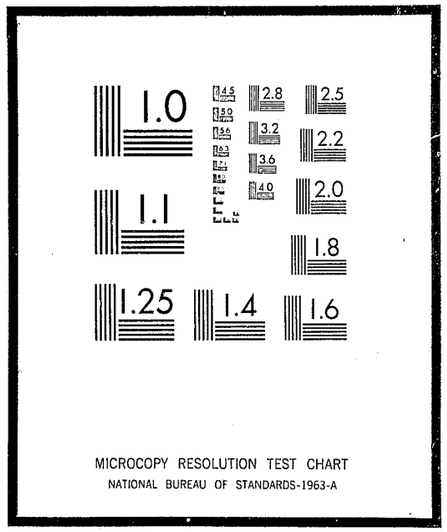

CRIMINAL JUSTICE MONOGRAPH

Reducing Court Delay

This monograph consists of papers on related topics presented at the Fourth National Symposium on Law Enforcement Science and Technology, May 1-3, 1972 conducted by:

THE INSTITUTE OF CRIMINAL JUSTICE
AND CRIMINOLOGY
UNIVERSITY OF MARYLAND

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FOREWORD

This publication is one of a series of nine monographs extracted from the Proceedings of the Fourth National Symposium on Law Enforcement Science and Technology.

The principal Symposium theme of "Crime Prevention and Deterrence" was chosen by the National Institute as a reflection of LEAA's overall action goal - the reduction of crime and delinquency. Whereas previous Symposia examined methods of improving the operations of individual components of the criminal justice system, the Fourth Symposium was purposefully designed to look beyond these system components and focus on the goal of crime reduction.

A major conference subtheme was "The Management of Change: Putting Criminal Justice Innovations to Work." The Institute's overall mission is in the area of applied rather than basic research, with special attention being given to research that can be translated into operational terms within a relatively short period of time. We have therefore been interested in exploring the obstacles to the adoption of new technology by criminal justice agencies. Many of the Symposium papers identify these obstacles - attitudinal, organizational, and political - and discuss how they are being overcome in specific agency settings.

The titles of the nine Symposium monographs are: Deterrence of Crime in and Around Residences; Research on the Control of Street Crime; Reducing Court Delay; Prevention of Violence in Correctional Institutions; Reintegration of the Offender into the Community; New Approaches to Diversion and Treatment of Juvenile Offenders; The Change Process in Criminal Justice; Innovation in Law Enforcement, and Progress Report of the National Advisory Commission on Criminal Justice Standards and Goals.

Following one of the major recommendations of the Science and Technology Task Force Report of the President's Crime Commission (1967), numerous studies have been conducted to assess alternative means to reduce court delay. This monograph presents the results of this research and discusses the emerging problems that have been identified as attempts have been made to reduce delay. In particular, the schedule of cases, the handling of witnesses and jurors, and the effectiveness of alternative administrative strategies are discussed.

Martin B. Danziger
Assistant Administrator
National Institute of Law Enforcement
and Criminal Justice

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INTRODUCTION

The Fourth National Symposium on Law Enforcement Science and Technology was held in Washington, D.C. on May 1-3, 1972. Like the three previous Symposia, it was sponsored by the National Institute of Law Enforcement and Criminal Justice of the Law Enforcement Assistance Administration. The Fourth Symposium was conducted by the Institute of Criminal Justice and Criminology of the University of Maryland.

These Symposia are one of the means by which the National Institute strives to achieve the objective of strengthening criminal justice in this country through research and development. The Symposia bring into direct contact the research and development community with the operational personnel of the law enforcement systems. The most recent accomplishments of "science and technology" in the area of criminal justice are presented to operational agencies - law enforcement, courts, and corrections - in a series of workshops and plenary sessions. The give and take of the workshops, followed by informal discussions between the more formal gatherings, provide the scholar and researcher with the all important response and criticism of the practitioner, while the latter has the opportunity to hear the analyst and the planner present the newest suggestions, trends and prospects for the future. In the case of the Fourth Symposium, these opportunities were amply utilized by over 900 participants from across the country.

The specific theme of the Fourth Symposium was "Crime Prevention and Deterrence." The content and the work of the Symposium must be seen against the immediate background of the activities of the National Advisory Commission on Criminal Justice Standards and Goals, which was appointed several months earlier and by the time of the Symposium was deeply involved in its mammoth task. Another major background factor was the National Conference on Corrections, held in Williamsburg shortly before. More generally, of course, the Symposium was one of many activities in the all-encompassing national effort to reduce crime embodied in the Omnibus Crime Control and Safe Streets Act of 1968, and the subsequently established Law Enforcement Assistance Administration.

A twelve-member Symposium committee made up of representatives of the Law Enforcement Assistance Administration and the Institute of Criminal Justice and Criminology of the University of Maryland was responsible for planning and arranging the Program. The program, extending over three days, was organized around three daily subthemes which were highlighted in morning plenary sessions. These

subthemes were further explored in papers and discussions grouped around more specific topics in the afternoon workshops.

The first day was one of taking stock of recent accomplishments. Richard A. McGee, President of the American Justice Institute, reviewed the progress of the last five years, and Arthur J. Bilek, Chairman of the Illinois Law Enforcement Commission, addressed himself to criminal justice as a system, the progress made toward coordination, and the ills of a non-system. The six afternoon workshops of the first day dealt with recent accomplishments in prevention and deterrence of crime around residences, violence in correctional institutions, control of street crime, court delay, community involvement in crime prevention, and the reintegration of offenders into the community.

The subtheme of the second day was formulated as "The Management of Change - Putting Innovations to Work." This is a reference to the frequently noted fact that the findings of many research projects all too often do not result in operational implementation, in spite of the funds, energy and competence invested in them. New methods that are adopted often prematurely die on the vine, with the old routines winning out and continuing on as before. The objective of the Symposium sessions was to identify the obstacles to change and to explore ways of overcoming them. Thus two papers given in the morning plenary session by Robert B. Duncan of Northwestern University and John Gardiner of the National Institute of Law Enforcement and Criminal Justice dealt, respectively, with attitudinal and political obstacles to change. The five afternoon workshops developed this theme further by discussing the change process within specific law enforcement and correctional settings. From there attention shifted to the role that public service groups play in the process of change, the pilot cities experience, and the diversion of juvenile offenders from the criminal justice system.

The third day of the Symposium was turned over to the National Advisory Commission on Criminal Justice Standards and Goals. The daily subtheme was listed as "Future Priorities." More particularly, however, this was a series of progress reports on the all important activities of the Commission, presented by the Executive Director, Thomas J. Madden, and representatives of the Commission's four Operational Task Forces on standards and goals for police, the courts, corrections, and community crime prevention.

Finally, there was a presentation on the management of change within the eight "Impact Cities" - a major program of the Law Enforcement Assistance Administration - by Gerald P. Emmer, Chairman of LEAA's Office of Inspection and Review.

By reproducing the contributed papers of the Symposium, the Proceedings admirably reflect the current intellectual climate of the criminal justice system in this country. It should be kept in mind that the majority of these papers present the results of research and demonstration projects - many of them experimental and exploratory - which have been funded by State and/or Federal agencies and private functions. Thus these papers do not only reflect the opinions of their authors, but are also indicative of the total climate of action, thought, and quest for new solutions regarding the crime problem in this country.

No reproduction of the papers of a professional meeting can fully reflect the flavor and the total contribution of the event. The questions and remarks from the meeting floor, the discussions in the workshops, the remarks exchanged in the corridors, over meals, or in the rooms of the participants often represent the major accomplishment of such a gathering. New face-to-face contacts and awareness of things done by others - both individuals and agencies - is often the most important byproduct the participant takes home with him. This Symposium was rich in all of this. Close to one thousand persons from all over the country, representing all component elements of the criminal justice system mingled together for three days under the aegis of a major Federal effort to do something about crime and delinquency, which have risen to unprecedented prominence over the last decade. The Symposium provided the needed national forum for all those engaged in the crime prevention and control effort.

Peter P. Lejins, Director
Institute of Criminal Justice and
Criminology
University of Maryland

COURT DELAY, CRIME CONTROL, AND NEGLECT OF THE INTERESTS OF WITNESSES

Michael Ash
Law Enforcement Assistance Administration

Introduction: Some "Previously Identified Goals"

Thirty-three years ago, the American Bar Association called attention to the way witnesses were then being treated (Vanderbilt, 1949). Witness fees were described as inadequate and not "commensurate with modern wage standards." Incongruously, low fees were said to excite the witness' "ridicule at the methods of justice." Intimidation of witnesses was said to be a problem and, where it existed, "the supreme disgrace of our justice." Courthouse accommodations for witnesses were protrayed as inadequate and uncomfortable. According to the ABA, "the state owes it to the witness to make the circumstances of his sacrifice as comfortable as possible." Too frequently, it was said, witnesses were being summoned back to court again and again without ever being asked to testify. The committee pointed to an incident involving a burglary case "in a certain city" in which:

> there was no real doubt about the accused's guilt; but there were 19 continuances before he was finally tried and convicted. Meanwhile, the witnesses were forced to come ten miles to the court, on 19 occasions, each time being sent home to reflect upon the course of justice (5).

"Promptness of trial," one of the recommendations concluded, "is essential to the preservation of testimony and to securing the goodwill and dependable mentality of witnesses" (Vanderbilt, 1949, pp. 566-568).

In 1948, Phillip L. Graham, a non-lawyer, reported on the impressions he gleaned from being part of "the Washington Experiment in judicial administration" (1). Graham wrote that there "seems to be widespread reluctance by many Americans to undergo the ordeal of being a witness" (Graham, 1948, p. 23). He claimed that witnesses perceived themselves as "being forced into a contest against skillful opponents while knowing none of the rules" (Graham, 1948, p. 23). He noted that many witnesses were outraged at court delay in the criminal courts and dismayed by the lack of accommodations for their comfort. He concluded that "those individuals among the public who may be called as witnesses need to be assured of fair treatment . . . . " (Graham, 1948, p. 24).

In 1954, Professor Fannie J. Klein, the noted bibliographer, wrote a short report on witnesses for The Institute of Judicial Administration. In this report, she referred to reforms serving witnesses as being "a neglected area in judicial administration" (Klein, 1954, p. 5). She wrote:

> In recent years, the distinction of being the "Forgotten Man of the Judicial System" seems to have devolved on the trial witness. Although the literature of the law bursts with erudition concerning methods of examining, cross-examining, impeaching, discrediting his reliability and indeed trying and convicting him, there is an astonishing paucity of material with regard to the attitude of the witness toward the judicial process, his criticisms of it and his suggestions for its improvement. But the trial witness, despite his silence, does have some complaints against the system which deserve review (Klein, 1954, p. 1).

Indeed, through all these years and to the present, little has been written on the problems, interests, and rights of witnesses (2). On the basis of the quantity of relevant materials, one would think that the eradication of the problems delineated back in 1938 had proceeded apace, that the witness is no longer the forgotten man of our criminal justice system, and that we should all be congratulating ourselves.

I submit that the precise opposite is true and that the witness, especially the witness in criminal courts, is more abused, more aggrieved, more neglected, and more unfairly treated than ever before. I suggest that this mistreatment has an important two-way effect on court delay and the prevention and deterrence of crime.

A witness may be defined as one who is summoned to testify at a judicial inquiry. This paper deals exclusively with witnesses in <u>criminal</u> cases in <u>state</u> courts (3). It focuses primarily on "civilian" or "non-professional" witnesses, rather than police, expert, or "professional" witnesses. It speaks mostly to the problems of prosecution witnesses simply because the defense witness is, in practice, a rare animal and also, in part, because a defense attorney is sometimes better able to afford "his" witnesses individualized treatment than is a mass-production prosecutor's office or court system.

Nevertheless, despite my focus on the civilian prosecution witness,

nearly everything I say is applicable, with only slight modification, to the professional prosecution witness and to all defense witnesses.

Progress or Regression: Witnesses in Criminal Courts Today

For approximately three and a half years, I worked as an assistant district attorney in a large, fairly typical metropolitan prosecutor's office in Milwaukee, Wisconsin. In that role, I saw the human impact of the criminal process close at hand. The atmosphere was crowded, the pace swift. Out of this blurred kaleidoscope of ringing phones, clacking typewriters, papers, voices, and incredible varieties of people, one feature thrust itself in front of me. I refer to the way the whole criminal justice system mistreats its witnesses, overlooks their problems, and wrecks havoc with their lives. Yes, of all the facets of our poor old creaking system, so famously dotted with malpractices, I found this the most remarkable. My impressions and concerns, I have found, are widely shared by working level personnel throughout the country.

Admittedly, the problems are not so serious everywhere. In rural areas, for example, and in smaller jurisdictions where delay and criminal court backlog have not yet become a problem, a witness may perform his function easily and without undue inconvenience. But, where a serious crime problem exists, so too does a witness problem. In nearly all metropolitan area state criminal courts, the treatment of witnesses borders on the scandalous. "The only thing worse than being a witness in a criminal cases," one courts expert (who asked to remain anonymous) volunteered, "was having terminal syphilis."

In the typical situation, the witness will several times be ordered to appear at some designated place, usually a courtroom, but sometimes a prosecutor's office or grand jury room. Several times he will be made to wait tedious, unconscionably long intervals of time in dingy courthouse corridors or other grim surroundings. Several times he will suffer the discomfort of being ignored by busy officials. Bewilderment, the painful anxiety of not knowing what is going on around him, or what will happen to him, will become all too familiar. On most of these occasions, he will never be asked to testify or to give anyone any information, often because of a last minute adjournment granted in a huddled conference at the judge's bench. He will miss many hours from work (or school) and will lose many hours of wages. In most jurisdictions, he will receive at best only token payment in the form of ridiculously low witness fees for his time and trouble. In many places, he will receive no recompense at all because he will be told neither that he is entitled to fees nor how to get them. Through the long months of waiting for the end of a criminal case, he must remain ever on call, reminded of his continuing attachment to the court by sporadic subpoenas. For some, each subpoena and each appearance at court is accompanied by tension and terror prompted by fear of the lawyers, fear of the defendant or his friends, and fear of the unknown. For many, the experience is dreary, time-wasting, depressing, exhausting, confusing, frustrating, numbing, and seemingly endless.

To provide some statistical corroboration for this picture, the Office of the District Attorney of Wayne County, Detroit and its

suburbs, Michigan, early this year began collecting weekly statistics on witness appearances in felony and "high misdemeanor" cases in the Recorders' Court, which handles crimes committed in the city of Detroit.

In Detroit, as in most jurisdictions, each time a case is set for trial, all witnesses are subpoenaed. In some instances, trials are held and witnesses are required to testify. In many other instances, either a plea of guilty is accepted or the trial postponed, "adjourned", or the case dismissed for any of a variety of reasons. In none of these events are any of the witnesses subpoenaed asked to testify, through they are required to appear. (I have been told), in practically all instances witnesses do, in fact, appear and usually spend between a half day to a day in the court environment.

According to <u>these</u> statistics, between January 10, 1972, and March 17, 1972, a total of 1,360 cases were set for trial. Subpoenas were issued for all police and civilian state's witnesses, as well as an undetermined number of defense witnesses. During the same period, only 227 trials were actually held. In the remaining 1,133 instances, nothing happened that required the testimony of any witnesses. In an average week during the period, 151.1 cases were set for trial, with witnesses ordered to appear and stand ready, and only 25.2 trials were actually held. Between January 10, 1972 and March 17, 1972, 2,055 civilian witnesses and 5,048 police witnesses were ordered into court for trials that were not held. A total of 7,103 witnesses were ordered into court and, then, in effect, told to go home. In an average

week, 560.8 police and 228.3 civilian witnesses were subpoenaed to no purpose, for an average weekly total of 789.2.

The figures do not reflect how many witnesses were subpoenaed for trials that were held. An average of 6.3 witnesses were subpoenaed for trials that were not held. If one makes the reasonable assumption that the average is approximately the same for trials held, then 5.0 witnesses are subpoenaed into court unproductively for every <u>one</u> that is subpoenaed for trial.

This five-to-one ratio of "waste" appearances to productive ones probably understates the situation. It takes no account, for example, of (1) witnesses who were subpoenaed for a trial that was held, but who never actually testified, and (2) <u>defense</u> witnesses unnecessarily subpoenaed. Like all statistical representations, it does not capture the anger, anguish, and frustration that such a situation engenders.

If it were untypical, there would be little to worry about, but it is not. In February, 1972, the National Center for Prosecution Management distributed 44 questionnaires to prosecutors attending an Office Management Seminar sponsored by the National District Attorneys Association. Because the seminar was geared to middle-sized offices, only three or four of the thirty or so largest offices responded. One assumes that larger jurisdictions have greater problems with court delay and witness disaffection than smaller ones. Therefore, the 44 responses to the questionnaire were all the more striking.

The significant question asked the prosecutors to "describe disaffection of prosecution witnesses because of court delay, continuances, repeated appearances, etc., in your jurisdiction." Of the 44 replies,

thirty described witness disaffection as being more than "a minor problem." Twenty said that in their jurisdictions there was "substantial disaffection" among witnesses. Six acknowledged that the witness situation was a "serious problem affecting overall ability to prosecute effectively." None described witness disaffection as being "nonexistent."

Despite its seriousness, one can find in the literature only tidbits descriptive of the real situation (5). Nowhere is there hard data on witnesses in criminal cases. In published materials generally, witnesses are striking by their absence.

Victimized by the machinery of justice and ignored by neglectful scholars, the witness' lot is made no less painful by the law. Under prevailing law and practice, he probably will not be able to listen to the other witnesses testify. He will be ordered excluded from the courtroom and may be subject to penalties for contempt of court if he violates the exclusion order. He is compelled to testify even if his testimony will bring him into "disgrace" (6). If he refuses to answer, he can be punished for contempt. If a witness is once punished for contempt in refusing to answer a question and is then recalled and asked the same or a similar question, which he again refuses to answer, he may, it seems, again be punished without violating the prohibition against double jeopardy (7).

