and the crime itself. With this information, crime prevention programs can be developed that concentrate on the crimes deemed to be most serious and amenable to control. Specific measures can be taken to protect the typical victim in those times and areas that the crime is most prevalent.

Tables 2 and 3 include a summary of basic data needs by component and by type of data.

Table 2

Crime Characteristics Data Requirements[9]

General Category	Data Element
Setting	Place Occurred - General (commercial, residential, open space)
Offense Characteristics	Time Occurred Weapon Used Property Taken Type Offense
Victim	Age, Sex and Race
Offender	Age, Sex and Race Victim/Offender Relationship
Trend	Multi-year trends in occurrence
Volume	Number of Crimes

Note
All items must be crime specific in nature; that is, all elements must be described for each type of crime.

[9]Atlanta Impact Program Master Plan Update, Atlanta Regional Commission (Atlanta, 1973), p. 17.

Table 3

Resources, Workload, Capability & Performance Data Requirements

Type Agency	Resources	Workload and Capability	Performance
Law Enforcement	Full-time sworn Part-time sworn Other personnel Total budget Personnel budget (Detailed budget) (Detailed personnel classifications) (Physical plant inventory)	Offenses by type Arrests by type offense committed (Administration) (Traffic control) (Prevention patrol levels) (Public service duties) (Other duties) Time requirements for each type work	Clearance rate Commitment hearing-to-grand jury rate Indictment rate Cost per crime Cost per clearance Offense-arrest time Turnover rate
Lower Courts (Committing Courts)	Full-time magistrates Part-time magistrates Total budget Personnel budget (Detailed budget) (Detailed personnel) classifications) (Physical plant inventory)	Hearings by type crime committed (Non-criminal hearings) (Traffic cases) (Administration) (Hearings by type crime committed and by number of defendants) (Other duties) Time requirements	Commitment hearing-to-grand jury rate Indictment rate Cost per hearing Arrest-hearing time Turnover rate

Table 3 (continued)

Type Agency	Resources	Workload and Capability	Performance
Prosecutors and Solicitors	Full-time prosecutors Part-time prosecutors Other personnel Total budget Personnel budget (Detailed budget) (Detailed personnel classifications) (Physical plant inventory)	Grand jury presentments by type of offense and number of defendants Trials by offense and number of defendants (Administration) (Other duties) Time requirements	Indictment rate Commitment hearing-to-grand jury rate Grand jury-to-trial rate Conviction rate Cost per court disposition Commitment hearing-to-grand jury time Grand jury-to-filing time Filing-to-disposition time Arrest-to-disposition time Court dispositions per filing Percent of filings backlogged Guilty plea rate Turnover rate
Trial Court	Full-time judges Part-time judges Total budget Personnel budget (Detailed budget) (Detailed personnel classifications) (Physical plant inventory)	Trials by offense and number of defendants Non-criminal trials (Administration) (Other duties) Time requirements	Filing-to-disposition time Cost per disposition Percent of decisions overturned in Appeals Court Turnover rate Dispositions per filing Percent of filings backlogged Incarceration rate

Table 3 (continued)

Type Agency	Resources	Workload and Capability	Performance
Corrections	Full-time officers Part-time officers Full-time counselors Part-time counselors Total budget Personnel budget (Detailed budget) (Detailed personnel classifications) (Inventory of programs or services) (Physical plant inventory)	Inmates or probationers (Administration) (Other duties) Time requirements	Increase in inmates' skills Cost per inmate-year
Entire System	N/A	N/A	Convictions per offense Convictions per arrest Re-arrest rate Re-conviction rate Return to prison rate

Notes

1. Capability data must be calculated from resource and time requirement information.
2. Data elements listed in parentheses represent second priority items.
3. "Personnel budget" should include costs for only those types of personnel listed.
4. "Cost per disposition" in Trial Courts should not include costs of civil or non-criminal cases.
5. Performance rates of an inter-component nature should be crime-specific.

Relationships Between the Types of Data

Data bases created from the seven types of data previously mentioned are very divergent in nature, yet they are all necessary to conduct a system performance analysis. System performance analyses are crucial, since they attempt to explain the relationships between factors that can be controlled (resources, workload, capabilities, policies) and factors that should be improved (performance), given certain factors that cannot be controlled (socio-economic and demographic variables). In conducting the system performance analysis, performance rates are considered as dependant variables, or variables that fluctuate due to the existence of other (usually independent) variables. The relationships between the seven types of data, and a description of how the system performance analysis was formulated, are illustrated in the following equation:

> performance=f (resources, workload, capabilities, other performance data, administrative data, socio-economic and demographic data, crime characteristics)

This equation states that any performance rate is a function of the seven types of data. Different performance rates will be affected differently by various combinations of the seven elements, so each must be analyzed separately.

Level of Data Collection and Data Quality

In any planning process, data must be collected for analysis and problem documentation. Unfortunately, resources available for such collection efforts in criminal justice planning agencies are the same as any other agency--limited and finite. Therefore, data must be collected on a priority basis, and the possibility of sampling must be investigated.

The seven types of data and two types of analyses can be used for two primary purposes. The first is identifying agencies or areas with unusually high or low statistics. These could include performance rates, resources, crimes or workload. Such agencies could then be the target for special funding programs and/or for special research to determine why the high or low statistics occur.

The second purpose is to identify the statistical relationships between data bases so that 1) the system can be documented and understood and 2) programs can be developed to improve operations of the system.

Since the first purpose is specific in nature, data collection must be from all agencies in the system if the objective is to be achieved. The second purpose, however, can be accomplished if data are collected from a random sample of sufficient size. The advantages of the second method are obvious: the data collection effort need not be so costly and time consuming. The disadvantage is that specific agency problem areas cannot be identified.

Since the primary collection vehicle for the key performance rates is the offender-based transaction statistics system, and since this system must collect data on every arrested person to update his/her criminal history, most performance data will be collected from the universe. Other statewide systems designed to supply additional information will provide data from all agencies, but few are operational. Until they become operative, sampling procedure will be employed to obtain the necessary data in manual collection efforts. Administrative data relating to policies will be collected on a sample basis, and will likely vary based on results of past analyses.