Certain "testimonial privileges" theoretically preclude testimony emanating from certain confidential relationships; but they are regarded, not as privileges of witnesses, but as privileges of parties, waivable by parties, and claimable by parties (8). A recalcitrant or

uncooperative witness can be held in contempt for any number of reasons (9). If someone decides he is lying, not only can he be held and punished for contempt, but he can also, in addition, be charged, convicted, and sentenced for the crime of perjury (10).

In certain states a witness may be liable for the costs of criminal proceedings; "statutes imposing costs on prosecution witnesses, under certain circumstances, on failure of the prosecution, and authorizing imprisonment until they are paid, generally have been upheld as constitutional." If adjudged to be a "material witness" who cannot be trusted to appear, he may be compelled to post bail to assure his appearance and, in its absence, he may be, and frequently is, jailed until there is no need for his testimony (12). If he is jailed, he is not entitled to witness fees (13). As recently as December, 1971, the United States Court of Appeals for the Fifth Circuit issued an opinion reiterating this rule (14).

In the hallowed halls of the courtroom itself, the witness may be subject to verbal abuse without there being much concern for its prevention (15). He may be threatened or assaulted by those concerned with the outcome of the prosecution; perhaps, the danger is all the greater in view of the rapid expansion of discovery in criminal cases and especially the practice of early disclosure of names and addresses of witnesses (16). In some circumstances, he may be ordered to undergo a mental examination (17). He is regarded as being under a strong obligation to appear at court when summoned and to answer the questions asked (18). Conversely, he has no general right not to testify.

Limitations on his testimonial duty are few and exceptional and, in the words of the leading authority on the law of evidence, "therefore to be discountenanced" (19). At grave financial loss, he may be compelled to venture the length of the country should his testimony be throught to be required (20). His interests, his convenience will not dictate a change in the location of a trial. In legal terms, "(a) change of venue will not be allowed merely for the convenience of witnesses" (21). In practical terms, he has absolutely no means of preventing, nor means of obtaining redress for being unnecessarily or even frivolously subpoenaed (22). In one remarkable instance in which 167 witnesses, most of whom knew nothing whatsoever about the cause, had been subpoenaed, it was held that causing the subpoenas to issue was not contempt of court (23).

In criminal cases, the witness is often the victim of the crime; that is, the person raped, robbed, beaten, or shot at by the accused. Courthouse contacts (not to mention contacts in the street) with the defendant, especially if he is free on bond or recognizance, are difficult and sometimes traumatic. When courtroom contacts are repeated, the experience may be even more unpleasant. Testifying, for the average witness, is terrifying; the more aggressive the cross-examination, the more uncomfortable the witness may be. The more heinous the crime, the more the fear and embarrassment there may be in recounting the details.

For all of this, the witness is paid little or nothing. His compensation is supposed to include a specified amount per day plus a mileage fee. Alabama, Colorado, Connecticut, Delaware, Kentucky,

Maryland, Minnesota, Mississippi, New Jersey, New York, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia compensate their criminal court witnesses at two dollars a day or less; Idaho, Illinois, Michigan, Montana, Nevada, and Wyoming at eight to twelve dollars per day; and the remaining states between three and six dollars per day. Mileage fees generally range between three cents per mile up to about ten cents per mile. Hawaii, Idaho, and Nebraska seem to be the only states offering mileage fees that are in excess (by a few cents) of this range. Typically, five cents per mile, roundtrip, from home to court, is allowed. Out-of-state mileage, if any, is usually not counted.

Even these meager fees are, in some instances, not being paid. I personally know of two major jurisdictions, and I suspect there are scores of others where it is very uncommon for witnesses in criminal cases to receive any fees at all. The expedient by which this is accomplished is very simple. Witnesses are simply not told that they are entitled to fees. In the unusual instances, when they are told or somehow find out, they are required to produce subpoenas or some "proof" of having been present in court. By this time, most witnesses have deposited their subpoenas in the trash and find it just too much trouble to scrounge for the paltry sums involved. As a result, few actually collect the sums available.

I am convinced that the way our criminal justice system treats witnesses and the way it dilly dallies about its business has an important impact on the prevention and deterrence of crime.

First, crime goes unsanctioned because of the disaffection of

witnesses. Every experienced prosecutor in a major urban area has a storehouse of tales to tell about how cases were lost and how crime went unpunished because disgusted witnesses grew weary of wasting time, became uncooperative, and ultimately refused to appear. Many crimes are committed by persons who might have been "incapacitated" or "neutralized" by prison terms or "rehabilitated" by correctional processes, but for convictions that were "lost" because of the "wearing out" of witnesses (24).

Second, exposure to the criminal court process as it actually exists discourages countless numbers of witnesses from ever "getting involved" again; that is, from reporting crime, from cooperating with investigative efforts, and from providing testimony crucial to conviction.

Third, as Kenneth Lawing Penegar has said:

> Not only does delay adversely affect the individual's perspective of justice and not only is that habit of keeping people waiting (the accused as well as witnesses, attorneys, policemen, etc.) expensive; more importantly, it could quite conceivably have detrimental effects on the effectiveness of the whole system in terms of the goal of deterrence. Seen as a form of communications between the system and the general public, particularly potential violators, the syndrome of delay tells these audiences in effect that crime and its participants are not really urgent public business; that not much store is set by it in practical terms however well meaning judges may huff and puff from the bench when the accused finally comes before it. The English courts have long prided themselves on the practice of providing sure and swift apprehension and trial as one, if not the most effective, way to communicate to its citizenry that the system should really be taken seriously. Whether or not the individual is convicted, regardless of the sentence he receives (whether imprisonment for a short or long period or probation), the most important messages to the individual about society's disapprobation of his conduct will be conveyed to him in the first weeks of apprehension, charging, and trial with efficient, deliberate progress throughout (Penegar, 1968).

Even if this were not so, the way our criminal justice system treats witnesses is an evil in and of itself; it must be corrected.

Witnesses: What Research Is To Be Done?

Witnesses are crucial nutrients of criminal courts, but their importance has never been appreciated by researchers or by those who fund criminal justice research. Hard data needs to be gathered about criminal court witnesses, their treatment, their responses to their treatment, their attitudes, and the impact of their attitudes and disaffection on prosecution, on cooperation with law enforcement, and, in general, on the prevention and deterrence of crime. Naturally, research of this nature will provide a means of testing the impressions and hypotheses set forth in this paper. More importantly, it will produce results, I believe, that will amaze many, shock some, and persuade most. It will thereby provide the essential first step toward the massive change that is required.

(1) Witness appearances

I suggest, first, that studies should be undertaken of witness appearances. Specifically, data should be gathered on the number of times witness are summoned to appear, the number of times they actually go to court, the total amount of time, including travel and waiting, they spend on appearances, the number and proportion of "waste"

appearances at which they do not testify, and the number of times testimonial or non-testimonial, that they are asked to relate what they know.

Although "per case", "per appearance", and "per witness" averages would undoubtedly be useful, it is crucial that the reporting of the data reflect distributions on the extremes. It is more important that large numbers of witness appearances and large expenditures of witness time are required in perhaps comparatively few criminal cases than that the "average" case required an "average" of so many appearances and so much time. In addition, averages may be misleading because so many cases are resolved by prompt guilty pleas.

(2) Witness costs

Second, inquiry should be commenced concerning the real cost of witness appearances and, ultimately, measurements of these costs should be devised. This ought to be relatively easy in the case of police witnesses. In most jurisdictions, policemen are paid at an hourly rate for court appearances. To separate "court time" from "police work time" and compute the cost of "court time" ought to be easy, and in many places has already been done. In the case of civilian witnesses, lost wages should be the starting point. Any adequate measure, however, would have to take into consideration other factors, like the cost to employers of lost employee services, the cost of the loss of value created by a witness' uncompensated labor, the cost of lost leisure or family time, and, perhaps, the cost of compensating for some of the unpleasantnesses of being a witness, e.g., disrupted vacations, harrowing cross-examinations, eyeball-to-eyeball

confrontations with assailants, grimy and uncomfortable surroundings, etc.

Cost data should then be correlated with appearance data and reported so as to reflect, for example, costs per case, costs per appearance, total systemic costs, costs of "waste appearances", and so forth.

(3) Witness attitudes

Third, a study of changes in witness attitudes over the duration of criminal proceedings should be begun. Included should be components of the clusters of attitudes that determine, for example, the degree of (1) willingness to appear in courts; (2) willingness to cooperate with parties associated with the courtroom proceedings, especially the prosecution; (3) hostility toward the various parties; (4) acquiescence to plea bargains, charge reductions, sentencing concessions, or dismissals; (5) willingness to "get involved", report crime, cooperate with police and the like; (6) respect for and faith in the criminal justice system; and (7) the relationship between case disposition, promptness of disposition, appearance costs, and these attitudes.

It is essential to avoid testing attitudes by selecting from biased samples of favorably disposed witnesses, for example, from lists of witnesses who have received witness fees and who have therefore, presumably, continued to make regular appearances throughout the proceedings. To assure a representative sample, it will be necessary to take account of the attitudes of witnesses who fail to appear and of those who "cannot be found" (25), possibly by conducting intensive searches for "lost witnesses", interviewing them, and making projections from those interviews. Moreover, an adequate study must measure

some fairly subtle attitudinal shadings. For example, it may not be enough to ask a witness, "If subpoenaed, will you appear?" Most witnesses will say, "Yes." It may be necessary to ask what kinds of alternative events or circumstances, say, a death in the family, the flu, a planned one-day trip, a planned birthday party for a small daughter, a cold, etc., might prompt non-appearance. Again, researchers must be wary of the fallacy of the average. In other words, changes in the attitudes of the "average witness" may be less important than radical changes in the attitudes of comparatively few witnesses.

(4) Witness disaffection, unsuccessful prosecution, and crime

Fourth, studies should be begun on the relationships between witness disaffection, unsuccessful prosecution, and the commission of crime. One might learn something about these relationships by focusing, for example, on (1) the reasons why witnesses fail to appear; (2) why witnesses "can't remember" or change their stories; (3) the effect of witness attitude on cases that result in dismissals, acquittals or abnormal plea bargaining; (4) post-dispositional criminal behavior by defendants whose cases were bargained down or resulted in acquittals or dismissals; and, (5) factors motivating prosecutors to extend concessions in plea bargaining with special reference to witness' attitudes.

It might also be appropriate to scrutinize cases carefully at the outset of proceedings, locate ones in which the alleged offender was "clearly guilty," and then follow "clearly guilty" cases through the system to their eventual outcome. Presumably, some would become "lost

conviction" cases which would then provide a fruitful topic for further study, as would the offenders involved in them.

Ideally, the studies I suggest should not be piecemeal, nor confined to one jurisdiction but should instead embrace a number of topics and jurisdictions at once. Less comprehensive studies, however, are better than nothing.

(5) Witness' Perspectives and Public Attitudes

A final suggestion. If technically possible at this stage of social science's development, it would be extremely valuable to test the effect of the communication of witness' experiences and attitudes, through individual conversations, by socialization and group interaction, and through the media, on generalized public attitudes toward crime-reporting, "getting involved" with the police, rights of the accused, courts, and the capacity of the government to assure public safety, personal security, and an adequate outlet for retributive impulses. If rigorous scientific inquiry into this last set of questions is impossible, then at least thoughtful reflection seems to be in order.

Specific Improvements

To propose improvements applicable to criminal courts across the land, or even to all "metropolitan" or "urban" criminal courts, requires considerable courage. Criminal laws and court procedures vary among the fifty states much more than most observers recognize. Even in individual states, criminal court systems vary markedly from locality to locality. Individual courts and individual judges exhibit striking idiosyncrasies and often do things very differently.

Hence, I accompany these proposals with an apology and a request. The apology is that they are not, because they cannot be, more specific than they are. The request is that the reader stretch his mind a bit, look at my skeletal proposals imaginatively, and try to see how they might be shaped and fit into a court system with which he is familiar.

(1) Witness' Appearance Control Projects

I suggest, first, the establishment of witness' appearance control projects like the one begun at the Vera Institute of Justice and the New York County District Attorney's Office in cooperation with the New York City Criminal Court and the New York City Police Department. Like the New York model, such projects would develop, implement, and test devices for (1) reducing the number of unnecessary trips to court required of both police and civilian witnesses, and (2) assuring their timely production at court when their presence is in fact required. "The overall goal" of such projects would be "to reduce unnecessary delay in criminal court proceedings, while at the same time reducing the inconvenience that often befalls police and citizen witnesses in the scheduling of court appearances" (26).

Among procedures recommended and implemented on a small scale by the New York project were:

(1) excusing witnesses from appearing on a first adjourned date where their testimony was practically never required and then using the date for plea bargaining and schedule setting

(2) the use of "witness forms" that contain complete and accurate information about residence addresses and phone numbers, occupational addresses and phone numbers, working hours, vacation dates, names and telephone numbers of close relatives and friends, and other data that helped facilitate notification and scheduling

(3) coding witnesses as early as possible according to the ease with which they could be notified by telephone, the probability of their continuing to appear, the likelihood of their appearing promptly, and the time it would take them to travel to court once notified, so as to determine which witnesses might be summoned by "telephone"

(4) putting selected "reliable" witnesses on telephone alert and then calling them when their presence was required

(5) giving all civilian witnesses wallet-sized cards containing space for filling in the places and times of scheduled court appearances and a telephone number to be called in the event of questions and directing them to keep the card on their persons at all times

(6) using notifications written in two languages.

These specific procedures appear to have produced promising results in the New York context (Lacy, 1971). They, of course, may not be applicable to other localities. I suggest, however, that similar projects in other jurisdictions could do just as well in coming up with useful innovations geared to local problems and requirements. What such projects afford is perspective. In addition, they provide a greater likelihood of identifying bad practices. They also provide a vehicle for institutionalizing concern for witnesses and an agency for causing alteration in procedures that affect them adversely. In certain circumstances, they may provide a much needed means for airing the complaints of witnesses and voicing their legitimate demands for reform. To the extent that they perform this function and, in general, become less research minded, they will become similar to the witness liaison and support squads mentioned below.

Such projects should be headed by management-minded lawyers or

legally-oriented management experts. A more difficult problem is getting court administrators, independently-minded judges, prosecutors, and court clerks to experiment with new procedures. This problem will be there until the Millenium, and nothing better can be recommended than to keep on grappling with it.

(2) Witness liaison and support squads

Second, I suggest the establishment of witness liaison and support squads. In general, such squads would represent the interests of the court system to the witnesses and, more importantly, the interests of the witnesses to the court system. Its members would keep witnesses informed about changes in court dates, court procedures, reasons for postponements and delay, and, in general, about what is going on in courtroom and courthouse. They would also keep judges, court clerks, and lawyers informed about witness availability, alert them to especially disgruntled witnesses and to special instances of mistreatment, act as advocates for legitimately aggrieved witnesses who themselves may be too timid or inarticulate to complain, and sometimes just yell "bloody nurder" at instances of witness abuse. They might also assist in arranging for special police protection for witnesses in appropriate cases. They might try to pin down attorneys as to their intentions on a scheduled date as far in advance as possible so as to prevent witnesses, for example, from coming to court for preliminary examinations that are waived on the date set.

The liaison support squads would spend large amounts of time on the telephone trying to locate witnesses, explaining things to them,

telling them where to go, conveying reminders, announcing last-minute calendar changes, placating ruffled feelings, and the like. They would often have to work nighttime hours to reach witnesses who could not be reached days. They would try to assure that no witness was summoned to court unproductively. They might frequently provide automobile rides to and from the court, especially for elderly and handicapped persons. They might even babysit occasionally or arrange for baby-sitters. They might also meet and greet witnesses at the court house, assure their comfort, and provide directions, answers to questions, a smile, and a helping hand (Penegar, 1969, pp. 139-140).

The members of witness liaison and support squads would have to be mature, responsible, and intelligent individuals, but they would not necessarily have to meet any stringent educational requirements; and they probably would not have to be paid exorbitant sums of money. Indeed, such squads might be made up partly of volunteers, perhaps drawn from the ranks of the retired. In many instances, the perfect person to head such a squad at a modest salary might be found among the ranks of the early retirees, notably police and military officers.

I will not attempt to say what agency or combination of agencies should have administrative responsibility for such squads because court systems, generally, and witness notification responsibility, particularly, vary so much, often even from court level to court level within one jurisdiction. Conceivably, the witness liaison and support squad could be a police unit, a prosecutor's unit, a judge's unit, a clerk's unit, a unit operated by a board consisting of representatives from several of the above-mentioned agencies, or a unit operated by some

independent outside agency. Possibly, such a squad should be completely independent and responsible only to the public and to its source of funds.

I do think, however, that such squads could everywhere be organized in some way appropriate to local conditions and could everywhere provide valuable services both to witnesses and to the system as a whole.

Both witness appearance control projects and witness liaison and support squads would, I believe, also help to reduce court delay. In many jurisdictions, the inability to produce required witnesses at the right time is a substantial cause of adjournments and, thus, of wasted court time and delay. The two above-mentioned proposals aim at improved two-way communication and notification, and increased attention to witness convenience. To the extent that these aims are realized, witnesses are more likely to appear when needed, adjournments are likely to be fewer, and delay is likely to be less.

(3) Early screening and diversionary devices

Although the situation varies from jurisdiction to jurisdiction, depending, in large part, on the extent to which the following suggestions have already been implemented; it is clear that many cases that cannot be won come before criminal courts and wind their way through the court system for a time until they terminate by dismissal. It is also clear that many offenders hauled before criminal courts could better be turned over to rehabilitative or supervisory agencies at the outset of proceedings. Such cases and such offenders take up considerable quantities of court and witness time to little or no benefit. To lessen the clutter thereby occasioned, I suggest, fourth, "early

screening" and increased use of "diversionary devices."

"Early screening" means that an experienced prosecutor should carefully and critically examine each case at the outset of proceedings, determine whether it is likely to be "successful," and not permit "bad" cases to enter the system at all; they should, in other words, "screen out" bad cases early in their history, before they have wasted much court and witness time.