Of primary importance in performing analyses of any type is validity of the data. All statewide information systems have quality control components designed to monitor the completeness and accuracy of data.

Frequency of Data Collection

An issue that also affects cost of data collection is the frequency which the collection occurs. Data must be collected for some items on a constant basis, such as performance data from the OBTS/CCH system. For many items, however, data can be collected on a periodic basis. These items include resources, workload, capabilities, administrative data, socio-economic and demographic data, and crime data. These types of data should not be collected in time intervals that are shorter than the status of the item would be expected to change. For example, since resources are usually governed by a budgetary process, and since most governmental budgets are annual processes, the collection of resource data on a less-than-annual basis would be non-productive.

Since resource data, in conjunction with workload data, yield capability data, these three elements should be collected and analyzed yearly. This, in turn, requires performance data to be aggregated on an annual basis. Crime data, which can be considered as a type of performance data, should be collected at least annually, although for specific research efforts, such as evaluations, monthly data may be required. Data on characteristics of the population and administrative policies could easily be collected on a two year basis, since such elements would likely not change markedly in a smaller time frame.

It should be noted that the references to annual data collection and analysis efforts are conservative. It is very possible, and perhaps likely, that performance or resources in any agency or area will not change a significant amount in a two or even three year period. It is felt, however, that additional research in this area is needed before a longer time frame than one year is adopted.

Methods of Data Collection

Several statewide information systems have been designed to provide data for analyses. The Offender-Based Transaction Statistics System will supply data to enable calculations of performance rates. The Summary Activity Reporting System will provide workload data for non-law enforcement agencies, and the Uniform Crime Reporting System will provide police workload data. The Management and Administrative Statistics System will supply data on resources. Capability data will be calculated by analysts and planners, although time standards will have to be researched and adopted. Socio-economic and demographic data is available from the U. S. Bureau of Census or the Office of Planning and Budget. Some administrative data, especially that which pertains to personnel characteristics, will be collected in the MAS system, but information on policies and procedures must be collected in a separate, manual operation.

APPENDIX

TABLE A

SUMMARY OF THE CORRELATIONS BETWEEN CRIME VARIABLES AND SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES, RESOURCE VARIABLES, AND PERFORMANCE VARIABLES

(NS - NOT SIGNIFICANT)

CRIME VARIABLES	SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Index Crime Rate	Population, 1975	+.6566	$N = 159$, $p = .001$, $r^2 = .4311$
	Percent Change in Population, 1970 - 1975	NS	
	Population Density, 1975	+.6345	$N = 159$, $p = .001$, $r^2 = .4026$
	Percent Change in Population Density, 1970 - 1975	NS	
	Black Percent of the Population	NS	
	Juvenile Percent of the Population	NS	
	Median Income	+.5667	$N = 159$, $p = .001$, $r^2 = 3211$
	Percent of the Households Receiving AFDC	NS	
	Percent of the Population Receiving Food Stamps	-.2869	$N = 159$, $p = .001$, $r^2 = .0823$
	Unemployment Rate	NS	

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Table A (continued)

CRIME VARIABLES	RESOURCE VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Index Crime Rate	Law Enforcement Budget	+.6042	$N = 159$, $p = .001$, $r^2 = .3651$
	Law Enforcement Budget Per Capita	+.4742	$N = 159$, $p = .001$, $r^2 = .2249$
	Law Enforcement Officers	+.6412	$N = 159$, $p = .001$, $r^2 = .4111$
	Law Enforcement Officers Per 10,000 Population	+.4000	$N = 159$, $p = .001$, $r^2 = .1600$
	Square Miles Per Law Enforcement Officer	-.3657	$N = 159$, $p = .001$, $r^2 = .1337$
	PERFORMANCE VARIABLES		
	Index Arrest Rate	-.4693	$n = 44$, $p = .001$, $r^2 = .2202$
	Index Conviction Per Crime Rate	-.5055	$n = 158$, $p = .001$, $r^2 = .2555$
	Court Backlog	NS	
	Percent Court Backlog	NS	

TABLE A (continued)

CRIME VARIABLES	SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Violent Crime Rate	Population, 1975	+.5815	$N = 159$, $p = .001$, $r^2 = .3381$
	Percent Change in Population, 1970 - 1975	-.1834	$N = 159$, $p = .021$, $r^2 = .0336$
	Population Density, 1975	+.4529	$N = 159$, $p = .001$, $r^2 = .2051$
	Percent Change in Population Density, 1970 - 1975	-.1884	$N = 159$, $p = .017$, $r^2 = .0355$
	Black Percent of the Population	+.1837	$N = 159$, $p = .020$, $r^2 = .0337$
	Juvenile Percent of the Population	NS	
	Median Income	+.1676	$N = 159$, $p = .035$, $r^2 = .0281$
	Percent of the Households Receiving AFDC	NS	
	Percent of the Population Receiving Food Stamps	NS	
	Unemployment Rate	NS	

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Table A (continued)

CRIME VARIABLES	RESOURCE VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Violent Crime Rate	Law Enforcement Budget	+.6432	$N = 159$, $p = .001$, $r^2 = .4137$
	Law Enforcement Budget Per Capita	+.5369	$N = 159$, $p = .001$, $r^2 = .2883$
	Law Enforcement Officers	+.6475	$N = 159$, $p = .001$, $r^2 = .4193$
	Law Enforcement Officers Per 10,000 Population	+.5039	$N = 159$, $p = .001$, $r^2 = .2539$
	Square Miles Per Law Enforcement Officer	-.2517	$N = 159$, $p = .001$, $r^2 = .0634$
	PERFORMANCE VARIABLES		
	Violent Arrest Rate	NS	
	Violent Conviction Per Crime Rate	-.2267	$N = 157$, $p = .001$, $r^2 = .0514$
	Court Backlog	NS	
	Percent Court Backlog	NS	

Table A (continued)

CRIME VARIABLES	SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Property Crime Rate	Population, 1975	+.6348	$N = 159$, $p = .001$, $r^2 = .4030$
	Percent Change in Population, 1970 - 1975	NS	
	Population Density, 1975	+.6276	$N = 159$, $p = .001$, $r^2 = .3939$
	Percent Change in Population Density, 1970 - 1975	NS	
	Black Percent of the Population	-.1738	$N = 159$, $p = .028$, $r^2 = .0302$
	Juvenile Percent of the Population	NS	
	Median Income	+.5912	$N = 159$, $p = .001$, $r^2 = .3495$
	Percent of the Households Receiving AFDC	NS	
	Percent of the Population Receiving Food Stamps	-.3154	$N - 159$, $p = .001$, $r^2 = .0995$
	Unemployment Rate	NS	

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Table A (continued)

CRIME VARIABLES	RESOURCE VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Property Crime Rate	Law Enforcement Budget	+.5700	$N = 159$, $p = .001$, $r^2 = .3249$
	Law Enforcement Budget Per Capita	+.4432	$N = 159$, $p = .001$, $r^2 = .1964$
	Law Enforcement Officers	+.6096	$N = 159$, $p = .001$, $r^2 = .3716$
	Law Enforcement Officers Per 10,000 Population	+.3672	$N = 159$, $p = .001$, $r^2 = .1348$
	Square Miles Per Law Enforcement Officer	-.3629	$N = 159$, $p = .001$, $r^2 = .1317$
	PERFORMANCE VARIABLES		
	Property Arrest Rate	-.1921	$N = 159$, $p = .015$, $r^2 = .0369$
	Property Conviction Per Crime Rate	-.4074	$N = 159$, $p = .001$, $r^2 = .1660$
	Court Backlog	NS	
	Percent Court Backlog	-.3354	$N = 42$, $p = .030$, $r^2 = .1125$

Table A (continued)

CRIME VARIABLES	SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Homicide Rate	Population, 1975	NS	
	Percent Change in Population, 1970 - 1975	-.1951	$N = 159$, $p = .014$, $r^2 = .0381$
	Population Density, 1975	NS	
	Percent Change in Population Density, 1970 - 1975	-.1759	$N = 159$, $p = .027$, $r^2 = .0309$
	Black Percent of the Population	+.2347	$N = 159$, $p = .003$, $r^2 = .0551$
	Juvenile Percent of the Population	NS	
	Median Income	-.2496	$N = 159$, $p = .002$, $r^2 = .0623$
	Percent of the Households Receiving AFDC	NS	
	Percent of the Population Receiving Food Stamps	+.2003	$N = 159$, $p = .011$, $r^2 = .0401$
	Unemployment Rate	+.1641	$N = 159$, $p = .039$, $r^2 = .0269$

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Table A (continued)

CRIME VARIABLES	RESOURCE VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Homicide Rate	Law Enforcement Budget	NS	
	Law Enforcement Budget Per Capita	NS	
	Law Enforcement Officers		
	Law Enforcement Officers Per 10,000 Population	+.2538	$N = 159$, $p = .001$, $r^2 = .0644$
	Square Miles Per Law Enforcement Officer	NS	
CRIME VARIABLES	SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES		
Rape Rate (population)	Population, 1975	+.6199	$N = 159$, $p = .001$, $r^2 = .3842$
	Percent Change in Population, 1970 - 1975	+.5164	$N = 159$, $p = .001$, $r^2 = .2667$
	Population Density, 1975	NS	
	Percent Change in Population Density, 1970 - 1975	+.3189	$N = 159$, $p = .001$, $r^2 = .1017$
	Black Percent of the Population	NS	
	Juvenile Percent of the Population	NS	
	Median Income	+.4241	$N = 159$, $p = .001$, $r^2 = .1799$

Table 1 (continued)

CRIME VARIABLES	SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Rape Rate (Population)	Percent of Households Receiving AFDC	NS	
	Percent of the Population Receiving Food Stamps	-.2081	$N = 159$, $p = .008$, $r^2 = .0433$
	Unemployment Rate	NS	
	RESOURCE VARIABLES		
	Law Enforcement Budget	+.6256	$N = 159$, $p = .001$, $r^2 = .3914$
	Law Enforcement Budget Per Capita	+.4097	$N = 159$, $p = .001$, $r^2 = .1679$
	Law Enforcement Officers	+.6381	$N = 159$, $p = .001$, $r^2 = .4072$
	Law Enforcement Officers Per 10,000 Population	+.3189	$N = 159$, $p = .001$, $r^2 = .1017$
	Square Miles Per Law Enforcement Officer	-.2965	$N = 159$, $p = .001$, $r^2 = .0879$

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Table A (continued)

CRIME VARIABLES	SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Rape Rate (Adult Females)	Population, 1975	+.4178	$N = 159$, $p = .001$, $r^2 = .1746$
	Percent Change in Population, 1970 - 1975	-.2216	$N = 159$, $p = .005$, $r^2 = .0491$
	Population Density, 1975	+.3562	$N = 159$, $p = .001$, $r^2 = .1269$
	Percent Change in Population Density, 1970 - 1975	-.2094	$N = 159$, $p = .008$, $r^2 = .0438$
	Black Percent of the Population	NS	
	Juvenile Percent of the Population	-.2015	$N = 159$, $p = .011$, $r^2 = .0406$
	Median Income	+.3444	$N = 159$, $p = .001$, $r^2 = .1136$
	Percent of the Households Receiving AFDC	NS	
	Percent of the Population Receiving Food Stamps	-.2520	$N = 159$, $p = .001$, $r^2 = .0635$
	Unemployment Rate	NS	

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Table A (continued)

CRIME VARIABLES	RESOURCE VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Rape Rate (Adult Females)	Law Enforcement Budget	+.4098	$N = 159$, $p = .001$, $r^2 = .1679$
	Law Enforcement Budget Per Capita	+.1599	$N = 159$, $p = .044$, $r^2 = .0256$
	Law Enforcement Officers	+.4205	$N = 159$, $p = .001$, $r^2 = .1768$
	Law Enforcement Officers Per 10,000 Population	NS	
	Square Miles Per Law Enforcement Officer	NS	
	SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES		
CRIME VARIABLES			
Robbery Rate	Population, 1975	+.8110	$N = 159$, $p = .001$, $r^2 = .6577$
	Percent Change in Population, 1970 - 1975	NS	
	Population Density, 1975	+.6831	$N = 159$, $p = .001$, $r^2 = .4666$
	Percent Change in Population Density, 1970 - 1975	NS	
	Black Percent of the Population	NS	
	Juvenile Percent of the Population	NS	
	Median Income	+.3943	$N = 159$, $p = .001$, $r^2 = .1555$