In general, the earlier and more thorough the screening, the better the result. The District Attorney's Office in Philadelphia has experimented with placing prosecutors in police stations at night to screen out "bad" arrests as soon as they are brought in. With rare exceptions, the District Attorney's Office in Milwaukee never lets a felony or a non-traffic misdemeanor get to initial appearance in court without an assistant having interviewed all crucial police and civilian witnesses, including any the defendant can produce. However, the screening practices of these two offices are exceptional. In general, screening either occurs only after several court and witness appearances or consists of a quick look at a police officer's written summary of the evidence, a summary that is likely to be incomplete, self-serving, biased in favor of prosecution, and less than completely candid. My experience in Wisconsin is that the candor and completeness of police reports has tended to diminish with the likelihood of their being discovered and utilized by defense attorneys.

In a few localities, the implementation of thorough early screening might involve statutory changes or massive changes in the thinking of judges, prosecutors, and policemen. In most places, it will require

only increases in prosecutorial manpower and firm belief that the job is worth doing.

Early screening can work nicely in tandem with the kind of diversionary devices that have been tried in some places, although either can also work independently to good effect. "Diversionary devices" are methods to "divert" certain types of offenders, especially first offenders, from the criminal courts to more appropriate agencies. Often, the offender is given an option of being prosecuted for a certain crime or submitting to supervision or treatment by some other person or agency, a psychiatrist, a clergyman, a community mental health facility, an alcoholic or narcotics rehabilitation unit, a probation department, and so forth.

Tentative reports on the success of such programs in terms of their impact on offenders tend to be encouraging. Less well recognized is the extent to which they can unclutter our courts and save witnesses time and grief.

(4) Justly compensatory witness fees governed by flexible rates proportioned to "real" costs

I suggest, fourth, that witness fees be drastically increased and that they provide witnesses with just compensation. I suggest further that a start be made toward measuring the cost to the individual witness of his appearances and then providing him with fair reimbursement for those costs. Perhaps the victim of a protracted beating by a gang, who might be compelled to relive hours of torture on the witness stand, should be compensated at a higher rate than the passerby. Similarly, the witness using the courts to obtain vengeance for a private grievance

should arguably be entitled to less than the bystander who is just doing his duty as a citizen. Merchants pressing bad check claims as substitutes for more expensive civil collection devices might be entitled to nothing at all.

Simple fairness, I believe, requires movement in this direction. If the framers of the Fifth Amendment to the United States Constitution in 1789 could say that "private property," time, fruits of labor, should not "be taken for public use, without just compensation," how can we say otherwise in the Age of Aquarius? In addition, the payment of justly compensatory fees, which will be much higher fees, will prompt painstaking consideration for the witness' time and comfort.

Computation of witness fees could become excessively complicated and could be more trouble than the results are worth. Indeed, the system could wind up paying many witnesses more than they are worth. If that point is ever reached, it will be long after there are sweeping changes in our present crude measures and unjust levels of compensation.

(5) Comfort and convenience

I suggest, fifth, that court systems examine their consciences to find out if they are doing everything possible for the comfort and convenience of witnesses.

It does not boggle my imagination to think that short courthouse tours might be arranged for groups of witnesses, that outdoor waiting areas might be set up in good weather, and that access to nearby recreational facilities (e.g., the rarely used police gymnasium in a

Milwaukee County court facility) be afforded to those few witnesses who might then find the wait less burdensome.

The point is not that any of the ideas mentioned above is necessarily a good one for any given locality. What is needed here is not a national blueprint, but conscientious self-criticism, imagination, and above all, action on the local level.

(6) Evaluation and testing

Finally, I suggest that innovations, if at all possible, be systematically tested and evaluated, preferably in connection with the research program outlined earlier.

Court Management Studies

Throughout the country, court management studies are proliferating. All aim at making courts "better." Most are geared to making the operations of trial court clusters in metropolitan areas more "efficient".

I suggest, henceforth, every such study should sharply focus on the ways in which court operations affect witnesses, and further, that every such study should expressly adopt and expressly employ "witness interest" as one yardstick of success. In other words, court operations will have to be pronounced "good" or "efficient" according (in part) to the extent to which they protect the interest of witnesses, that is the extent to which they treat them well.

I am emphatically not suggesting that "witness' interest" become the exclusive or even the primary criterion of evaluation. Certainly, a fairness to the accused must remain the central concern of our criminal court system; and a judge's time is valuable, should be expended

wisely, and valued appropriately. I am only suggesting that the witness' time is also valuable, though, perhaps, less so that the judge's, and that fairness to witnesses, as defendants, should be assured. I am only suggesting, in other words, that the time of witnesses, the comfort of witnesses, and the feelings of witnesses ought to be taken into account.

Rethinking Law and Practice

Finally, I suggest that we begin rethinking laws, practices, and customs in terms of their impact on witnesses. Extensive treatment of the law is undoubtedly beyond the scope of this symposium; and particular objectionable practices do not exist in every jurisdiction. It may be appropriate to mention that we ought to rethink, for example:

(1) continuance practices in criminal cases

(2) the need for numerous separate evidentiary hearings on collateral questions, e.g., the propriety of a lineup, the legality of a search, the admissibility of a confession, etc.

(3) the police department practice (prevalent in some jurisdictions) of not returning stolen property to the rightful owner until the termination of all criminal proceedings against the thief

(4) the practice of routinely excluding witnesses from the courtroom during trials in which they may testify

(5) the practice of requiring witnesses to remain on call in the courthouse all throughout the many days of a lengthy trial

(6) the practice of not informing citizens that they are entitled to witness fees and not providing easy means of collecting fees to which they are entitled

(7) the practice of requiring a witness to testify

(and be cross-examined) several times about the same set of facts

(8) the failure of our system to provide any meaningful sanction for the frivolous issuance of subpoenas or any effective method of redress for the witness who has been frivolously subpoeanaed

Summing Up

As one observer put it, "Let's face it; the complaining witness is rarely John D. Rockefeller." Typically, he is not well off financially. He often comes from the same impoverished background as the defendant. He lacks knowledge of the system, access to those who man it, and confidence in his ability to deal with it. He remains thoroughly intimidated by the trappings of justice, even if disillusioned by his perception of its actual workings, and by the reputations and statuses of judges and lawyers. He is short, both in the ability to articulate his grievances and in the social and political "clout" necessary to make his anger felt.

Moreover, unlike every other class affected by criminal courts, including, for example, prisoners, witnesses have no way of helping themselves. They are a class whose members are constantly changing. They do not interact much with one another. They are easily led into believing that the frustrations they experience are untypical rather than something endemic to the system. When they leave the class, they rapidly lose interest in its problems. Indeed, most are so happy no longer to have to serve as witnesses that their overwhelming disposition is to leave the whole system as far behind as possible. For all these reasons and others, no agency, legal or otherwise, exists to

urge their legitimate demands for reform.

As a result, our system has remained startlingly blind to witnesses and neglectful of their problems. It is essential both to the prevention and deterrence of crime and to the fair and effective working of criminal courts that this pattern of blindness and neglect be altered.

NOTES

1. On program and concept see Bolitha J. Laws, (1945, p. 89 and 1952, p. 169).

2. In 1967, the President's Commission on Law Enforcement and Administration of Justice devoted approximately 1/3 of a page (out of 340 pages) of its report to "jurors and witnesses," lumping the two in the same category. Substantially, the same problems--repeated, unnecessary appearances, poor facilities, inadequate compensation--were alluded to as in the earlier reports mentioned. See President's Commission on Law Enforcement and Administration of Justice, (1967).

3. I leave to the side the problems of witnesses (1) in all civil cases, (2) in federal criminal cases, and (3) in all non-judicial proceedings, including investigative grand juries and legislative hearings.

   Obviously, much that is said will be applicable to persons falling within each of the above three categories. For example, for discussion of some very similar problems facing grand jury witnesses and for some suggested solutions similar to the ones advanced in this paper, see Edelhertz, (1970, pp. 32-33, 36).

   I am excluding witnesses in federal court criminal cases because I have become convinced that state courts and federal courts play two entirely different ball games and that there is very little basis for comparing the operations of the two. In general, United States District Courts (which are trial courts) are incomparably richer in resources, manpower, and facilities than their state counterparts. With respect to "crime" nationwide, federal trial courts have, of course, proportionately only only a tiny role.

4. Conversation with James Garber, chief assistant to William L. Cahalan, District Attorney of Wayne County, April 20, 1972. I am much indebted to Mr. Garber and Mr. Cahalan for letting me use these published and privately kept statistics.

5. See, Laura Banfield and C. David Anderson, (1968); 283-91; Howard James, (1968: pp. 39-41 and passim); Remington, (1969: pp. 1325-26); and President's Commission on Law Enforcement and Administration of Justice, (1967A: pp. 89-91).

6. Brown v. Walker (1896), 161 U.S. 591; Barber v. Moss (1955), 3 Utah 2d 268, 282 P. 2d 838; and Evidence-Witnesses - Privilege Against Disgrace, 25 NOTRE DAME LAWYER (1950) 378.

7. 17AM. JUR. 2d Contempt, Section 29, p. 34; see Yates v. United States (1957), 355 U.S. 66.

8. See Hawkins v. United States (1958), 358 U.S. 74, and Wyatt v. United States (1960), 362 U.S. 525, 528-29. For anyone interested in following up on the rather subtle point of legal doctrine adverted to in the text, I would suggest referring to the briefs of the parties in the above Supreme Court cases.

9. See 3 WHARTON'S CRIMINAL LAW, Section 1336-1339, pp. 715-727.

10. Annotation, 89 ALR 2d 1258, 1266; 5 WHARTON'S CRIMINAL PROCEDURE, Section 2027, p. 171.

11. 20 AM. JUR. 2d Costs, Section 111, p. 85, fns. 3,4, and 5.

12. See Carlson, (1969); Comment, Pretrial Detention of Witnesses, 117 U. PA. L. REV. (1969) 700; and Witnesses: Imprisonment of the Material Witnesses for Failure to Give Bond, 40 NEV. L. REV. 1961) 503.

13. Annotation, 50 ALR 2d 1439, 1439.

14. Hurtado v. United States (5th Cir., 1971), 10 Cr. L. 2243.

15. E.g., "When the evidence justifies severe and rigorous criticism of a witness, it is not reversible error to allow an attorney to use invective in denouncing him." 5 WHARTON'S CRIMINAL EVIDENCE, Section 2078, p. 237.

16. 21 AM. JUR. 2d Criminal Law, Section 327, pp. 354-355.

17. United States v. Hiss (1950), 88 F. Supp. 559.

18. E.g., Blair v. United States (1919), 250 U.S. 273, 281-282.

19. 8 WIGMORE EVIDENCE, Section 2192, p. 67.

20. People v. O'Neill (1959), 359 U.S. 1.

21. 4 WHARTON'S CRIMINAL PROCEDURE, Section 1517, p. 110.

22. See generally, Annotation, 37 ALR 2d 1113.

23. Ex parte Stroud (Ark., 1925), 268 S.W. 13, 37 ALR 2d 1111.

24. In partial support, consider the following:

First, when perpetrators of crimes "solved" are apprehended and turned over to the courts, they are quite frequently not convicted of any crime and often convicted only of a lesser charge. According to the FBI'S UNIFORM CRIME REPORTS FOR THE UNITED STATES - 1970 (FBI, 1971) (hereinafter, "UCR-1970") of adults prosecuted for "Crime Index" (murder, rape, robbery, aggravated assault, burglary, larceny, and auto theft) offenses in 1970, 61 per cent were found guilty as charged and 10 per cent of a lesser charge. UCR - 1970, p. 36. Thus, 29 per cent were acquitted or their cases were dismissed. UCR - 1970, p. 36.

Several things must be noted about these figures. For one thing, the per centage of "unsuccessful" prosecutions varies considerably with the kind of crime charged. UCR - 1970, Table 15, p. 114. Generally, it appears to be harder to secure convictions on the more violent crimes than on the less violent ones. UCR - 1970, Table 15, p. 114. Thus, "in 1970, 41 per cent of the murder defendants were either acquitted or their cases dismissed at some prosecutive stage. Forty-six per cent of those charged with forcible rape were acquitted or had their cases dismissed, and 39 per cent of the persons charged with aggravated assault won their freedom through acquittal or dismissal." UCR - 1970, p. 36. When one looks to the percentage of conviction on the original charge, "larceny, 71 per cent, recorded the highest percentages for persons found guilty on the original charge in 1970. This was followed by 53 per cent on the original charge for burglary, 50 per cent for auto theft, 47 per cent for robbery, 44 per cent for aggravated assault, 44 per cent for murder, and 36 per cent for forcible rape." UCR - 1970, p. 36.

Convictions on lesser charges usually mean, in effect, that short prison terms are substituted for longer ones, probation for short ones, fines for probation, and suspended sentences for fines. They mean, in other words, that society's capacity to neutralize, rehabilitate, or simply punish criminals has so much the less chance to operate.

Though this cannot be demonstrated by the FBI statistics that are published, it seems certain that conviction rates also vary considerably from jurisdiction to jurisdiction. Thus, the percentage of acquittals may be much higher in certain cities than the average, creating so much the greater problem. Moreover, there is some impressionistic evidence to suggest that conviction rates may be lower in larger communities where the crime problem is already greater.

Obviously, some of these acquitted have in fact not performed any criminal act. However, I believe that anyone closely associated with the actual operation of the criminal court system, including

defense attorneys and prisoners, in candid moments, would describe the percentage of truly guiltless defendants to be very small. Many "guilty person," they would acknowledge, cannot be convicted solely because of legal reasons or problems of proof beyond a reasonable doubt.

Thus, in summary, I suggest, first, that substantial number of criminals (for reasons good or bad) "slip through the net", "escape justice:, and are left unrehabilitated, unpunished, and unrestrained to roam the streets and commit crimes.

Second, the likelihood of successful prosecution seems to decrease, generally, with (1) the length of time between apprehension and disposition, (2) the number of appearances in court by the defendant, and (3) the number of witness appearances. At least, this is the suggestion of Banfield and Anderson (1968). It is also the firmly held belief of most of those closely associated with the operation of criminal courts. In other words, dilatory tactics and the "wearing out of witnesses," I suggest, produce results beneficial to accused criminals, but detrimental to anyone later victimized by their misdeeds.

Third, of those who do commit crimes, amazingly large percentages seem to have been recently embroiled in criminal court processes. By extrapolating from the analysis of the FBI in UCR - 1970, pp. 37-38, it can plausibly be suggested that approximately 68 per cent of all crimes are committed by those who have come before criminal courts sometime in their recent past. Some of these persons, of course, were convicted. Hence, their recidivism reflects the failure of prisons and correctional processes than courts.

But fourth (and on the other hand), of those brought before criminal courts the worse recidivists by far seem to be those who have been acquitted or those cases have been dismissed. UCR - 1970, pp. 38-42. The FBI reports that of "offenders released to the community in 1965, 63 per cent had been rearrested by the end of the fourth calendar year after release. Of those persons who were acquitted or had their cases dismissed in 1965, 85 per cent were rearrested for new offenses. Of those released on probation, 56 per cent repeated, parole 61 per cent, and mandatory release after serving time 75 per cent. Offenders receiving a sentence of fine and probation in 1965 had the lowest repeating proportion with 37 per cent rearrested." (Emphasis added). UCR - 1970 pp. 38-39.

I emphatically do not intend the above analysis to stand as "proof" of the textual proposition to which this footnote refers. In one or two instances, I have plugged statistical interstices with what amounts to informed conjecture. Even if this were not so, I am fully aware of the fact that the reasoning above falls considerably short of what is required for rigorous logical demonstration.

Nevertheless, the above analysis, I believe, at least strongly suggests that there might be something more than emotion and rhetoric behind the theory I espouse in the text.

25. For an example of both errors, see Committee on the Administration of Justice, (1970: pp. 169-173). For some reason, the survey also seems to have relied on interviews with U. S. District Court witnesses whereas the real problems with witnesses in the District of Columbia are in the Superior Court (then the Court of General Sessions). Like federal district courts everywhere, the one in D. C. presents far fewer management or operational problems than harried state courts which perform criminal functions similar to that of the D. C. Superior Court.

    Generally, the survey suggests that the experience of the witnesses interviewed was favorable. "The time they spent waiting to see and to speak to various legal officials, however, was a source of irritation to many of them. * * * In view of the generally high levels of positive reports concerning the witnesses' experiences one might expect similar high levels of positive reactions in the respondent's ratings of the court, and the process of law. However, the court was rated as good in handling the specific cases of witness involvment and in handling criminal cases in general, by 58 per cent and 53 per cent of the respondents respectively. These are hardly mandate percentages. Moreover, exactly one-half of the respondents were negative about the process and procedures of law, based on what they had seen in their roles as witnesses.

    "Such data suggests that, while the court currently enjoys the confidence of a majority of respondents, this support may be tenuous. * * * " Id., pp. 172-173.

26. See Lacy, (1971). A final report on this very promising report is expected in June, 1972. Mr. Lacy himself is now associated with the National Center for Prosecution Management, Washington, D. C.

EMPIRICAL RESEARCH AND THE PROBLEM OF COURT DELAY

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Introduction

On July 3, 1970, the National Institute of Law Enforcement and Criminal Jutice approved a $191,991 grant to the University of Notre Dame College of Engineering and Law School to support a program of research entitled Systems Study of Court Delay NI-70-078. The contract was limited to state criminal court problems. The research was conducted in two Indiana counties primarily for reasons of convenience and accessability.

The unique team of lawyers and engineers enabled the project to achieve results which neither could achieve alone: ascertaining points of unnecessary and avoidable delay in an accurately described felony process, commencing with the arrest and ending with the final judgment on appeal; assigning legal, administrative, or other reasons where indicated; making specific and workable recommendations designed to eliminate such delays and insure prompt disposition without requiring the sanction of discharge or dismissal of charges; developing a mathematical model with the capacity to simulate the effect of proposed changes; learning whether lawyers and engineers

could work effectively together in the area of court delay.