Table A (continued)

CRIME VARIABLES	SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Robbery Rate	Percent of the Households Receiving AFDC	NS	
	Percent of the Population Receiving Food Stamps	NS	
	Unemployment Rate	NS	
	RESOURCE VARIABLES		
	Law Enforcement Budget	+.8731	$N = 159$, $p = .001$, $r^2 = .7623$
	Law Enforcement Budget Per Capita	+.5750	$N = 159$, $p = .001$, $r^2 = .3306$
	Law Enforcement Officers	+.8801	$N = 159$, $p = 001$, $r^2 = .7746$
	Law Enforcement Officers Per 10,000 Population	+.4555	$N = 159$, $p = .001$, $r^2 = .2075$
	Square Miles Per Law Enforcement Officer	-.2542	$N = 159$, $p = .001$, $r^2 = .0646$

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Table A (continued)

CRIME VARIABLES	SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Assault Rate	Population, 1975	+.3139	$N = 159$, $p = .001$, $r^2 = .0985$
	Percent Change in Population, 1970 - 1975	-.2074	$N = 159$, $p = .009$, $r^2 = .0430$
	Population Density, 1975	+.2148	$N = 159$, $p = .007$, $r^2 = .0461$
	Percent Change in Population Density, 1970 - 1975	-.2159	$N = 159$, $p = .006$, $r^2 = .0466$
	Black Percent of the Population	+.2273	$N = 159$, $p = .004$, $r^2 = .0517$
	Juvenile Percent of the Population	NS	
	Median Income	NS	
	Percent of the Households Receiving AFDC	+.2156	$N = 159$, $p = .006$, $r^2 = .0465$
	Percent of the Population Receiving Food Stamps	NS	
	Unemployment Rate	NS	

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Table A (continued)

CRIME VARIABLES	RESOURCE VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Assault Rate	Law Enforcement Budget	+.3618	$N = 159$, $p = .001$, $r^2 = .1309$
	Law Enforcement Budget Per Capita	+.4008	$N = 159$, $p = .001$, $r^2 = .1606$
	Law Enforcement Officers	+.3632	$N = 159$, $p = .001$, $r^2 = .1319$
	Law Enforcement Officers Per 10,000 Population	+.4146	$N = 159$, $p = .001$, $r^2 = .1719$
	Square Miles Per Law Enforcement Officer	-.1804	$N = 159$, $p = .023$, $r^2 = .0325$
CRIME VARIABLES	SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES		
Burglary Rate (Population)	Population, 1975	+.5589	$N = 159$, $p = .001$, $r^2 = .3124$
	Percent Change in Population, 1970 - 1975	NS	
	Population Density, 1975	+.5656	$N = 159$, $p = .001$, $r^2 = .3199$
	Percent Change in Population Density, 1970 - 1975	NS	
	Black Percent of the Population	-.1651	$N = 159$, $p = .038$, $r^2 = .0273$
	Juvenile Percent of the Population	NS	
	Median Income	+.5112	$N = 159$, $p = .001$, $r^2 = .2613$

Table A (continued)

CRIME VARIABLES	SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Burglary Rate (Population)	Percent of the Households Receiving AFDC	NS	
	Percent of the Population Receiving Food Stamps	-.2766	$N = 159$, $p = .001$, $r^2 = .0765$
	Unemployment Rate	NS	
	RESOURCE VARIABLES		
	Law Enforcement Budget	+.5116	$N = 159$, $p = .001$, $r^2 = .2617$
	Law Enforcement Budget Per Capita	+.3670	$N = 159$, $p = .001$, $r^2 = .1347$
	Law Enforcement Officers	+.5461	$N = 159$, $p = .001$, $r^2 = .2982$
	Law Enforcement Officers Per 10,000 Population	+.2995	$N = 159$, $p = .001$, $r^2 = .0897$
	Square Miles Per Law Enforcement Officer	-.2610	$N = 159$, $p = .001$, $r^2 = .0681$

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Table A (continued)

CRIME VARIABLES	SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Burglary Rate (Structures)	Population, 1975	+.3498	$N = 159$, $p = .001$, $r^2 = .1224$
	Percent Change in Population, 1970 - 1975	NS	
	Population Density, 1975	+.3513	$N = 159$, $p = .001$, $r^2 = .1234$
	Percent Change in Population Density, 1970 - 1975	NS	
	Black Percent of the Population	NS	
	Juvenile Percent of the Population	NS	
	Median Income	+.3886	$N = 159$, $p = .001$, $r^2 = .1510$
	Percent of the Households Receiving AFDC	NS	
	Percent of the Population Receiving Food Stamps	-.2572	$N = 159$, $p = .001$, $r^2 = .0662$
	Unemployment Rate	NS	

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CRIME VARIABLES	RESOURCE VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Burglary Rate (Structures)	Law Enforcement Budget	+.3120	$N = 159$, $p = .001$, $r^2 = .0973$
	Law Enforcement Budget Per Capita	NS	
	Law Enforcement Officers	+.3322	$N = 159$, $p = .001$, $r^2 = .1104$
	Law Enforcement Officers Per 10,000 Population	NS	
	Square Miles Per Law Enforcement Officer	NS	

CRIME VARIABLES	SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES		
Larceny Rate	Population, 1975	+.6110	$N = 159$, $p = .001$, $r^2 = .3733$
	Percent Change in Population, 1970 - 1975	NS	
	Population Density, 1975	+.5957	$N = 159$, $p = .001$, $r^2 = .3549$
	Percent Change in Population Density, 1970 - 1975	NS	
	Black Percent of the Population	NS	
	Juvenile Percent of the Population	NS	
	Median Income	+.5724	$N = 159$, $p = .001$, $r^2 = .3276$

Table A (continued)