All officially recorded activities connected with over 2,500 selected felony cases were collected from police, prosecutor and court records. Felonies in the Crime Index Categories of the Uniform Crime Reports, plus receiving stolen property and gambling felonies, were studied in Marion (Indianapolis) and St. Joseph (South Bend) counties. The sampled time period covered 1963 to 1970. A large case sampling was necessary to insure a high statistical confidence level which would support the model development, legal analysis, and conclusions.

An accurate flow chart analysis of each court system helped to clarify processing points and relationships, as well as the involvement in a case by police, prosecutors, and courts. For example, of the 116 functions identified in the St. Joseph County felony trial court process, the police were involved in 33 steps, the prosecutor in 16 steps and the court in 71. Some functions obviously involve more than one element. Flow analysis aided an accurate understanding of the operational structure of the system. It was interesting to see the differences in the systems of the two counties both operating within the same state.

The model developed is analytical in nature using partial realization of systems functions theory. In its simulation capability, it possesses a high degree of fidelity to the actual data. As an analytic tool, the model was used to produce precise interval data on the cases with numerous characteristics relating to type of crime, input, court, charging procedure, and disposition.

Factor analysis was used to gain some broader understanding of the phenomenon of delay and those variables (e.g. type of counsel, pre-trial status of the accused, disposition--plea or trial) apparently more related to delay than others, e.g. prior arrests.

A matrix of correlations among 43 selected variables proved to be particularly effective and quickly highlighted those variables which appeared related to the delay problem and those which appeared not to be so related. For example, pre-trial motions to suppress evidence appeared not to relate to the length of the interval from arraignment to disposition, but continuances were significantly related.

Interviews with practicing defense attorneys, prosecutors, and judges also proved of importance in defining the problem and developing recommendations.

An in-court work measurement study provided some idea of how heavily the courtroom itself was engaged in criminal case matters as well as the amount of time required for the variety of operations occurring in the courtroom. In general, this study showed that the courtroom itself was in use less than half the assumed available hours.

Applying statistical results to the judicial system

It was necessary to find some standard by which to compare the statistics in order to cope with the elusive notion of delay. Each court system may consider adapting different norms by which to evaluate itself; to facilitate the analysis, the maximum time inter-

vals for felony cases recommended by the 1967 President's Crime Commission were chosen. By applying these standards, it was possible to divide delay into three phases: the period from arrest to arraignment, from arraignment to disposition, from disposition in the case of a guilty plea or verdict to decision on appeal. Thus, applying the analytical techniques described above, it became possible to quantify and measure the operational effect of current statutes, rules, court and administrative practices upon case disposition time by comparing the various time intervals actually produced in the system with the Crime Commission's suggested time table.

The analysis revealed three general insights. First, that the law tended to build in delays. Required procedures seemed to delay unnecessarily the movement of the case by anticipating a request or procedure not likely to occur in the routine case. Such system generated delays were especially obvious and unacceptable in the pre-arraignment stage by excessive use of grand juries when another more efficient charging procedure--the prosecutor's affidavit--was available.

A need for greater individual case control by the judges was also suggested from the research. The calendaring procedure generally, as administered, allowed cases to move through the system virtually at random. This condition resulted from a failure to control the plea bargaining process which disposes between 80 and 90 per cent of all felony cases not dismissed. The appellate process was characterized by excessive time in the interval from sentencing to the filing of

the record and in the actual time consumed by the five justices of the Indiana Supreme Court in arriving at a final written opinion.

The Indiana judicial system, as most others, lacks an effective mechanism to insure any coordination within local criminal justice court and related components. Such a structure was recommended to insure a continual process of evaluation, specifically the Notre Dame study proposed that each member of the Indiana Supreme Court be assigned a region of the state and evaluate the quality of justice by the courts of that region on an annual basis. This approach called for the filing of regular reports on caseload dispositions and disposition time on criminal cases. Other critical indicators of quality in the system could be developed.

To oversee the coordination problem among the courts, police, prosecution and defense, a state criminal justice coordinating council was suggested.

Findings

There is a need to determine a satisfactory definition of delay. Several standards are available including state discharge rules, which require dismissal after a maximum limit on delay by the prosecution, legislative proposals, and the 1967 President's Crime Commission model timetable. It may be that a different standard of efficiency and delay is appropriate for different court systems to reflect the nuances of procedure, local practice, and personnel problems peculiar to each community or state.

As indicated above, the flow analysis and statistics suggested that the court delay problem broke naturally into three parts: Pre-arraignment delay--the period from arrest to arraignment, post-arraignment delay--the period from arraignment to disposition by guilty plea, or trial and appeal--the period from sentencing to decision on appeal to appropriate appellate tribunal. During the period of the research, all appeals in felony cases were to the Indiana Supreme Court. Since January 1, 1972, this appellate review is shared by an intermediate Court of Appeals and the Supreme Court.

In Marion County, substantial pre-arraignment delay was revealed in the charging procedures. Where the grand jury was used, the interval from arrest to the indictment date averaged over 90 days. Indiana law provides for a felony charge by affidavit which is both a pleading and a written allegation of probable cause reviewed by a magistrate. This procedure was still slower in Marion County than in St. Joseph County largely because of an administrative delay in handling the documents.

Delays in arraignment following filing of the charge were also revealed. These delays were attributable to continuances. The reasons for these delays assigned by defense lawyers and judges ranged from preparation problems to fee collection.

The system tends to anticipate the exceptional case rather than the routine. Motions to quash (dismiss) the charge must be made before arraignment. The effect is to delay the trial setting even though few such motions are filed or successful. Motions to

suppress evidence were similarly infrequent and did not significantly relate to prearraignment or post-arraignment delay.

In post-arraignment phases of the case plea bargaining or as some prefer, dispositions by way of plea of guilty--required almost as much as and in some cases, more time in the system as did cases tried to a verdict. In other words, despite the fact that there is a strong likelihood of cases disposed of by plea, there was an absence of control over the case by the court with a view toward prompt disposition. Suggestions to speed this phase of the case included an early pre-trial conference and some cut off on plea negotiations.

Court granted continuances to defense counsel were shown to be a significant cause of case delay. Stricter insistence to show adequate grounds for continuances was recommended.

Substantial delay was uncovered in criminal appeals to the Indiana Supreme Court. The President's Crime Commission recommends a five month maximum from sentencing to decision; the Indiana average in this period was nearly 22 months.

Several concerns affected the formulation of proposals. Many states provide for discharge or dismissal upon certain elapsed time without fault by the accused. In Indiana the period is six months for jail cases and two months for bail cases. To avoid this blunderbuss approach narrowly focused rifle-shot, suggestions were made and aimed at those specific procedures which contribute to delay. The flow analysis showed the strategic position of the judge in the system. This finding coupled with explicit and inherent

rule-making authority of the courts at both trial and appellate level suggested that the responsibility of the courts in solving the delay problem be emphasized.

In a straight forward fashion, particular time limits were recommended in each step of the case to the end that routine cases reach disposition 60 days after arrest. Since most cases were disposed of within the present discharge rules, one could also make an argument that simply lowering these limits would also encourage prompt disposition.

The study found a lack of case control by the trial courts. Cases appeared to move through the system on nearly a random basis. An administrative judge was suggested for counties with more than one judge with felony jurisdiction. This judge could oversee the docket, handle arraignments, pleas and motions and determine available judges and courts for trial purpose.

Benefits and limitations

Empirical statistically based research in court problems has several benefits and, of course, some limitations. It is useful in providing an accurate description of the way in which the system actually operates in practice. For example, within each Indiana county system studied, interviewed personnel could not agree on which steps their activity preceded or which steps followed. Systems analysis also helps to confirm or dispel false assumptions about the system. For example, disposition time for retained

lawyers was nearly always substantially (sometimes twice as long) longer than for assigned lawyers. And retained lawyers tended to request more continuances. On the other hand, post-arraignment delay did not correlate with plea bargaining.

Nor did it correlate with dismissals or acquittals. In other words, based on the data in this study, the idea that post-arraignment delay benefits the accused may not be founded in fact. Plea bargaining may also depend on other factors such as the strength of prosecutors case, the adequacy of the prosecutors trial preparation, the skill of defense counsel, the culpability of the accused and his potential for reform. Another example is the absence of any apparent relationship in Indiana between suppression motions and delay. Similarly, the number of accused's prior arrests did not appear to correlate with delay, tending to cast doubt on the theory that more experienced offenders tend to unduly manipulate the system as a delaying tactic.

Another obvious benefit from empirical research is that it opens the court processes to objective and informed public scrutiny and evaluations. Evaluation by public and the media can help end the confusion between judicial independence and immunity from constructive criticism. Empirical data of the kind generated by the Notre Dame study provide the basis for firm proposals for improvement from judges and practicing lawyers alike.

There are limitations. Computers and statistics cannot alone solve the problem of court delay. Informed and experienced legal

judgment is needed for both data interpretation and the formulation of workable proposals. One must distinguish between management issues which do not require changes in statutes, rules, and case law, and those changes that do. For example, the potential investigatory benefits of a grand jury must be preserved; but its delaying effect on routine cases avoided. The limits on part-time prosecutors must be weighed. The effect of peculiar rules such as the right to a change of judge must be considered as to its inhibiting effect upon a trial judges ability to control dilatory practices by lawyers.

In the end the judges, lawyers, and public must set the balance between prompt disposition and justice. As with an automobile, a system can become dangerous if operated at too high a speed. As Judge Kaufman of the Second Circuit U.S. Court of Appeals has said, "Making mistakes fast is not an improvement." Yet, the need and opportunity for improvement is evident, if only the courts and lawyers have the will to do it. And, they had better attend to it if they would avoid the potential for negative expedients which can follow from public impatience.

REDUCING COURT DELAY

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Introduction

Court delay is indeed a timely topic for discussion--or is it? Researching the literature relating to judicial administration makes it very obvious that the term court delay has been used with more recurrence than most others. It is also enlightening to discover that this particular subject has quite an immense historical perspective. It seems similar to other somewhat cosmic subjects such as love, the weather, and the mystery of woman, all of which have been discussed and grumbled about through the ages. Unfortunately, we inherited from the loquaciousness of our predecessors only their grumblings and few substantive solutions. For instance, Goethe wrote in the twelfth chapter of his autobiography:

> An immense mountain of swollen files lay there growing every year, since the seventeen assessors were not even able to handle the current workload. Twenty thousand cases had piled up, sixty could be disposed of every year, while twice as many were added. It was not unusual for a case to remain on the docket for more than a hundred years. One, for instance, involving the city of Gelnhausen, began in 1459 and was in 1834 still waiting for the court's decision. A dispute between the city of Nurenberg and the electorate of Brandenburg had begun in 1526 and remained for ever undecided when in 1806 the court was dissolved. The piteous state of the court created the unique profession of 'solicitants' whose sole job it was to secure preferments for their

> clients. This custom resulted eventually in the jailing of its leading practitioner and in the removal of three judges from the court because of bribery (Eckler, 1960, p. 2).

To substantiate that court delay might in some instances be salutary, "it made Goethe lose whatever taste he had for the law, gave him sufficient leisure, the court had 174 holidays annually, to fall into desperate love with Charlotte Buff, the heroine of the novel which was to catapult him firmly into world fame" (Eckler, 1960, p. 2).

Judge Ulysses S. Schwartz in Gray v. Gray (6 Ill. App. 2d 571, 578-579, 128 N.E. 2d 602, 606 (1955)) suggests the temporal nature of court delay:

> The law's delay in many lands and throughout history has been the theme of tragedy and comedy. Hamlet summarized the seven burdens of man and put the law's delay fifth on his list. If the meter of his verse had permitted, he would perhaps have put it first. Dickens memorialized it in Bleak House, Checkhov, the Russian, and Moliere, the Frenchman, have written tragedies based on it. Gilbert and Sullivan have satirized it in song.

Throughout our history, United States Supreme Court Justices have rhetorically addressed court delay, and here we are in 1972 at a National Symposium on Law Enforcement discussing it. For instance, Chief Justice William Howard Taft stated:

> If one were asked in what respect we have fallen furthermost short of ideal conditions in our government, I think we would be justified in answering, in spite of the glaring defects of our system of municipal government, that it is our failure to secure expedition and thoroughness in the enforcement of public and private rights in our courts.

Years later, Chief Justice Earl Warren stated that:

> ...interminable and unjustifiable delays in our courts are today compromising the basic legal rights

> of countless thousands of Americans and, imperceptibly, corroding the very foundations of constitutional government in the United States.

Therefore, court delay is certainly not a new or novel topic for discussion in 1972. It has been present, noted, and discussed for centuries. However, justice for the 1970's requires much more than mere discussion. The time has arrived when court delay should be defined, identified, and distinguished from delays located elsewhere in the criminal justice system, and remedial measures advanced to reduce the unnecessary delay.

Court Delay: A Definiendum

What Is Delay?.--Webster defines delay as "to put off . . . to cause to be late or behind in movement or progress." How delay is defined and measured often depends upon the yardstick chosen to identify and measure it (Zeisel, et al, 1959, pp. 43-57). Contemporary literature on court management concludes that delay as a time factor in the administration of justice has several meanings (Friesen, et al, 1969, p. 63). Analysis of court delay has progressed from utilizing a yardstick which measures only the elapsed time from the date of the act that gave rise to the court proceeding to the disposition. Numerical size of backlogs has also been discarded as a reliable guide. "An accurate measure of delay requires four reference points: the first is the occurrence of the events that precipitated the court action; the second is the date the court action was filed; the third is the date of readiness of all parties to the dispute to proceed; the fourth and final date is the date of disposition of the action. The time lapse

or time span between each of these reference points is pertinent in court management (Friesen, et al, 1969, p. 64).

Thus, after measurements of elapsed time are fashioned and achieved, and a meaningful yardstick utilized, delay is an abnormal or extraordinary amount of elapsed time between these reference points. "In common parlance, the term delay is used to signify abnormal lapse of time . . . . Delay in the administration of justice should likewise signify the extra or abnormal time beyond that which might reasonably be expected to bring a case to trial (Green, 1960, pp. 8-9).

A definition of delay as merely abnormal usage of time, however, is still incomplete. The question of what is normal requires definition and must be resolved prior to assessing or measuring delay. All too often we are guilty of alleging that delay exists before we attempt to devise an authoritative standard or norm.

What Is Normal Time?.--Tabulation of normal time between certain reference points in the system has been attempted by Presidential commissions, as well as by statutes enacted in several states (A.B.A., 1968, pp. 14-15). The President's Crime Commission on Law Enforcement and Administration of Justice, The Challenge of Crime in a Free Society (1967, p. 155) prescribes that the normal time from arrest to trial of felony cases should not exceed more than four (4) months. The American Bar Association's Standards Relating to Speedy Trial (1968, p. 14), cites the Commission's timetable but does not attempt "to identify in the standard the number of days or months which, if exceeded without cause, would constitute denial of a speedy trial." It does recommend that "a defendant's right to speedy trial should be expressed by rule

or statute in terms of months running from a specified event . . . " but mentioned that "this kind of judgment . . . (prescription of normal time) . . . must be made in each jurisdiction based upon the conditions which prevail there. In the few states which currently express the time in days or months rather than in terms of court, the times range from seventy-five days to six months. (E.g., see Cal. Pen. Code Sec. 1382 (15 days from date held to answer to filing of information; 60 days from filing of information to trial); Ill. Rev. Stat. 6.38, Sec. 103-5(a) (1965) (120 days from arrest); Iowa Code Ann. Sec. 795.1, 795.2 (Supp. 1966) (30 days from date held to answer indictment; 60 days from indictment to trial); Mass. Ann. Laws c. 277, Sec. 72 (1956) (6 months from time of imprisonment or bail); Nev. Rev. Stat. Secs. 178.490, 178.495 (1957) (30 days from date held to answer to indictment or information; 60 days from indictment or information to trial); PA. Stat. Ann. Tit. 19, Sec. 781 (1964) (6 months from commitment); Wash. Rev. Code Sec. 10.37.020, 10.46.010 (1961) (30 days from date held to answer to indictment or information; 60 days from indictment or information to trial" (A.B.A., 1968, p. 14).

A perusal of the statutes illustrates the inadequacy of utilizing the Presidential Commission's timetable as a model to fit all jurisdictions or any attempt to devise a single model capable of prescribing normal time limits for all jurisdictions. For instance, what is abnormal time, or failure to provide a defendant a speedy trial, in California, over seventy-five days, is quite within the normal time limitation in Pennsylvania, over one-hundred eighty days.

The United States Supreme Court has not prescribed fixed time limits

in deciding speedy trial issues. The general rule states that "The essential ingredient is orderly expedition and not mere speed" (Smith v. United States, 1959). In United States v. Marion (92 S. Ct. 455, 459 (1971), the United States Supreme Court noted that "no federal statute of general applicability has been enacted by Congress to enforce the speedy trial provision of the Sixth Amendment, but Rule 48(b) of the Federal Rules of Criminal Procedure, which has the force of law, authorizes dismissal of an indictment, information or complaint 'if there is unnecessary delay in presenting the charge to a grand jury or in filing an information against a defendant who has been held to answer to the district court, or if there is unnecessary delay in bringing a defendant to trial. . . .'" The court has consistently held that the right to a speedy trial is necessarily relative and depends upon the circumstances of the case. There are four factors used in determining whether the right to a speedy trial has been denied: (1) length of the delay; (2) reason for the delay; (3) existence of prejudice to defendant; and (4) waiver of defendant (Solomon v. Mancusi, 412 F. 2d 88 (2d Cir. 1969)).

In determining the length of the delay, the Supreme Court has held that "the protection of the amendment is activated only when a criminal prosecution has begun and extends only to those persons who have been 'accused' in the course of that prosecution (United States v. Marion, 92 S. Ct. 455, 459 (1971)). The Court further stated that:

> It is either a formal indictment or information or else the actual restraints imposed by arrest and holding to answer a criminal charge that engages the particular protection of speedy trial provisions of the Sixth Amendment.

Thus, although the court has provided "no touchstone of time which sets a fixed maximum period . . . " (Hedgepeth v. United States, 124 U. S. App. D. C. 291 (1966)) to measure delay, it seems that under the Marion rule, computation begins with either a formal indictment, an information, or restraints imposed by arrest.

Thus, delay, if abnormal time between certain reference points, must begin with a measurement of normal time. Although recommendations have been made that jurisdictions express these measurements by rule or statute, the few states which have enacted statutes to accomplish this purpose reflect various ranges of time periods. No federal statute attempts to express a measurement of normal time in terms of days or months. The model advanced by the President's Commission on Law Enforcement is hardly capable of implementation in all jurisdictions. The United States Supreme Court has not prescribed a set period of days or months which, if exceeded, would be abnormal time. Instead, the court depends upon the circumstances of each particular case.

Consequently, delay, although the subject matter of countless pieces of literature, thousands of public addresses, several national, regional and local commissions, seems without substantive definition. The presence of delay is alleged prior to any assessment of normal time periods. Normal time periods must be the subject matter of future studies and the state-of-the-art should advance to the realization that the presence of delay is not a problem, but instead is a symptom. A tragic failure in past studies and recommendations concerning courts is that symptoms are cited and superficially treated while the problems, which are their cause, go untreated with a blighted future of recurrence.

Assessment of normal time, in excess of which could be determined to be delay, must be made on a jurisdiction-by-jurisdiction basis. This tabulation must take into consideration the pre-trial and trial apparatus existing in the jurisdictions as well as the size and capabilities of the court's support personnel and adjunct agencies. Size and capability of judge-strength must be measured as well as physical plant and facilities. Existing and projected caseloads as well as administrative capabilities in each jurisdiction also would be important parts of the criteria. Only after these and other variables are considered can a true evaluation and assessment of normal time be accomplished. Then, delay can be removed from its cosmic state and empirical measurements perfected.

What Is Court Delay?

The title of this paper is "Reducing Court Delay" which is indeed a misnomer. This misnaming, however, is symptomatic of a real and ever-present misunderstanding. It is automatically concluded that when and if delay exists in the criminal justice system, it is court delay. It is not recorded where the departure toward this misunderstanding occurred nor reasons for it. If progress is to be made in reducing delay in the system, a clarification must begin now.

In an April 10th, 1972, interview with U. S. News and World Report, Judge Charles W. Halleck, an Associate Judge of the Superior Court of the District of Columbia, clearly focalized the misnomer of alleging blame against the courts for the inadequacies of the criminal justice system. He stated:

> You see, the easiest response is to blame somebody else--people never blame themselves--and the handiest whipping boy to blame is the courts, because the courts traditionally never respond.

If substantial progress is to be made in reducing delay in the criminal justice system, the state-of-the-art can no longer allow the cop-outs or automatic assumption that ills in the system, such as delay, are products of the courts, police, prosecutors, calendar clerks, computer operators, or anyone down to the bailiff who fills the judge's water glass, exclusively!

From the time of an arrest until the final disposition of a case, particularly in a metropolitan trial court, literally scores of persons from several agencies are involved. In the District of Columbia, for instance, at least eighty persons come in contact with a case from the commission of a crime until trial. In light of all these agencies and actors, to state that delay from the time of arrest until final disposition is court delay, is truly a misnomer.

It seems that understanding the measurement of delay in civil cases has far out-distanced its counterpart on the criminal side. It has long been conceded that measurements in civil cases from time of filing until time of disposition, taken alone, were less meaningful than measurement figures from the time the case is at issue and the parties ready until the time of disposition. "Nor is waiting time between the date the suit was filed and the date of trial a satisfactory measure . . . [of civil court delay] . . . due to the fact that much of the elapsed time may have been due to the voluntary action of the parties (Green, 1960, p. 9). Yet, delay in criminal cases is

erroneously measured from the time of arrest until the time of trial.

One quite logically might ask, "If it is not court delay, then what might it be?" If the state-of-the-art would advance to that point, delay in the system would be enjoying its last few days. As illustrated previously, the criminal justice system is composed of scores of actors with diverse responsibilities, relationships, and goals. Responsibility and authority for the movement of cases through the maze of process is mutual to the parties, and in most instances, is not the sole responsibility of any particular part.

A thumbnail example of the criminal justice system might illustrate the point:

Occurrence		Whose Delay
From	To	
Commission of a crime	Reporting	Public
Reporting	Arrest	Police
Arrest	Complaint	Police, Prosecutor, witness
Complaint	First Judicial Appearance	Prosecutor, sometimes appointed counsel, court, witnesses
First Judicial Appearance	Return of Information or Grand Jury Indictment	Prosecutor, appointed counsel, court, witnesses
Indictment or Information	Motions	Prosecutor, defense counsel, court, witnesses
Motions and Hearings	Trial	Prosecutor, defense counsel, court, witnesses
Trial	Disposition	Court

There appears to be a correlation between repetitious responsibility and authority as to against whom delay should be assessed. Only when sole authority and responsibility exists and an abnormal or extra time elapses can a particular part of the system be accredited with the delay. Therefore, there are only three areas where sole responsibility and authority exist. The time from commission of a crime and the reporting of it, which unless observed by a police officer, is delay which can be rightfully assessed against the public. The time from reporting until arrest which can be assessed against the police. The third is the time of trial until disposition which can be assessed against the court. In the other areas, there exists a mutual interrelationship between authority and responsibility. This, instead of court delay, should actually be termed criminal justice system delay. Solutions or delay fighters must be structured, keeping this mutuality in reference. Delay reductants must, therefore, be in concert.

Concerted Reductants: The Essential Delay Fighter

As noted in the previous definitional section, most of the criminal justice system is comprised of areas where diverse goals and objectives as well as mutual authority and responsibility exist. The process " . . . was not designed or built in one piece at one time. Its philosophical role is that a person may be punished by the government, if, and only if, it has been proven by an impartial and deliberate process that he has violated a specific law. Around that role, layer upon layer of institutions and procedures, some carefully constructed, and some improvised, some inspired by principle and some by

expediency, have accumulated" (President's Commission, 1967, p. 7). Presently, the system is confronted daily with thousands of cases which test whether it can endure. Evaluation of the system's performance is made in numerous reports which reach practically the same conclusion:

> The American criminal justice system is racked by inefficiency, lack of coordination, and an obsessive adherence to outmoded practices and procedures. In many respects, the entire process might more aptly be termed a non-system, a feudalistic confederation of several independent components often working at cross references. (A.B.A., 1972, p. 10).

Not only are the conclusions reached in the numerous reports similar, so are their destinies. As once beautiful automobiles now fill the nation's junkyards and once beautiful and sexy movie starlets become fat and wrinkled, the fantastic conclusions reached in these reports have a similar destiny: accumulation of dust while occupying someone's bookshelve and citation in a future study which will replace the previous ones. "The reasons why the criminal justice process has failed to control crime effectively have been dramatized in recent years as commission after commission has reported on the myriad ills which beset criminal justice agencies at all levels of government. Those commissions have concluded that the entire criminal justice process is permeated with defects and problems . . . the reports themselves are typically shelved without any significant action" (A.B.A., 1972, p. 9).

Why has not a solution been advanced to cure these pressing problems? Why have so many solutions which have been advanced

ultimately been junked without being attempted, much less implemented? Most solutions advanced are piecemeal, affect only parts of the system, and lack the necessary ingredient for implementation: acceptability. The lack of acceptability is a direct response to a lack of involvement by those who have the authority to implement. Without the involvement, the decision makers have very little commitment to the change. Reductants, meaning alternatives and solutions advanced to reduce delay, must be mutually contrived, implemented, and performed in unison. "Research has shown repeatedly that people are more deeply committed to a course of action if they have had a voice in planning it. In industry there has been a growing realization that the most effective means of gaining commitment and involvement is to obtain the participation of the work force in reaching decisions and plans of action that affect them" (Rush, 1969, p. 7). Thus, reductants to delay must be concerted even prior to the implementation phase. Those who must accept and implement the change cannot be overlooked as it is being designed.

Past studies and reports have analyzed the criminal justice system as a mere process. Instead, the justice system like industry, a human system, composed of persons and agencies with diverse goals and objectives. For example, the goals of the prosecutor and defense counsel are different. Even within the prosecutorial function there exist different goals. The prosecutor who screens the initial report of the policemen is a screen which, with optimum performance, prohibits unwarranted cases from entering the court system. Thus, one of his goals is to throw out cases. His brother prosecutor in the trial court has

as his goal everything but throwing out cases. The criminal justice system is more than a mere mechanical apparatus. Therefore, it seems relevant to view it in terms of behavioral science, which is the systematic study of people and their relationships to each other. Industry has been attempting to view its process in these terms. "A growing number of companies have been looking to the behavioral sciences for insights and understandings about people and their motivations in relation to increased productivity" (Rush, 1969, p. 7). Behavioral science's chief aim is greater productivity through optimal use of human resources.

The major dysfunctions and points in the system where coordination and application of behavioral science relationships seem to exist are where the various functions in the criminal justice system interface. An interface is a place at which independent systems meet and act or communicate with each other. From the commission of a crime until trial there appear to be six major interfaces. They are the interfaces between:

(1) Commission of a crime and the reporting of a crime

(2) Reporting of the crime to police and arrest

(3) Arrest and prosecutorial screening

(4) Prosecutorial screening and first judicial appearance

(5) First judicial appearance and information or return of an indictment;

(6) Information or return of an indictment and trial

The Following Are Suggestions For The Reduction Of Delay At These Interfaces

Improve Coordination.--There exists little doubt that the criminal justice system is hopelessly fragmented and cannot operate efficiently until it is coordinated. Countless studies have evidenced this fragmentation, but alas, little change has been promoted. These fragmented parts must be coordinated. A recent American Bar Association Report on New Perspectives on Urban Crime states that the number one problem in the criminal justice system is "inefficiency flowing from the seeming inability of the component parts of the criminal justice system to coordinate their activities" (A.B.A., 1972, p. 13). The report further states:

> The govermental commissions that have studied the criminal justice process in recent years have begun to ask whether fragmentation should continue to be tolerated as a necessary by-product of the separation of functions. They have sought to redefine the criminal justice process as a composite of agencies which, while necessarily independent at the decision-making level, can and must work closely together at the administrative level. Under that view the nation's criminal justice apparatus must be converted at all levels of government from a diffuse group of agencies, each acting without regard to the other, into a unified system which will permit them to interact on a coordinated basis to achieve the common goal of crime control" (A.B.A., 1972, p. 14).

The solution offered is "a permanent organizational unit developed according to the particular needs of the community that can bring meaningful unity to the discordant elements of the criminal

justice process. Such a unit would be delegated legal power to coordinate the criminal justice process at the administrative level and would perform functions that are too frequently ignored in the present fragmented system" (A.B.A., 1972, p. 14). Thus, the state-of-the-art has advanced to the realization that if delay and other human cost can be alleviated, it will require coordination.

An independent agency is not required if the court takes the leadership role in providing the necessary coordination function. In the Superior Court of the District of Columbia, under the direction of Chief Judge Harold H. Greene, several task forces were organized which included representatives from the office of the Clerk of the Court, the United States Attorney, United States Marshal, the Director of the court's Data Processing Division, Metropolitan Police Department, and the District of Columbia Department of Corrections. Other representatives from various parts of the system were also included. A coordinated effort ensued with the intent of eliminating the unnecessary delays and human cost in the system. Thus, coordination of these vital functions with one another seems to have begun. One of the primary observations and recommendations of the task forces to date has been the need for the court to monitor the entire system by the use of computer and human resources. This monitoring conceptually will consist of information and data being transmitted to the computer and the human monitor on a periodic basis by all of the actors in the system. The information will be cross-referenced with aged cases noted and advanced. It will also assure that persons will not be lost or unduly incarcerated.

Another technique which has been used in several locales across the nation, sponsored by the Court Studies Section of the National College on the State Judiciary, is an Organization Development program structured to include representatives from all parts of the system. These organizational development meetings can assist the system in quickly determining the problems which inhibit coordination as the important, yet independent, functions meet.

Another innovation which would assist management of the criminal justice system was set out as the Number One Recommendation in the previously cited report:

> The Law Enforcement Assistance Administration and the state planning agencies established thereunder must redirect their funding priorities toward programs which have as their specific goal the systematizing of the presently fragmented criminal justice process.

The rationale behind this important guidance is that:

> ". . . the proglems of the criminal justice system . . . will only be magnified if the additional money is simply poured indiscriminately into existing criminal justice agencies . . .. Of the $7.4 billion spent on the criminal justice system in 1969, 60 percent--or $4.4 billion was divided among the courts, prosecution and criminal defense offices, probation departments, prisons and other supporting judicial and correctional services . . .. With its emphasis on police equipment and hardware, the LEAA funding process is in danger of becoming a gigantic 'pork barrel' that will obscure the need for systematic criminal justice reform. More sophisticated police equipment can have only a marginal impact on crime rates compared to improved correctional facilities to reduce recidivism or more efficient courts to improve the quality of justice . . .. The present approach of dispensing funds on an ad hoc programmatic basis threatens to bring greater fragmentation to the criminal justice system (A.B.A., 1972: p. 11-12).

Therefore, LEAA funding, instead of being part of the solution, is now being viewed by some as part of the problem. Funding which

fragments offers greater harm than good. The system needs coordination, not added fragmentation.

Improved Communications.--A court is not unlike many other large, complex organizations. Transmittal of information and improved communications are a must for the organization to function. Forms which transport information required for decision making must be devised and reviewed for workability. Unnecessary forms must be quickly eliminated. The communication system of a court, forms and records management, is truly the organization's bloodstream. One of the important tasks of the task forces used by the District of Columbia Superior Court has been to analyze the existing forms in the criminal justice system, revise them when necessary to accomplish intended purposes, and eliminate forms which are used because "the jury clerk before me used it." Delay often exists because communication is retarded by obsolete and meaningless forms. A major delay reductant can be achieved by improving communications.

Improvement Of Facilities.--A major ingredient in the efficiency and effectiveness of any organization is the physical plant which houses the operations. Courts, it seems by nature, are housed in inadequate and aged buildings, which, if used for industrial purposes, would have been condemned long ago. The greatest injustice that exists is that the public, the legislators, the bar associations and others, mandate the courts to improve their efficiency and simultaneously provide the court with a physical plant which inhibits, and in many instances, prevents a court from being efficient. How many times have you driven into a strange town and observed the oldest,

crustiest, and most ancient structure, and not even had to ask the location of the courthouse. Unfortunately, its location was quite ostensible. At the District of Columbia Superior Court, for example, the court operates in and, in a major part of the day, between six buildings. In answer to this management plight, the court was provided a seventh! It is beyond estimate to compute the wastage in judge-time, police and witness-time, juror-time, attorney-time, etc., that could be extremely lessened if the operation could be housed in a single structure. One wonders whether it will require a tragedy before the public realizes the security problems involved with transporting prisoners between these separate buildings. In this era of disrespect for the courts, the confusion and general tenor of inefficiency is extremely difficult to overcome. When the public interfaces with its court, it is an experience which makes an indelible impression--and all too often it is far from favorable.

Conclusion

Fragmentation and multiplicity of actors and agencies in the criminal justice system necessitate concerted reductants if delay in the system is to be alleviated. Criminal justice system delay has been a sad part of the status-quo for hundreds of years. It is not novel or unique to contemporary Anglo-American justice. To understand delay, if it is indeed abnormal time between certain reference points, jurisdictions must attempt to determine their normal time intervals between these reference points. Many states have attempted to enact statutes to accomplish this purpose. The varied ranges of time periods reflected in these statutes illustrate the inconsistency

of a model which purports to cover all jurisdictions. Normal time, in excess of which would be determined to be delay, must be made on a jurisdiction-by-jurisdiction basis, taking into consideration numerous variables. Pre-trial and trial apparatus, size and capability of the courts' support personnel and adjunct agencies, size and capability of the judge-strength, adequacy or inadequacy of the physical plant or facilities, existing or projected caseloads, administrative capabilities, and many others must be taken into consideration. Delay then can be specific instead of mystic; specific estimates are needed if delay is to be removed from its cosmic state and empirical measurements advanced. The abnormal time from the commission of a crime until disposition is not court delay, exclusively. It is, instead, criminal justice system delay, because mutual responsibilities and authority for the movement of cases exist.

All agree that the criminal justice system is extremely fragmented. Thus, the various functions in which agencies interface with one another must be studied, and above all coordinated in order to reduce delay. Improved communications at these interfaces, as well as improved or new facilities which promote rather than inhibit efficiency and effectiveness are musts if delay is to be reduced. If implementation and coordination are to be achieved, reductants must be advanced and concerted. They must be the product of the contribution of all the agencies.

Court delay is truly one of the injustices of doing justice. As Justice Tom Clark stated:

> History teaches us that if the judicial process falls short in giving effect to the law, the very

> existence of a free society is at an end. In short, the injustice of justice must be minimal for man to be free, and obedience to the command of the law must be paramount for a society to be an ordered one.

Whether we can reduce delay and the other injustices of justice is indeed our challenge. It is not yet certain that the state-of-the-art will succeed in meeting this challenge, but as Justice Tom Clark's statement reflected, organized society could hang in the balance.

SIMULATION OF A CRIMINAL COURT CASE PROCESSING SYSTEM

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Introduction

There are many problems in social sciences that can be stated in mathematical terms, but for which there are no analytical methods of solution. Computer simulation is increasingly being used to study such problems. Criminal court case management is such an area in which the application of the techniques of simulation for the purpose of reducing court delays has great potential. Various solutions to the problem of delay in the processing of cases have been suggested by the court administrators and others. To obtain information about the usefulness of the available alternatives, one has to experiment with the case processing system of the criminal court under consideration. If a model is built to simulate the case flow in the criminal court system, one may experiment with the model instead of the actual system. This paper deals with such an effort of building a simulation model of the criminal court system of the County of Monroe and the City of Rochester, New York.