CRIME VARIABLES	SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Larceny Rate	Percent of the Households Receiving AFDC	NS	
	Percent of the Population Receiving Food Stamps	-.2967	$N = 159$, $p = .001$, $r^2 = .0880$
	Unemployment Rate	NS	
	RESOURCE VARIABLES		
	Law Enforcement Budget	+.5436	$N = 159$, $p = .001$, $r^2 = .2955$
	Law Enforcement Budget Per Capita	+.4661	$N = 159$, $p = .001$, $r^2 = .2172$
	Law Enforcement Officers	+.5814	$N = 159$, $p = .001$, $r^2 = .3380$
	Law Enforcement Officers Per 10,000 Population	+.3923	$N = 159$, $p = .001$, $r^2 = .1539$
	Square Miles Per Law Enforcement Officer	-.3921	$N = 159$, $p = .001$, $r^2 = .1537$

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Table A (continued)

CRIME VARIABLES	SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Motor Vehicle Theft Rate (Population)	Population, 1975	+.5889	$N = 159$, $p = .001$, $r^2 = .3468$
	Percent Change in Population, 1970 - 1975	NS	
	Population Density, 1975	+.5866	$N = 159$, $p = .001$, $r^2 = .3441$
	Percent Change in Population Density, 1970 - 1975	NS	
	Black Percent of the Population	-.3405	$N = 159$, $p = .001$, $r^2 = .1159$
	Juvenile Percent of the Population	NS	
	Median Income	+.5623	$N = 159$, $p = .001$, $r^2 = .3162$
	Percent of the Households Receiving AFDC	-.2753	$N = 159$, $p = .001$, $r^2 = .0758$
	Percent of the Population Receiving Food Stamps	-.3409	$N = 159$, $p = .001$, $r^2 = .1162$
	Unemployment Rate	NS	

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Table A (continued)

CRIME VARIABLES			
	RESOURCE VARIABLES		
	Law Enforcement Budget	+.5252	$N = 159$, $p = .001$, $r^2 = .2758$
	Law Enforcement Budget Per Capita	+.2443	$N = 159$, $p = .001$, $r^2 = .0597$
	Law Enforcement Officers	+.5648	$N = 159$, $p = .001$, $r^2 = .3190$
	Law Enforcement Officers Per 10,000 Population	+.1802	$N = 159$, $p = .023$, $r^2 = .0325$
	Square Miles Per Law Enforcement Officer	-.2817	$N = 159$, $p = .001$, $r^2 = .0794$
	SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES		
Motor Vehicle Theft Rate (Registered Vehicles)	Population, 1975	+.4489	$N = 159$, $p = .001$, $r^2 = .2015$
	Percent Change in Population, 1970 - 1975	-.2297	$N = 159$, $p = .004$, $r^2 = .0528$
	Population Density, 1975	+.4355	$N = 159$, $p = .001$, $r^2 = .1897$
	Percent Change in Population Density, 1970 - 1975	-.2131	$N = 159$, $p = .007$, $r^2 = .0454$
	Black Percent of the Population	-.1924	$N = 159$, $p = .015$, $r^2 = .0370$
	Juvenile Percent of the Population	-.1564	$N = 159$, $p = .050$, $r^2 = .0245$
	Median Income	+.3960	$N = 159$, $p = .001$, $r^2 = .1568$

Table A (continued)

CRIME VARIABLES	SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Motor Vehicle Theft Rate (registered Vehicles)	Percent of the Households Receiving AFDC	NS	
	Percent of the Population Receiving Food Stamps	-.2655	$N = 159$, $p = .001$, $r^2 = .0705$
	Unemployment Rate	+.1596	$N = 159$, $p = .044$, $r^2 = .0255$
	RESOURCE VARIABLES		
	Law Enforcement Budget	+.4143	$N = 159$, $p = .001$, $r^2 = .1716$
	Law Enforcement Budget Per Capita	NS	
	Law Enforcement Officers	+.4383	$N = 159$, $p = .001$, $r^2 = .1921$
	Law Enforcement Officers Per 10,000 Population	NS	
	Square Miles Per Law Enforcement Officer	-.2817	$N = 159$, $p = .001$, $r^2 = .0794$

AFDC - Aid to Families With Dependent Children

Table B

SUMMARY OF THE CORRELATIONS BETWEEN THE PERFORMANCE VARIABLES AND RESOURCE VARIABLES, OTHER PERFORMANCE VARIABLES, CRIME VARIABLES, AND SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES

(NS - NOT SIGNIFICANT)

PERFORMANCE VARIABLES	RESOURCE VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Index Arrest Rate	Law Enforcement Budget		
	Law Enforcement Budget Per Capita	NS	
	Law Enforcement Officers		
	Law Enforcement Officers Per 10,000 Population	NS	
	Square Miles Per Law Enforcement Officer	NS	
	Prosecution Budget		General Comment: Prosecution and court data are judicial circuit based. Arrest data is unavailable for the circui
	Prosecution Budget Per Capita		
	Prosecutors		
	Prosecutors Per 10,000 Population		
	Felony Filings Per Prosecutor		
	Prosecution Cost Per Disposition		

Table B (continued)

PERFORMANCE VARIABLES	RESOURCE VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Index Arrest Rate	Prosecution Cost Per Felony Filing		
	Court Budget		
	Court Budget Per Capita		
	Judges		
	Judges Per 10,000 Population		
	Felony Filings Per Judge		
	Court Cost Per Disposition		
	Court Cost Per Felony Filing		
	PERFORMANCE VARIABLES		
	Index Clearance Rate	+.9907	$n = 20$, $p = .001$, $r^2 = .9815$
	Index Indictment Rate	NS	
	Prosecution Rate		Arrest data is unavailable for circuits.
	Index Conviction Rate (conviction/crime)	+.8834	$n = 43$, $p = .001$, $r^2 = .7804$
	Conviction/Arrest Rate	NS	
	Guilty Plea Rate		Arrest data is unavailable for circuits.
	Court Backlog		Arrest data is unavailable for circuits.
	Percent Court Backlog		Arrest data is unavailable for circuits.