The criminal court system of Monroe County is defined in this simulation as being a system consisting of all the agencies involved

from the start of a criminal action in the City of Rochester/ Monroe County to the final disposition of the case. Attention in this simulation is given to all the proceedings a case goes through. The actions of the agencies involved which are not related to the criminal cases are not considered in this simulation analysis.

The performance of the system should take into account the following:

1. Movement of cases through the criminal court system
2. The backlog of cases at various points within the system due to:
   (a) the system's capacity being exceeded
   (b) the unbalance of case loads at various stages

Analysis

The criminal court system was analyzed to determine the various relevant components of the system and their interactions with one another. System units which are of relevance to this study were separated from the others. The mechanisms that make up the various operations within the system were determined so that the model simulating the system would do so as realistically as possible.

The cases, felonies or misdemeanors, to be arraigned enter the court system. The court system as used in the model consists of both city and county courts. The cases leave the court system when they are finally disposed. The final disposition of a case may be (1) pleading guilty to the original charges, (2) pleading guilty to

a lesser charge (plea-bargaining resolution), (3) being found guilty after trial, (4) being dismissed by the court, or (5) being remanded to family court. The case flow path from entry to disposition is being simulated by the model. Various paths that the cases might take within the court system are analyzed, and the time delays experienced by the cases following each of these paths is determined and incorporated in the simulation model.

In city court the case flow path is divided into six major stages:

1. Arraignment stage
2. Resolution-after-arraignment stage
3. Motion (or preliminary hearing) stage
4. Resolution-after-motion stage
5. Trial stage
6. Resolution-after-trial stage

Arraignment stage includes the arraignment of a case and all the adjournments that a case goes through in the process. It, thus, includes all the time delays faced by a case before going on to motion stage or trial stage. Similarly, the motion stage includes all the adjournments of a case once the case is scheduled for a motion hearing or a preliminary hearing in the case of felonies. The time delays included here will be those faced by the case after arraignment stage, but before trial stage, if there is to be one. The trial stage includes the time delays of the cases scheduled for a trial, but trial may not necessarily take place. Such a time delay may be indicated in cases in which the defendant pleads guilty to a lesser

charge before the scheduled trial takes place and the case is disposed. The resolution stages simulate the number and manner of disposition of the cases after each of the above three stages.

In county court, the path that cases follow is different, and thus, the major stages in the model for county court are also different from that of city court. The major stages here are:

1. Arraignment stage
2. Youthful offender investigation stage
3. Pre-plea investigation stage
4. Mental or narcotics exam stage
5. Trial calendar stage
6. Resolution stage

Arraignment stage, as before, includes the arraignment of a case in county court and all the adjournments before the case goes on to one of the next stages listed. After going through the arraignment stage, the case might go to youthful offender investigation, pre-plea investigation, mental, or narcotics examination stage. These stages also include all the adjournments taking place in each of these investigations. The trial stage includes the case being put on the trial calendar, the delay in the case being taken off the calendar and all the adjournments of the case before it goes on to the resolution stage. In the resolution stage, the cases are brought to their final disposition and go out of the county court.

The cases have been categorized in both city and county courts. In city court misdemeanors and violations are divided into ten

categories and felonies are divided into three categories by the type of charge on the defendant. The categories are:

Misdemeanors and Violations:

1. Assault 3rd (1)
2. Possession of dangerous drugs 6th (1)
3. Disorderly conduct
4. Petit Larceny
5. Harassment
6. Loitering
7. Public Intoxication
8. Other single misdemeanor charges
9. Two (2) misdemeanor charges
10. Three (3) or more misdemeanor charges

Felonies:

1. Single charge
2. Two charges (at least one a felony)
3. Three (3) or more charges (at least one a felony)

In county court, the cases are all felonies. They are not categorized by the particular charge or charges concerning the defendant as was done in the city court. However, they are assigned to one of the four judges in the county court and are usually processed by their respective judges.

The separate categories of cases undergo different time delays at various stages. The simulation model, after generating a case,

assigns it to a particular category. The case, depending on its category, is assigned values of the case characteristics. These characteristics determine the various time delays that the case will go through while in the court system. After this assignment, the cases go through various stages in city and county courts where they face time delays and become parts of various queues in the court system before being disposed.

Output

The output of the simulation model needs explanation at this stage. The state of the court system after a specified number of cases are disposed of is given by the output in graphic form.

Graphs showing information about the parameters used and various queues in the court system are presented in the following pages.

DESCRIPTION OF THE PARAMETERS OF THE CASES

A. CITY COURT CASES (MISDEMEANORS)

PARAMETER #	DESCRIPTION
1	QUEUE # - CASES TO BE ARRAIGNED IN CITY COURT. (1-MALE, 2-FEMALE)
2	PROPORTION OF CASES IN WHICH THERE IS ONE ADJOURNMENT OR MORE IN ARRAIGNMENT.
3	PROPORTION OF CASES IN WHICH THERE IS ONE ADJOURNMENT IN BEING ARRAIGNED.
4	DURATION OF THE FIRST ADJOURNMENT PERIOD IN BEING ARRAIGNED.
5	SPREAD OF THE DURATION OF FIRST ADJOURNMENT PERIOD IN BEING ARRAIGNED.
6	PROPORTION OF CASES IN WHICH THERE IS ONE ADJOURNMENT FOR LAWYER.
7	DURATION OF FIRST ADJOURNMENT PERIOD FOR LAWYER.
8	SPREAD OF THE DURATION OF FIRST ADJOURNMENT PERIOD FOR LAWYER.
9	PROPORTION OF CASES IN WHICH THERE IS ONE ADJOURNMENT FOR DISPOSITION.
10	DURATION OF FIRST ADJOURNMENT PERIOD FOR DISPOSITION.
11	SPREAD OF THE DURATION OF FIRST ADJOURNMENT PERIOD FOR DISPOSITION.
12	PROPORTION OF CASES IN WHICH THERE IS ONE ADJOURNMENT FOR BENCH WARRANT.
13	DURATION OF FIRST ADJOURNMENT PERIOD FOR BENCH WARRANT.
14	SPREAD OF DURATION OF FIRST ADJOURNMENT PERIOD FOR BENCH WARRANT.
15	PROPORTION OF CASES IN WHICH THERE ARE TWO OR MORE ADJOURNMENTS FOR ARRAIGNMENT.
16	PROPORTION OF CASES IN WHICH THERE ARE TWO ADJOURNMENTS IN BEING ARRAIGNED.
17	DURATION OF SECOND ADJOURNMENT PERIOD IN BEING ARRAIGNED.
18	SPREAD OF THE DURATION OF SECOND ADJOURNMENT PERIOD IN BEING ARRAIGNED.
19	PROPORTION OF CASES IN WHICH THERE ARE TWO ADJOURNMENTS FOR LAWYER.
20	DURATION OF SECOND ADJOURNMENT PERIOD FOR LAWYER.
21	SPREAD OF THE DURATION OF SECOND ADJOURNMENT PERIOD FOR LAWYER.
22	PROPORTION OF CASES IN WHICH THERE ARE TWO ADJOURNMENTS FOR DISPOSITION.
23	DURATION OF SECOND ADJOURNMENT PERIOD FOR DISPOSITION.
24	SPREAD OF THE DURATION OF SECOND ADJOURNMENT PERIOD FOR DISPOSITION.
25	PROPORTION OF CASES IN WHICH THERE ARE TWO ADJOURNMENTS FOR BENCH WARRANT.

26	DURATION OF THE SECOND ADJOURNMENT PERIOD FOR BENCH WARRANT.
27	SPREAD OF THE DURATION OF THE SECOND ADJOURNMENT PERIOD FOR BENCH WARRANT.
28	PROPORTION OF CASES WHICH ARE DISPOSED OF BEFORE MOTION HEARING STAGE.
29	PROPORTION OF CASES WHICH ARE DISMISSED OR REMANDED OUT OF THE DISPOSED OF QUEUE.
30	QUEUE # - CASES IN WHICH TRIAL IS TO BE HELD.
31	TABLE # - TABULATION OF 'IN SYSTEM' TIME OF CASES DISMISSED OR REMANDED BEFORE MOTION HEARING STAGE.
32	PROPORTION OF CASES WHICH HAD PLEA BARGAINING RESOLUTION OUT OF THE REST OF THE DISPOSED OF CHARGE.
33	TABLE # - TABULATION OF 'IN SYSTEM' TIME FOR CASES WHICH PLEAD GUILTY TO ORIGINAL CHARGES.
34	TABLE # - TABULATION OF 'IN SYSTEM' TIME FOR CASES IN WHICH PLEA BARGAINING RESOLUTION.
35	PROPORTION OF CASES SKIPPING MOTION STAGE.
36	QUEUE # - CASES WAITING FOR MOTION HEARING.
37	DELAY TILL MOTION IS TAKEN UP.
38	SPREAD OF THE DELAY TILL MOTION IS TAKEN UP.
39	PROPORTION OF CASES IN WHICH THERE ARE ONE OR MORE ADJOURNMENTS FOR MOTION HEARING.
40	DURATION OF FIRST ADJOURNMENT PERIOD.
41	SPREAD OF DURATION OF FIRST ADJOURNMENT PERIOD.
42	PROPORTION OF CASES IN WHICH THERE ARE TWO OR MORE ADJOURNMENTS FOR MOTION HEARING.
43	DURATION OF SECOND ADJOURNMENT PERIOD.
44	SPREAD OF DURATION OF SECOND ADJOURNMENT PERIOD.
45	PROPORTION OF CASES IN WHICH THERE ARE THREE OR MORE ADJOURNMENTS FOR MOTION HEARING.
46	DURATION OF THIRD ADJOURNMENT PERIOD.
47	SPREAD OF DURATION OF THIRD ADJOURNMENT PERIOD.
48	PROPORTION OF CASES IN WHICH THERE ARE FOUR ADJOURNMENTS FOR MOTION HEARING.
49	DURATION OF FOURTH ADJOURNMENT PERIOD.
50	SPREAD OF DURATION OF FOURTH ADJOURNMENT PERIOD.
51	PROPORTION OF CASES WHICH ARE DISPOSED OF AT THIS STAGE.
52	PROPORTION OF CASES WHICH ARE DISMISSED OUT OF DISPOSED OF CASES.
53	TABLE # - TABULATION OF 'IN SYSTEM' TIME OF CASES WHICH ARE DISMISSED AT THIS STAGE.
54	PROPORTION OF CASES WHICH HAD PLEA BARGAINING RESOLUTION OUT OF THE REST OF THE DISP OF CASES.

55 TABLE # - TABULATION OF 'IN SYSTEM' TIME OF CASES WHICH PLEAD GUILTY TO ORIGINAL CHARGES.
56 TABLE # - TABULATION OF 'IN SYSTEM' TIME OF CASES IN WHICH PLEA BARGAINING RESOLUTION.
57 NOT USED.
58 DELAY TILL TRIAL IS TAKEN UP.
59 SPREAD OF THE DELAY TILL TRIAL IS TAKEN UP.
60 PROPORTION OF CASES IN WHICH ONE OR MORE ADJOURNMENTS FOR TRIAL.
61 DURATION OF FIRST ADJOURNMENT PERIOD FOR TRIAL.
62 SPREAD OF DURATION OF FIRST ADJOURNMENT PERIOD FOR TRIAL.
63 PROPORTION OF CASES IN WHICH TWO OR MORE ADJOURNMENTS FOR TRIAL.
64 DURATION OF SECOND ADJOURNMENT PERIOD FOR TRIAL.
65 SPREAD OF DURATION OF SECOND ADJOURNMENT PERIOD FOR TRIAL.
66 PROPORTION OF CASES IN WHICH THREE OR MORE ADJOURNMENTS FOR TRIAL.
67 DURATION OF THIRD ADJOURNMENT PERIOD FOR TRIAL.
68 SPREAD OF DURATION OF THIRD ADJOURNMENT PERIOD FOR TRIAL.
69 PROPORTION OF CASES IN WHICH FOUR ADJOURNMENTS FOR TRIAL.
70 DURATION OF FOURTH ADJOURNMENT PERIOD FOR TRIAL.
71 SPREAD OF DURATION OF FOURTH ADJOURNMENT PERIOD FOR TRIAL.
72 PROPORTION OF CASES WHICH ARE DISMISSED BEFORE TRIAL.
73 TABLE # - TABULATION OF 'IN SYSTEM' TIME OF CASES WHICH ARE DISMISSED BEFORE TRIAL.
74 NOT USED.
75 PROPORTION OF CASES IN WHICH DEFENDANT FOUND GUILTY AFTER TRIAL.
76 TABLE # - TABULATION OF 'IN SYSTEM' TIME OF CASES FOUND GUILTY AFTER TRIAL.
77 PROPORTION OF CASES IN WHICH PLEA BARGAINING RESOLUTION.
78 TABLE # - TABULATION OF 'IN SYSTEM' TIME OF CASES WHICH PLEAD GUILTY TO ORIGINAL CHARGES.
79 TABLE # - TABULATION OF 'IN SYSTEM' TIME OF CASES WHICH HAD PLEA BARGAINING RESOLUTION.
80 PROPORTION OF CASES IN WHICH THERE IS A PRESENTENCE INVESTIGATION.

81 DURATION OF PRESENTENCE INVESTIGATION.
82 SPREAD OF THE DURATION OF PRESENTENCE INVESTIGATION.
83 PROPORTION OF CASES IN WHICH SENTENCING WITHOUT ADJOURNMENT.
84 DURATION OF ADJOURNMENT BEFORE BEING SENTENCED.
85 SPREAD OF DURATION OF ADJOURNMENT BEFORE BEING SENTENCED.
86 AN INDICATOR SHOWING IF A CASE IS A FELONY OR MISDEMEANOR. (0-MISDEMEANOR)

DESCRIPTION OF THE PARAMETERS OF THE CASES

B. CITY COURT CASES (FELONIES)

PARAMETER #	DESCRIPTION
1	QUEUE # - CASES TO BE ARRAIGNED IN CITY COURT. (1-MALE, 2-FEMALE)
2	PROPORTION OF CASES IN WHICH THERE IS ONE ADJOURNMENT OR MORE IN ARRAIGNMENT.
3	PROPORTION OF CASES IN WHICH THERE IS ONE ADJOURNMENT IN BEING ARRAIGNED.
4	DURATION OF FIRST ADJOURNMENT PERIOD IN BEING ARRAIGNED.
5	SPREAD OF THE DURATION OF FIRST ADJOURNMENT PERIOD IN BEING ARRAIGNED.
6	PROPORTION OF CASES IN WHICH THERE IS ONE ADJOURNMENT FOR LAWYER.
7	DURATION OF FIRST ADJOURNMENT PERIOD FOR LAWYER.
8	SPREAD OF THE DURATION OF FIRST ADJOURNMENT PERIOD FOR LAWYER.
9	PROPORTION OF CASES IN WHICH THERE IS ONE ADJOURNMENT FOR DISPOSITION.
10	DURATION OF FIRST ADJOURNMENT PERIOD FOR DISPOSITION.
11	SPREAD OF THE DURATION OF FIRST ADJOURNMENT PERIOD FOR DISPOSITION.
12	PROPORTION OF CASES IN WHICH THERE IS ONE ADJOURNMENT FOR BENCH WARRANT.
13	DURATION OF FIRST ADJOURNMENT PERIOD FOR BENCH WARRANT.
14	SPREAD OF DURATION OF FIRST ADJOURNMENT PERIOD FOR BENCH WARRANT.
15	PROPORTION OF CASES IN WHICH THERE ARE TWO OR MORE ADJOURNMENTS FOR ARRAIGNMENT.
16	PROPORTION OF CASES IN WHICH THERE ARE TWO ADJOURNMENTS IN BEING ARRAIGNED.
17	DURATION OF SECOND ADJOURNMENT PERIOD IN BEING ARRAIGNED.
18	SPREAD OF THE DURATION OF SECOND ADJOURNMENT PERIOD IN BEING ARRAIGNED.
19	PROPORTION OF CASES IN WHICH THERE ARE TWO ADJOURNMENTS FOR LAWYER.
20	DURATION OF SECOND ADJOURNMENT PERIOD FOR LAWYER.
21	SPREAD OF THE DURATION OF SECOND ADJOURNMENT PERIOD FOR LAWYER.
22	PROPORTION OF CASES IN WHICH THERE ARE TWO ADJOURNMENTS FOR DISPOSITION.
23	DURATION OF SECOND ADJOURNMENT PERIOD FOR DISPOSITION.
24	SPREAD OF THE DURATION OF SECOND ADJOURNMENT PERIOD FOR DISPOSITION.
25	PROPORTION OF CASES IN WHICH THERE ARE TWO ADJOURNMENTS FOR BENCH WARRANT.