Table B (continued)

PERFORMANCE VARIABLES	CRIME VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Index Arrest Rate	Index Crime Rate	-.4693	$n = 44$, $p = .001$, $r^2 = .2202$
	Percent Change in Index Crime, 1972 - 1975	-.3598	$n = 44$, $p = .016$, $r^2 = .1295$
	SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES		
	Population, 1975	NS	
	Percent Change in Population, 1970 - 1975	NS	
	Population Density, 1975	NS	
	Percent Change in Population Density, 1970 - 1975	NS	

Table B (continued)

PERFORMANCE VARIABLES	SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Index Arrest Rate	Black Percent of the Population	NS	
	Juvenile Percent of the Population	NS	
	Median Income	-.4394	$n = 44$, $p = .001$, $r^2 = .1931$
	Percent of Households Receiving AFDC	NS	
	Percent of the Population Receiving Food Stamps	+.2693	$n = 44$, $p = .039$, $r^2 = .0726$
	Unemployment Rate	-.2675	$n = 44$, $p = .040$, $r^2 = .0716$

AFDC - Aid to Families With Dependent Children

Table B (continued)

PERFORMANCE VARIABLES	RESOURCE VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Index Clearance Rate	Law Enforcement Budget		
	Law Enforcement Budget Per Capita	NS	
	Law Enforcement Officers		
	Law Enforcement Officers Per 10,000 Population	NS	
	Square Miles Per Law Enforcement Officer	NS	
	Prosecution Budget		General Comment: Prosecution and court data are judicial circuit based. Clearance data is unavailable for the circuits.
	Prosecution Budget Per Capita		
	Prosecutors		
	Prosecutors Per 10,000 Population		
	Felony Filings Per Prosecutor		
	Prosecution Cost Per Disposition		
	Prosecution Cost Per Felony Filing		
	Court Budget		
	Court Budget Per Capita		

Table B (continued)

PERFORMANCE VARIABLES	RESOURCE VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Index Clearance Rate	Judges		
	Judges Per 10,000 Population		
	Felony Filings Per Judge		
	Court Cost Per Disposition		
	Court Cost Per Felony Filing		
	PERFORMANCE VARIABLES		
	Index Arrest Rate	+.9907	$n = 20$, $p = .001$, $r^2 = .9815$
	Index Indictment Rate		Could not be computed, only one common case.
	Prosecution Rate		Clearance data is unavailable for circuits.
	Index Conviction Rate (convictions/crime)	+.7035	$n = 34$, $p = .001$, $r^2 = .4949$
	Conviction/Arrest Rate	NS	
	Guilty Plea Rate		Clearance data is unavailable for circuits.
	Court Backlog		Clearance data is unavailable for circuits.
	Percent Court Backlog		Clearance data is unavailable for circuits.

Table B (continued)

PERFORMANCE VARIABLES	CRIME VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Index Clearance Rate	Index Crime Rate	-.3603	$n = 35$, $p = .033$, $r^2 = .1298$
	Percent Change in Index Crime, 1972 - 1975	NS	
	SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES		
	Population, 1975	NS	
	Percent Change in Population, 1970 - 1975	NS	
	Population Density, 1975	NS	
	Percent Change in Population Density, 1970 - 1975	NS	
	Black Percent of the Population	NS	
	Juvenile Percent of the Population	NS	
	Median Income	-.3947	$n = 35$, $p = .019$, $r^2 = .1558$
	Percent of Households Receiving AFDC	NS	
	Percent of the Population Receiving Food Stamps	NS	
	Unemployment Rate	NS	

AFDC - Aid to Families With Dependent Children

TABLE B (continued)

PERFORMANCE VARIABLES	RESOURCE VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Index Indictment Rate (Only 21 of 159 Non-random cases were available.)	Law Enforcement Budget		
	Law Enforcement Budget Per Capita	NS	
	Law Enforcement Officers		
	Law Enforcement Officers Per 10,000 Population	NS	
	Square Miles Per Law Enforcement Officer	NS	
	Prosecution Budget		General Comment: Prosecution and court data are judicial circuit based. Indictment data is unavailable for the circuits.
	Prosecution Budget Per Capita		
	Prosecutors		
	Prosecutors Per 10,000 Population		
	Felony Filings Per Prosecutor		
	Prosecution Cost Per Disposition		
	Prosecution Cost Per Felony Filing		
	Court Budget		
	Court Budget Per Capita		

CONTINUED

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Table B (continued)

PERFORMANCE VARIABLES	RESOURCE VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Index Indictment Rate (only 21 of 159 Non-random cases were available)	Judges		
	Judges Per 10,000 Population		
	Felony Filings Per Judge		
	Court Cost Per Disposition		
	Court Cost Per Felony Filing		
	PERFORMANCE VARIABLES		
	Index Arrest Rate	NS	
	Index Clearance Rate		Could not be computed, only one common case.
	Prosecution Rate		Indictment data is unavailable for circuits.
	Index Conviction Rate (convictions/crime)	NS	
	Conviction/Arrest Rate	+.5514	$n = 21$, $p = .010$, $r^2 = .3040$
	Guilty Plea Rate		Indictment data is unavailable for circuits.
	Court Backlog		Indictment data is unavailable for circuits.
	Percent Court Backlog		Indictment data is unavailable for circuits.

Table B (continued)

PERFORMANCE VARIABLES	CRIME VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Index Indictment Rate (Only 21 of 159 Non-random cases were available)	Index Crime Rate	NS	
	Percent Change In Index Crime, 1972 - 1975	NS	
	SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES		
	Population, 1975	NS	
	Percent Change in Population, 1970 - 1975	NS	
	Population Density, 1975	NS	
	Percent Change in Population Density, 1970 - 1975	NS	
	Black Percent of the Population	NS	
	Juvenile Percent of the Population	NS	
	Median Income	NS	
	Percent of Households Receiving AFDC	NS	
	Percent of the Population Receiving Food Stamps	NS	
	Unemployment Rate	NS	

TABLE B (continued)

PERFORMANCE VARIABLES	RESOURCE VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Index Prosecution Rate (felony filings per offense)			Since felony filings per offense do not accurately reflect prosecution rate and since circuit-based arrest data is unavailable, correlations involving index prosecution rate have been deleted.

TABLE B (continued)

PERFORMANCE VARIABLES	RESOURCE VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Index Conviction Rate (Convictions per felony filing; circuit-based)	Law Enforcement Budget Per Capita	NS	
	Law Enforcement Officers Per 10,000 Population	NS	
	Prosecution Budget	+.3613	$N = 42$, $p = .019$, $r^2 = .1305$
	Prosecution Budget Per Capita	NS	
	Prosecutors Per 10,000 Population	NS	
	Felony Filings Per Prosecutor	NS	
	Prosecution Cost Per Disposition	NS	
	Prosecution Cost Per Felony Filing	+.3898	$N = 42$, $p = .011$, $r^2 = .1519$
	Court Budget	NS	
	Court Budget Per Capita	NS	
	Judges Per 10,000 Population	NS	
	Felony Filings Per Judge	-.3097	$N = 42$, $p = .046$, $r^2 = .0959$
	Court Cost Per Disposition	NS	
	Court Cost Per Felony Filing	+.3311	$N = 42$, $p = .032$, $r^2 = .1096$

TABLE B (continued)

PERFORMANCE VARIABLES	PERFORMANCE VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Index Conviction Rate	Index Arrest Rate		Arrest data is unavailable for circuits.
	Index Clearance Rate		Clearance data is unavailable for circuits.
	Index Indictment Rate		Indictment data is unavailable for circuits.
	Prosecution Rate		Prosecution Rate Invalid
	Conviction/Arrest Rate		Conviction/Arrest rate is unavailable for circuits.
	Guilty Plea Rate	+.4975	$N = 42$, $p = .001$, $r^2 = .2475$
	Court Backlog	-.3648	$N = 42$, $p = .018$, $r^2 = .1331$
	Percent Court Backlog	NS	
	CRIME VARIABLES		
	Index Crime Rate	NS	
	Percent Change in Index Crime, 1972 - 1975	NS	
	SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES		
	Population, 1975	+.3307	$N = 42$, $p = .032$, $r^2 = .1094$
	Percent Change in Population, 1970 - 1975	NS	

TABLE B (continued)

PERFORMANCE VARIABLES	SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Index Conviction Rate	Population Density, 1975	+.3154	$N = 42$, $p = .042$, $r^2 = .0995$
	Percent Change in Population Density, 1970 - 1975	NS	
	Black Percent of the Population	NS	
	Juvenile Percent of the Population	NS	
	Median Income		Median Income in unavailable for circuits.
	Percent of Households Receiving AFDC	NS	
	Percent of the Population Receiving Food Stamps	NS	
	Unemployment Rate	NS	

AFDC - Aid to Families With Dependent Children

TABLE B (continued)

PERFORMANCE VARIABLES	RESOURCE VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Index Incarceration Rate	Law Enforcement Budget Per Capita	NS	
	Law Enforcement Officers Per 10,000 Population	NS	
	Prosecution Budget Per Capita	NS	
	Prosecutors Per 10,000 Population	NS	
	Felony Filings Per Prosecutor	NS	
	Prosecution Cost Per Felony Filing	NS	
	Court Budget Per Capita	NS	
	Judges Per 10,000 Population	NS	
	Felony Filings Per Judge	NS	
	Court Cost Per Felony Filing	NS	
	Conviction/Arrest Rate	NS	
	Guilty Plea Rate	NS	
	Court Backlog	NS	
	Percent Court Backlog	NS	

Table B (continued)

PERFORMANCE VARIABLES	PERFORMANCE VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Index Incarceration Rate	Index Arrest Rate	NS	
	Index Clearance Rate	+.4461	$n = 34$, $p = .008$, $r^2 = .1990$
	Index Indictment Rate	NS	
	Prosecution Rate		Prosecution Rate Invalid
	Index Conviction Rate		
	(convictions/crime)	NS	
	(convictions/felony filing)	NS	
	CRIME VARIABLES		
	Index Crime Rate	NS	
	Percent Change in Index Crime 1972 - 1975	NS	
	SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES		
	Population, 1975	NS	
	Percent Change in Population, 1970 - 1975	NS	
	Population Density, 1975	NS	
	Percent Change in Population Density, 1970 - 1975	NS	

Table B (Continued)

PERFORMANCE VARIABLES	SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Index Incarceration Rate	Black Percent of Population	NS	
	Juvenile Percent of the Popul Population	NS	
	Median Income	NS	
	Percent of Households Receiving AFDC	NS	
	Percent of the Population Receiving Food Stamps	NS	
	Unemployment Rate	NS	

AFDC - Aid to Families With Dependent Children

Table B (Continued)

PERFORMANCE VARIABLES	RESOURCE VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Index Probation Rate	Law Enforcement Budget Per Capita	NS	
	Law Enforcement Officers Per 10,000 Population	NS	
	Prosecution Budget Per Capita	NS	
	Prosecutors Per 10,000 Population	NS	
	Felony Filings Per Prosecutor	NS	
	Prosecution Cost Per Felony Filing	NS	
	Court Budget Per Capita	NS	
	Judges Per 10,000 Population	NS	
	Felony Filings Per Judge	NS	
	Court Cost Per Felony Filing	NS	

Table B (continued)

PERFORMANCE VARIABLES	PERFORMANCE VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Index Probation Rate	Index Arrest Rate	NS	
	Index Clearance Rate	-.4461	$n = 34$, $p = .008$, $r^2 = .1990$
	Index Indictment Rate	NS	
	Prosecution Rate		Prosecution Rate is Invalid
	Index Conviction Rate		
	(convictions/crime)	NS	
	(convictions/felony filing)	NS	
	Conviction/Arrest Rate	NS	
	Guilty Plea Rate	NS	
	Court Backlog	NS	
	Percent Court Backlog	NS	
	CRIME VARIABLES		
	Index Crime Rate	NS	
	Percent Change in Index Crime, 1972 - 1975	NS	

Table B (continued)

PERFORMANCE VARIABLES	SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Index Probation Rate	Population, 1975	NS	
	Percent Change in Population, 1970 - 1975	NS	
	Population Density, 1975	NS	
	Percent Change in Population Density, 1970 - 1975	NS	
	Black Percent of the Population	NS	
	Juvenile Percent of the Population	NS	
	Median Income	NS	
	Percent of Households Receiving AFDC	NS	
	Percent of the Population Receiving Food Stamps	NS	
	Unemployment Rate	NS	