26	DURATION OF THE SECOND ADJOURNMENT PERIOD FOR BENCH WARRANT.
27	SPREAD OF THE DURATION OF THE SECOND ADJOURNMENT PERIOD FOR BENCH WARRANT.
28	PROPORTION OF CASES WHICH ARE DISPOSED OF BEFORE PRELIMINARY HEARING STAGE.
29	PROPORTION OF CASES WHICH ARE DISMISSED OR REMANDED OUT OF THE DISPOSED OF QUEUE.
30	NOT USED.
31	TABLE # - TABULATION OF 'IN SYSTEM' TIME OF CASES DISMISSED OR REMANDED BEFORE PRELIM. HEARING
32	PROPORTION OF CASES WHICH HAD PLEA BARGAINING RESOLUTION OUT OF THE REST OF THE DISPOSED OF CASES.
33	TABLE # - TABULATION OF 'IN SYSTEM' TIME FOR CASES WHICH PLEAD GUILTY TO ORIGINAL CHARGES.
34	TABLE # - TABULATION OF 'IN SYSTEM' TIME FOR CASES IN WHICH PLEA BARGAINING RESOLUTION.
35	PROPORTION OF CASES SKIPPING PRELIMINARY HEARING STAGE.
36	QUEUE # - CASES WAITING FOR PRELIMINARY HEARING.
37	DELAY TILL PRELIMINARY HEARING IS TAKEN UP.
38	SPREAD OF THE DELAY TILL PRELIMINARY HEARING IS TAKEN UP.
39	PROPORTION OF CASES IN WHICH THERE ARE ONE OR MORE ADJOURNMENTS FOR PRELIMINARY HEARING.
40	DURATION OF FIRST ADJOURNMENT PERIOD.
41	SPREAD OF DURATION OF FIRST ADJOURNMENT PERIOD.
42	PROPORTION OF CASES IN WHICH THERE ARE TWO OR MORE ADJOURNMENTS FOR PRELIMINARY HEARING.
43	DURATION OF SECOND ADJOURNMENT PERIOD.
44	SPREAD OF DURATION OF SECOND ADJOURNMENT PERIOD.
45	PROPORTION OF CASES IN WHICH THERE ARE THREE OR MORE ADJOURNMENTS FOR PRELIMINARY HEARING.
46	DURATION OF THIRD ADJOURNMENT PERIOD.
47	SPREAD OF DURATION OF THIRD ADJOURNMENT PERIOD.
48	PROPORTION OF CASES IN WHICH THERE ARE FOUR ADJOURNMENTS FOR PRELIMINARY HEARING.
49	DURATION OF FOURTH ADJOURNMENT PERIOD.
50	SPREAD OF DURATION OF FOURTH ADJOURNMENT PERIOD.

51	PROPORTION OF CASES WHICH ARE DISMISSED OF AT THIS STAGE.
52	PROPORTION OF CASES WHICH ARE DISMISSED OUT OF DISPOSED OF CASES.
53	TABLE # - TABULATION OF 'IN SYSTEM' TIME OF CASES WHICH ARE DISMISSED AT THIS STAGE.
54	PROPORTION OF CASES WHICH HAD PLEA BARGAINING RESOLUTION OUT OF THE REST OF THE DISP OF CASES.
55	TABLE # - TABULATION OF 'IN SYSTEM' TIME OF CASES WHICH PLEAD GUILTY TO ORIGINAL CHARGES.
56	TABLE # - TABULATION OF 'IN SYSTEM' TIME OF CASES IN WHICH PLEA BARGAINING RESOLUTION.
86	AN INDICATOR SHOWING IF CASE IS A FELONY OR MISDEMEANOR. (100-FELONY)

DESCRIPTION OF THE PARAMETERS OF THE CASES

C. COUNTY COURT CASES (FELONIES)

PARAMETER #	DESCRIPTION
1	QUEUE # - CASES WAITING TO BE ARRAIGNED IN COUNTY COURT.
2	PROPORTION OF CASES IN WHICH THERE IS A DELAY FOR ARRAIGNMENT.
3	DELAY TILL ARRAIGNMENT.
4	SPREAD OF THE DELAY TILL ARRAIGNMENT.
5	PROPORTION OF CASES IN WHICH THERE IS ONE OR MORE ADJOURNMENTS FOR ARRAIGNMENT.
6	DURATION OF THE FIRST ADJOURNMENT.
7	SPREAD OF THE DURATION OF FIRST ADJOURNMENT.
8	PROPORTION OF CASES IN WHICH TWO OR MORE ADJOURNMENTS FOR ARRAIGNMENT.
9	DURATION OF THE SECOND ADJOURNMENT.
10	SPREAD OF THE DURATION OF SECOND ADJOURNMENT.
11	PROPORTION OF CASES IN WHICH THREE OR MORE ADJOURNMENTS FOR ARRAIGNMENT.
12	DURATION OF THE THIRD ADJOURNMENT.
13	SPREAD OF THE DURATION OF THE THIRD ADJOURNMENT.
14	PROPORTION OF CASES IN WHICH FOUR OR MORE ADJOURNMENTS FOR ARRAIGNMENT.
15	DURATION OF FOURTH ADJOURNMENT.
16	SPREAD OF THE DURATION OF FOURTH ADJOURNMENT.
17	PROPORTION OF CASES IN WHICH FIVE ADJOURNMENTS FOR ARRAIGNMENT.
18	DURATION OF FIFTH ADJOURNMENT.
19	SPREAD OF THE DURATION OF FIFTH ADJOURNMENT.
20	PROPORTION OF CASES IN WHICH YOUTHFUL OFFENDER INVESTIGATION (YOI) IS TO BE HELD.
21	PROPORTION OF CASES IN WHICH PREPLEA INVESTIGATION (PPI) IS TO BE HELD.
22	PROPORTION OF CASES IN WHICH MENTAL OR NARCOTICS EXAM IS TO BE HELD.
23	DURATION OF THE ADJOURNMENT FOR YOI.
24	SPREAD OF THE DURATION OF THE ADJOURNMENT FOR YOI.
25	PROPORTION OF CASES IN WHICH SECOND ADJOURNMENT FOR YOI.

26 DURATION OF SECOND ADJOURNMENT.
27 SPREAD OF THE DURATION OF SECOND ADJOURNMENT.
28 PROPORTION OF CASES IN WHICH THIRD ADJOURNMENT FOR YOI.
29 DURATION OF THE THIRD ADJOURNMENT.
30 SPREAD OF THE DURATION OF THIRD ADJOURNMENT.
31 PROPORTION OF CASES IN WHICH FOUR ADJOURNMENTS FOR YOI.
32 DURATION OF THE FOURTH ADJOURNMENT.
33 SPREAD OF THE DURATION OF FOURTH ADJOURNMENT.
34 DURATION OF ADJOURNMENT FOR PPI.
35 SPREAD OF THE DURATION OF ADJOURNMENT FOR PPI.
36 PROPORTION OF CASES IN WHICH TWO OR MORE ADJOURNMENTS FOR PPI.
37 DURATION OF SECOND ADJOURNMENT.
38 SPREAD OF THE DURATION OF SECOND ADJOURNMENT.
39 PROPORTION OF CASES IN WHICH THREE OR MORE ADJOURNMENTS FOR PPI.
40 DURATION OF THIRD ADJOURNMENT.
41 SPREAD OF DURATION OF THIRD ADJOURNMENT.
42 PROPORTION OF CASES IN WHICH FOUR ADJOURNMENTS FOR PPI.
43 DURATION OF FOURTH ADJOURNMENT PERIOD.
44 SPREAD OF THE DURATION OF FOURTH ADJOURNMENT PERIOD.
45 PROPORTION OF CASES NOT PUT ON TRIAL CALENDAR.
46 PROPORTION OF CASES IN WHICH ADJOURNMENTS BEFORE TRIAL.
47 DELAY TILL TRIAL CASE IS TAKEN UP.
48 SPREAD OF THE DELAY TILL TRIAL CASE IS TAKEN UP.
49 PROPORTION OF CASES IN WHICH SECOND ADJOURNMENT BEFORE TRIAL.
50 DURATION OF THE SECOND ADJOURNMENT PERIOD.
51 SPREAD OF THE DURATION OF SECOND ADJOURNMENT PERIOD.
52 PROPORTION OF CASES GOING TO TRIAL.
53 DURATION OF TRIAL.
54 SPREAD OF THE DURATION OF TRIAL.
55 PROPORTION OF CASES IN WHICH DEFENDANT FOUND GUILTY AFTER TRIAL.
56 TABLE # - TABULATION OF 'IN SYSTEM' TIME OF CASES WHICH ARE FOUND NOT GUILTY AFTER TRIAL.

57 DURATION OF THE ADJOURNMENT FOR SENTENCING.
58 SPREAD OF THE DURATION OF THE ADJOURNMENT FOR SENTENCING.
59 TABLE # - TABULATION OF 'IN SYSTEM' TIME OF CASES WHICH ARE FOUND GUILTY AFTER TRIAL.
60 PROPORTION OF CASES IN WHICH GUILTY IS PLEAD.
61 DURATION OF PPI OR YOI.
62 SPREAD OF THE DURATION OF PPI OR YOI.
63 TABLE # - TABULATION OF 'IN SYSTEM' TIME OF CASES IN WHICH PPI WAS HELD AT THIS STAGE.
64 PROPORTION OF CASES IN WHICH PSI IS HELD AFTER DEFENDANT PLEADS GUILTY.
65 DURATION OF PRESENTENCE INVESTIGATION.
66 SPREAD OF DURATION OF PRESENTENCE INVESTIGATION.
67 TABLE # - TABULATION OF 'IN SYSTEM' TIME OF CASES IN WHICH PSI WAS HELD.
68 DURATION OF ADJOURNMENT FOR SENTENCING.
69 SPREAD OF DURATION OF ADJOURNMENT FOR SENTENCING.
70 TABLE # - TABULATION OF 'IN SYSTEM' TIME OF CASES IN WHICH ADJOURNMENT FOR SENTENCING.
71 PROPORTION OF CASES WHICH ARE DISMISSED AT THIS STAGE.
72 PROPORTION OF THE REST OF THE CASES WHICH DO NOT HAVE PSI.
73 DURATION OF THE PRESENTENCE INVESTIGATION.
74 SPREAD OF THE DURATION OF THE PRESENTENCE INVESTIGATION.
75 TABLE # - TABULATION OF 'IN SYSTEM' TIME OF CASES WHICH HAVE PSI BEFORE BEING DISPOSED OF.
76 DURATION OF ADJOURNMENT FOR SENTENCING.
77 SPREAD OF THE DURATION OF ADJOURNMENT FOR SENTENCING.
78 TABLE # - TABULATION OF 'IN SYSTEM' TIME OF CASES WHICH PLEAD GUILTY.
79 TABLE # - TABULATION OF 'IN SYSTEM' TIME OF CASES WHICH ARE DISMISSED.
80 PROPORTION OF CASES WHICH ARE DISPOSED OF BEFORE TRIAL.
81 DURATION OF MENTAL OR NARCOTICS EXAM.
82 SPREAD OF DURATION OF MENTAL OR NARCOTICS EXAM.
83 PROPORTION OF CASES WHICH HAVE SECOND ADJOURNMENT.
84 DURATION OF SECOND ADJOURNMENT PERIOD.
85 SPREAD OF DURATION OF SECOND ADJOURNMENT PERIOD.

DESCRIPTION OF QUEUES IN THE SYSTEM

QUEUES IN THE CITY COURT ARE 1 THROUGH 18
QUEUES IN THE COUNTY COURT ARE 19 THROUGH 23

QUEUES AT MAJOR STAGES IN CITY COURT CASE FLOW:

QUEUE #	DESCRIPTION
1	QUEUE OF CASES WAITING IN THE 'ARRAIGNMENT STAGE'. (MALE)
2	QUEUE OF CASES WAITING IN THE 'ARRAIGNMENT STAGE'. (FEMALE)
3	QUEUE OF CASES WAITING IN THE 'MOTION STAGE'. (MISDEMEANORS)
4	QUEUE OF CASES WAITING IN THE 'PRELIMINARY HEARING STAGE'. (FELONIES)
5	QUEUE OF CASES WAITING IN THE 'TRIAL STAGE'.

QUEUES WITHIN EACH STAGE:

A. ARRAIGNMENT STAGE:

6	QUEUE OF CASES ADJOURNED FOR LAWYER FIRST TIME.
7	QUEUE OF CASES ADJOURNED FOR DISPOSITION FIRST TIME.
8	QUEUE OF CASES ADJOURNED DUE TO BENCH WARRANT ISSUED.
9	QUEUE OF CASES ADJOURNED FOR LAWYER SECOND TIME.
10	QUEUE OF CASES ADJOURNED FOR DISPOSITION SECOND TIME.

B. MOTION STAGE:

11	QUEUE OF CASES ADJOURNED ONCE IN MOTION STAGE.
12	QUEUE OF CASES ADJOURNED TWICE IN MOTION STAGE.
13	QUEUE OF CASES ADJOURNED THRICE IN MOTION STAGE.
14	QUEUE OF CASES ADJOURNED FOURTH TIME IN MOTION STAGE.

C. TRIAL STAGE:

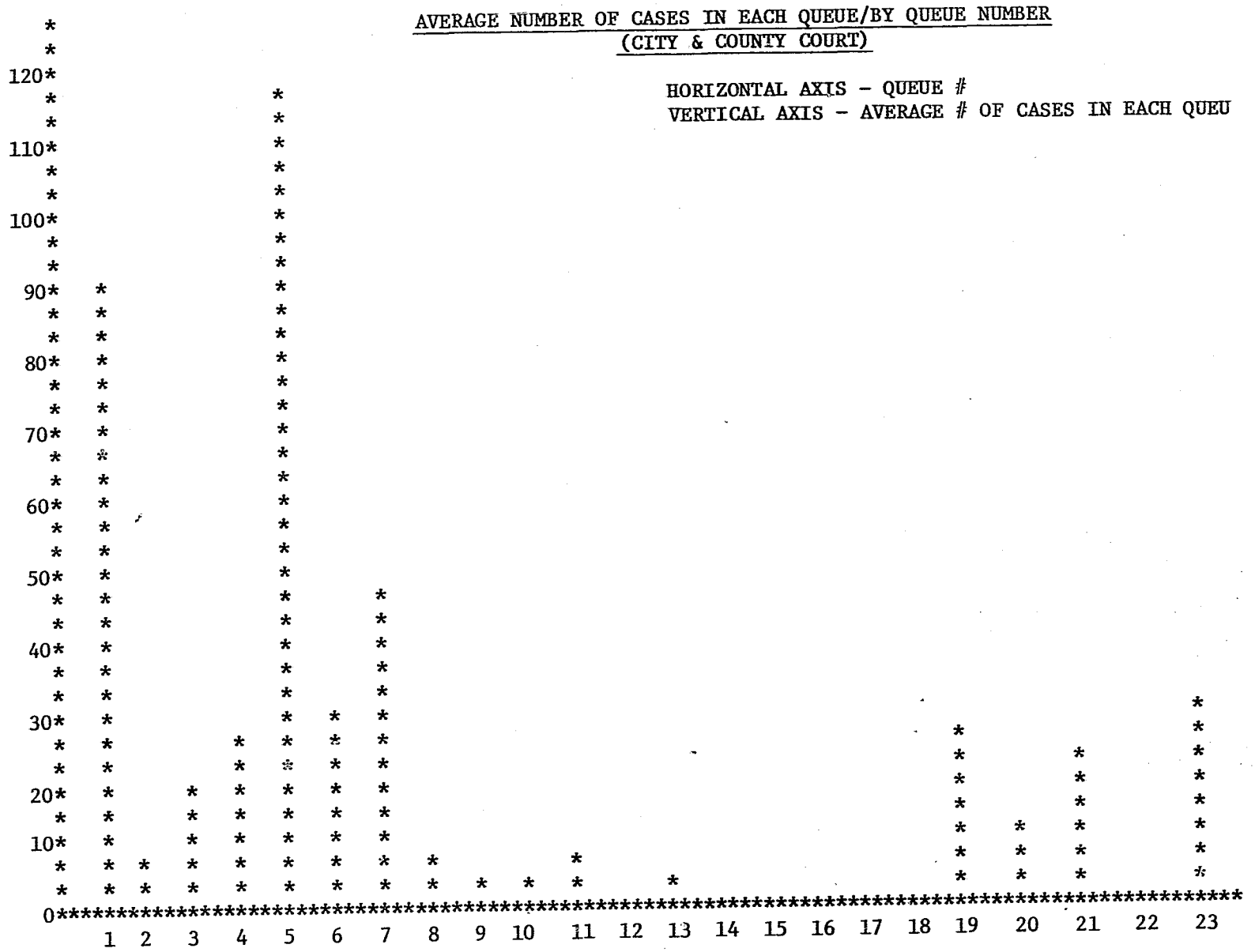
15	QUEUE OF CASES ADJOURNED ONCE IN TRIAL STAGE.
16	QUEUE OF CASES ADJOURNED TWICE IN TRIAL STAGE.
17	QUEUE OF CASES ADJOURNED THRICE IN TRIAL STAGE.
18	QUEUE OF CASES ADJOURNED FOURTH TIME IN TRIAL STAGE.

QUEUES AT MAJOR STAGES IN THE COUNTY COURT CASE FLOW:

19	QUEUE OF CASES WAITING IN THE 'ARRAIGNMENT STAGE'.
20	QUEUE OF CASES WAITING IN THE 'YOI STAGE' AFTER ARRAIGNMENT.
21	QUEUE OF CASES WAITING IN 'PPI STAGE' AFTER ARRAIGNMENT.
22	QUEUE OF CASES WAITING IN THE 'MENTAL OR NARCOTICS EXAM STAGE' AFTER ARRAIGNMENT.
23	QUEUE OF CASES WAITING IN THE 'TRIAL STAGE'.