AFDC - Aid to Families With Dependent Children

Table B (continued)

PERFORMANCE VARIABLES	RESOURCE VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Percent Court Backlog	Law Enforcement Budget Per Capita	NS	
	Law Enforcement Officers Per 10,000 Population	NS	
	Prosecution Budget Per Capita	NS	
	Prosecutors Per 10,000 Population		
	Felony Filings Per Prosecutor	NS	
	Prosecution Cost Per Felony Filing	NS	
	Court Budget Per Capita	NS	
	Judges Per 10,000 Population	+.3332	$N = 42$, $p = .031$, $r^2 = .1110$
	Felony Filings Per Judge	-.3220	$N = 42$, $p = .038$, $r^2 = .1037$
	Court Cost Per Felony Filing	NS	
	PERFORMANCE VARIABLES		
	Index Arrest Rate		Arrest data is unavailable for circuits.
	Index Clearance Rate		Clearance data is unavailable for circuits.
	Index Indictment Rate		Indictment data is unavailable for circuits.
	Prosecution Rate		Prosecution Rate is Invalid
	Index Conviction Rate	NS	

Table (continued)

PERFORMANCE VARIABLES	PERFORMANCE VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Percent Court Backlog	Conviction/Arrest Rate		Conviction/Arrest rate is unavailable for circuits.
	Guilty Plea Rate	NS	
	CRIME VARIABLES		
	Index Crime Rate	-.3308	$N = 42$, $p = .032$, $r^2 = .1094$
	Percent Change in Index Crime, 1972 - 1975	NS	
	SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES		
	Population, 1975	NS	
	Percent Change in Population, 1970 - 1975	NS	
	Population Density, 1975	NS	
	Percent Change in Population Density, 1970 - 1975	NS	
	Black Percent of the Population	NS	
	Juvenile Percent of the Population	NS	
	Median Income		Median income is unavailable for circuits.

Table B (continued)

PERFORMANCE VARIABLES	SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Percent Court Backlog	Percent of Households Receiving AFDC	NS	
	Percent of the Population Receiving Food Stamps	NS	
	Unemployment Rate	NS	

AFDC - Aid to Families With Dependent Children

Table B (continued)

PERFORMANCE VARIABLES	RESOURCE VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Law Enforcement Turnover Rate	Law Enforcement Officers	NS	
	Law Enforcement Budget	NS	
	Educational Incentives	NS	
	Fringe Benefit Policies	NS	
	Recruitment Policies	NS	
	Minimum Salary	NS	
	Percent of Budget in Personnel Category	NS	
	CRIME VARIABLES		
	Index Crimes	NS	
	Violent Crimes	NS	
	Property Crimes	NS	
	SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES		
	Population	NS	

Table B (continued)

PERFORMANCE VARIABLES	RESOURCE VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS[1]
Juvenile Referral Rate	Number of Alternatives in Community	+.4278	$n = 158$, $p = .001$, $r^2 = .1830$
	Type of Court	+.5040	$n = 158$, $p = .001$, $r^2 = .2540$
	PERFORMANCE VARIABLES		
	Juvenile Commitment Rate - 1976	-.3341	$n = 158$, $p = .001$, $r^2 = .1116$
	Juvenile Commitment Rate - 1975	-.5960	$n = 22$, $p = .002$, $r^2 = .3552$
	Juvenile Probation Rate	-.4176	$n = 21$, $p = .030$, $r^2 = .1744$
	SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES		
	Juvenile Population	+.4537	$n = 158$, $p = .001$, $r^2 = .2058$

Table B (continued)

PERFORMANCE VARIABLES	RESOURCE VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Juvenile Petition Rate	Type of Court	NS	See Section IV
	Number of Investigative Officers	NS	
	Investigative Caseload	NS	
	Number of Probation Officers	NS	
	Probation Caseloads	NS	
	Number of Alternatives in Community	NS	
	PERFORMANCE VARIABLES		
	Juvenile Commitment Rate - 1976	+.3841	$n = 159$, $p = .001$, $r^2 = .1475$
	Juvenile Probation Rate	+.6758	$n = 21$, $p = .001$, $r^2 = .4567$
	Juvenile Referral Rate	-.2201	$n = 158$, $p = .003$, $r^2 = .0484$
	SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES		
	Juvenile Population	NS	

Table B (continued)

PERFORMANCE VARIABLES	RESOURCE VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Juvenile Detention Rate	Type of Court	NS	See Section IV
	Number of Alternatives in Community	NS	
	PERFORMANCE VARIABLES		
	Juvenile Commitment Rate - 1976	.3818	$n = 20$, $p = .048$, $r^2 = .1458$
	Juvenile Petition Rate	NS	
	Juvenile Referral Rate	NS	
	Juvenile Probation Rate	NS	
	SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES		
	Juvenile Population	NS	

Table B (continued)

PERFORMANCE VARIABLES	RESOURCE VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Juvenile Commitment Rate - 1976	Number of Alternatives in Community	NS	
	Type of Court	-.2068	$n = 159$, $p = .004$, $r^2 = .0428$
	PERFORMANCE VARIABLES		
	Juvenile Referral Rate	-.3341	$n = 158$, $p = .001$, $r^2 = .1116$
	Juvenile Petition Rate	+.3841	$n = 159$, $p = .001$, $r^2 = .1475$
	Juvenile Detention Rate	+.3818	$n = 20$, $p = .048$, $r^2 = .1458$
	SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES		
	Juvenile Population	NS	

Table B (Continued)

PERFORMANCE VARIABLES	RESOURCE VARIABLES	ASSOCIATION (r)	CONDITIONS/COMMENTS
Juvenile Probation Rate	Type of Court	-.4502	$n = 21$, $p = .020$, $r^2 = 2027$
	Number of Alternatives in Community	NS	See Section IV
	PERFORMANCE VARIABLES		
	Juvenile Referral Rate	-.4176	$n = 21$, $p = .030$, $r^2 = .1744$
	Juvenile Petition Rate	+.6758	$n = 21$, $p = .001$, $r^2 = .4567$
	Juvenile Detention Rate	NS	
	SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES		
	Juvenile Population	NS	

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