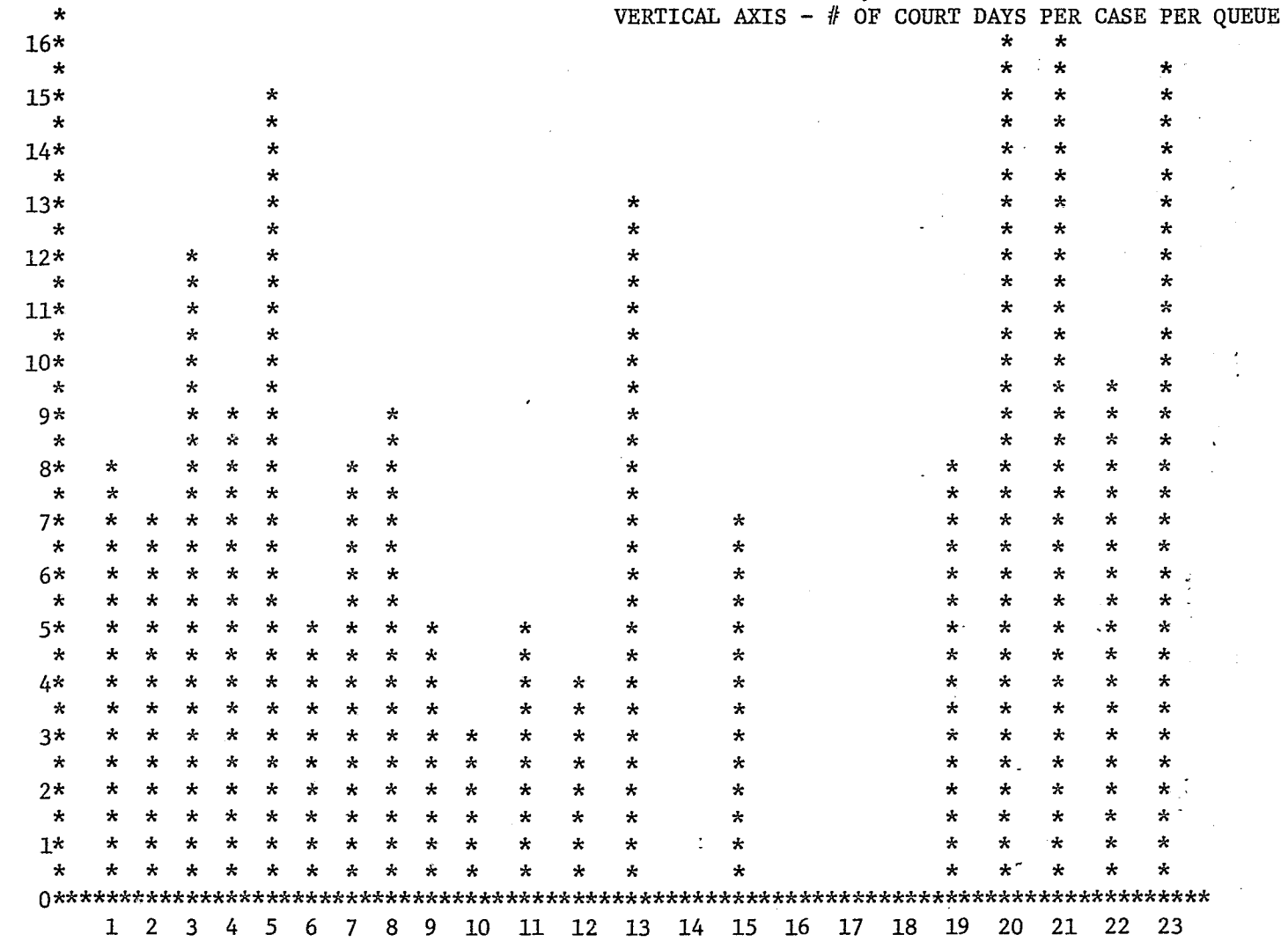
AVERAGE NUMBER OF CASES IN EACH QUEUE/BY QUEUE NUMBER
(CITY & COUNTY COURT)

HORIZONTAL AXIS - QUEUE #
VERTICAL AXIS - AVERAGE # OF CASES IN EACH QUEU



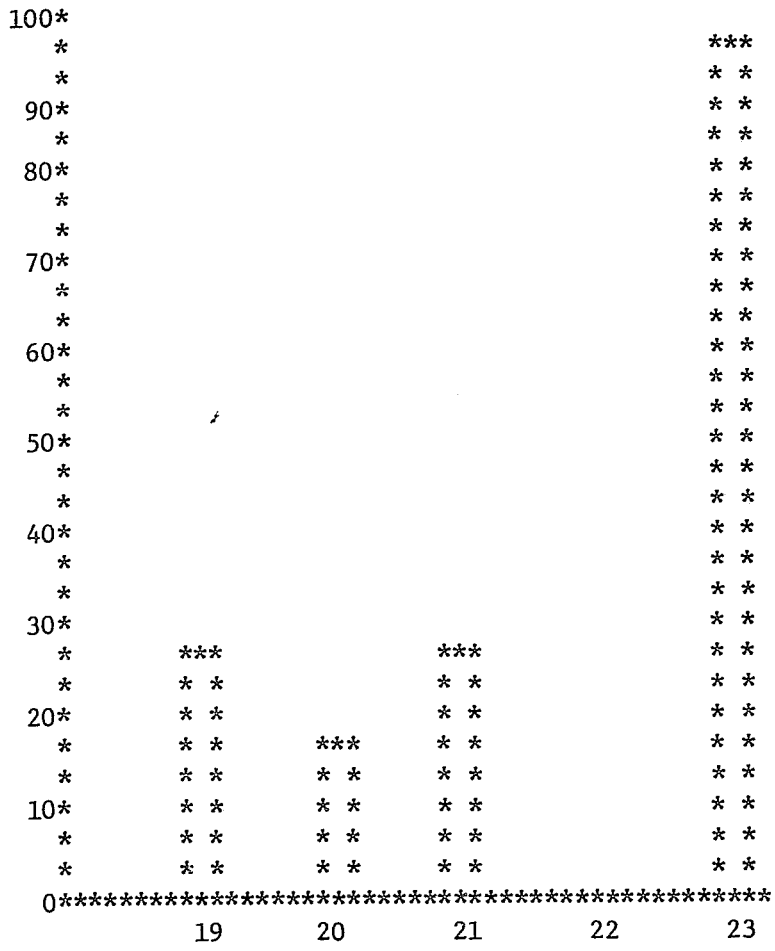
NUMBER OF COURT DAYS PER CASE IN EACH QUEUE/BY QUEUE NUMBER
(CITY & COUNTY COURT)

HORIZONTAL AXIS - QUEUE #
VERTICAL AXIS - # OF COURT DAYS PER CASE PER QUEUE



AVERAGE NUMBER OF CASES IN EACH QUEUE/BY QUEUE NUMBER
(COUNTY COURT)

HORIZONTAL AXIS - QUEUE #
VERTICAL AXIS - AVERAGE # OF CASES IN EACH QUEUE

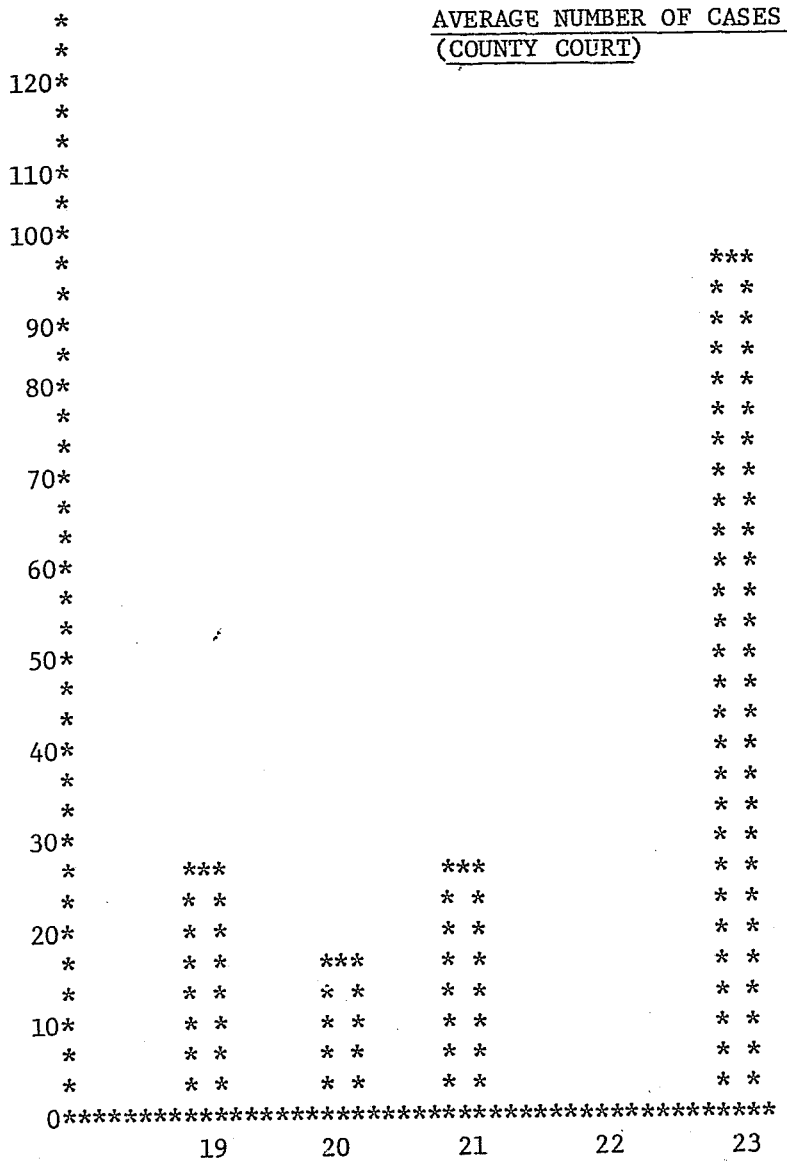


CONTINUED

1 OF 2

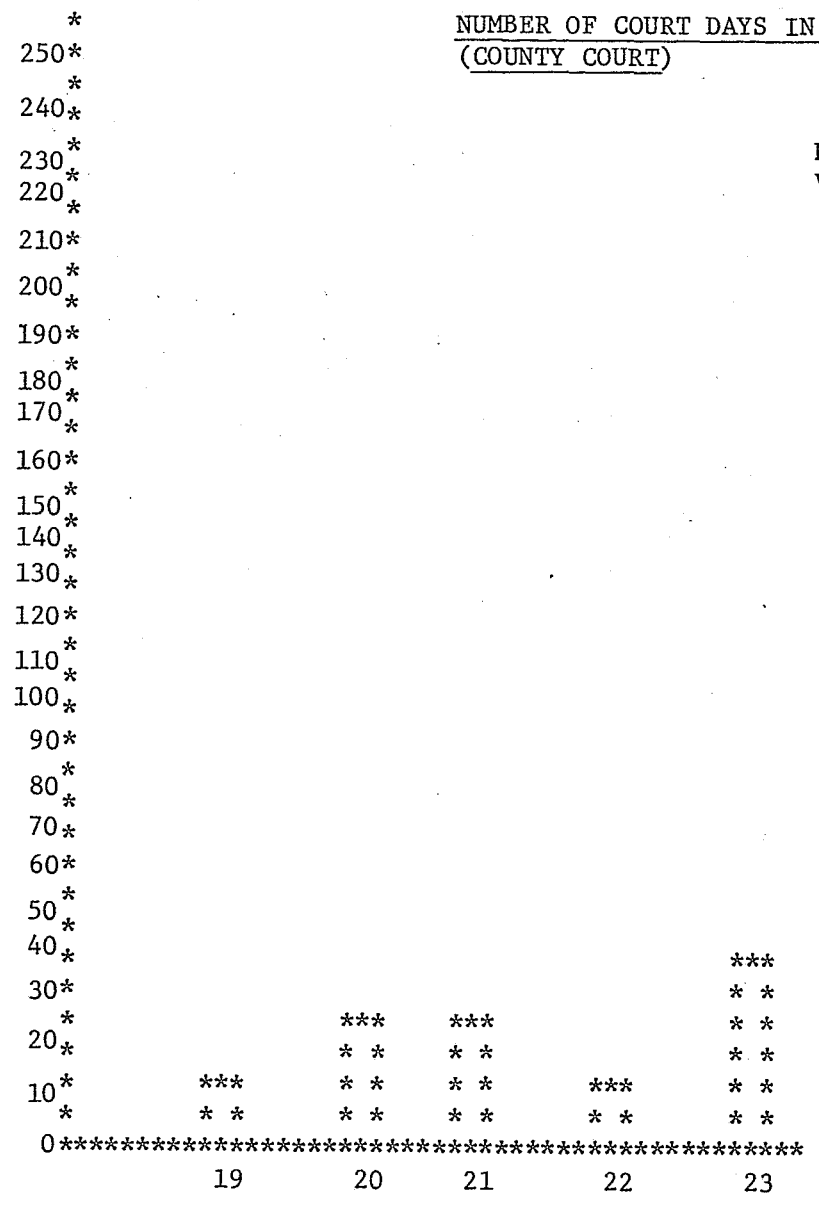
AVERAGE NUMBER OF CASES IN EACH QUEUE/BY QUEUE NUMBER
(COUNTY COURT)

HORIZONTAL AXIS - QUEUE #
VERTICAL AXIS - AVERAGE # OF CASES IN EACH QUEUE



NUMBER OF COURT DAYS IN EACH QUEUE/BY QUEUE NUMBER
(COUNTY COURT)

HORIZONTAL AXIS - QUEUE #
VERTICAL AXIS - # OF COURT DAYS PER CASE PER QUEUE



Validation

The simulation model validation is carried out by comparing the rate at which cases are disposed by the simulated criminal court system and the actual criminal court system. The validation of city court segment, and county court segment was done separately as follows:

(a) City Court Simulation Validation: A random sample of 100 cases in city court was taken. The number of court days in each of these 100 cases spent in city court before being disposed was determined. Since the simulation model run was over 41 court days, all cases which took more than 41 days in the sample were dropped to make the sample consistent with the simulated results. The sample was reduced to 72 by this operation. The frequency table was constructed for the sample. The combined simulation model output was modified by excluding all of the county court cases in it and adjusted to total 72, so that a direct comparison with the sample frequency table may be made. The same frequency table was then compared with the simulation model frequency table. A Chi-square goodness-of-fit test indicated acceptance at a 90 percent level of confidence.

(b) County Court Simulation Validation: The county court segment of the simulation model was run on the computer separately to obtain the "in system" time frequency distribution of county court alone. A random sample of 105 cases in county court was taken, and their frequency table was constructed. The simulation output frequency table was modified to total 105 cases so a direct comparison with the sample frequency table is possible. A Chi-square goodness-of-fit test indicated acceptance at a 90 percent level of confidence.

Conclusions

To study the backlog in the court system, the queues of cases in the simulation model should be analyzed. In both city and county courts, the cases waiting in the trial stage form the longest queue. This queue includes all cases scheduled for trial but waiting to be taken up and also the cases rescheduled for trial after it is taken up. Whereas, the former might be because of the capacity of the court system being exceeded, the latter is due to improper scheduling of cases. Rescheduled cases form 14 percent of the total queue in city court. A better scheduling should help in reducing this queue to the extent the rescheduling of cases contribute to the trial stage queue.

In city court, the cases in the arraignment stage form the next longest queue. This thirty-eight percent of queue has cases adjourned, once or more for various reasons; e.g., lawyer, disposition, bench warrant, etc. Here proper scheduling of cases should make adjournment of cases within the arraignment stage unnecessary and should reduce the backlog significantly. In the county court, the queue in arraignment stage is smaller. The cases in "mental and narcotics exam stage" form a much smaller queue than the rest of the queues in county court.

Notes

1. The number associated with these charges signifies the seriousness of the crime committed within a particular category of crime. Assault 1st, for example, is a much more serious crime than assault 3rd. Similarly, possession of dangerous drugs 4th, a felony, is a much more serious crime than possession of dangerous drugs 6th which is only a misdemeanor.

A STUDY OF JUROR UTILIZATION

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Introduction

The right to trial by jury, as part of our Anglo-Saxon tradition of justice, can be traced back to the Magna Carta. The British system of juries was carried over to the colonies, and the principle was incorporated into the Constitution of the United States. The right to be judged by peers, rather than by an established judge or precept, was intended to make the development of the law responsive to the mores of the community. Hence, the jury system is a bulwark of a democratic system.

Through the years the federal, state, and local governments have summoned citizens, supposedly a random cross-section of the local population, to serve as jurors in the interests of the courts. A system of payment for the services of those selected as jurors has been developed through the years, but the rate of pay has usually been much less than available alternative employments. Because jurors have been meagerly paid and therefore not expensive to retain, the clerks of the courts have tended in the past to bring as many jurors as they thought necessary to meet all possible demands. The clerks could be criticized only when they could not furnish enough

jurors to make up a panel when a judge wished to start a case. The net result was considerable over-staffing of jurors month after month. More recently, especially after the increase of federal jurors' pay to $20.00 per day, there is increasing concern for the better utilization of jurors' time. There is also more recognition that the frustration of waiting and wasting time might have as much effect in alienating prospective jurors as the size of their stipend.

This study of the jury system operation of the District Court for the District of Columbia reflects this increasing concern with the operation of the jury system (1). A condensation is presented here, not simply to show how statistical methodology is useful in understanding the problem, but to encourage solutions to alleviate the problem.

Operations Involved in Jury Trials

Each jury trial involves two basic juror operations, as shown in Figure 1. A preliminary operation is involved in selecting the jury pool, but this is a clerical or machine operation done in the office of the Clerk of the Court. In the D. C. Court, the names for the jury pool are selected at random by computer from the lists of the city directory. Those selected respond to a questionnaire through which those ministers, doctors, lawyers, women, and others, if they desire, are eliminated from the list. During the period of this study, the court subpoenaed a pool of about 250 jurors to serve each month.

The first operation is the selection of the panel from the jury pool, during what is called the "voir dire," that is, the right to see and speak. The voir dire panel usually involves thirty people for a

median time of 45 minutes. Its purpose is to ensure that the jurors finally selected for the trial are not biased; that they do not know the principals, witnesses, or counsels; or that they have not already made up their minds on the issues involved. Then, the jurors selected, usually twelve with two alternates, listen to the evidence and return their verdict. The usual median is 9 hours trial time.

After the pool has been selected and summoned for service on the first court day of the month, the names are randomized and placed on a wheel. The first names are sent to the first panel, the next names to the second panel, and so forth. The names are placed at the end of the list as they return from service. The operation is orderly and systematic. The jurors not being used in panels or in juries wait in the jury lounge until called. The District Court has fifteen authorized judges, but any number of them can be holding court at a given time. When several of them request panels at the same time, a large number of jurors is required; but the number in use trails off rapidly as the jurors are selected and those not needed return to the jury lounge.

The operation of the jury system can thus be described as one requiring a large but variable start-up crew for a short time, plus a smaller longer-time production crew while the task is in progress. Both the length of the start-up task and the production job are uncertain but can be described by a log-normal distribution. For each court, the number of jurors in use can be large, small, or zero, depending upon the stage of a case in progress, or on the absence of

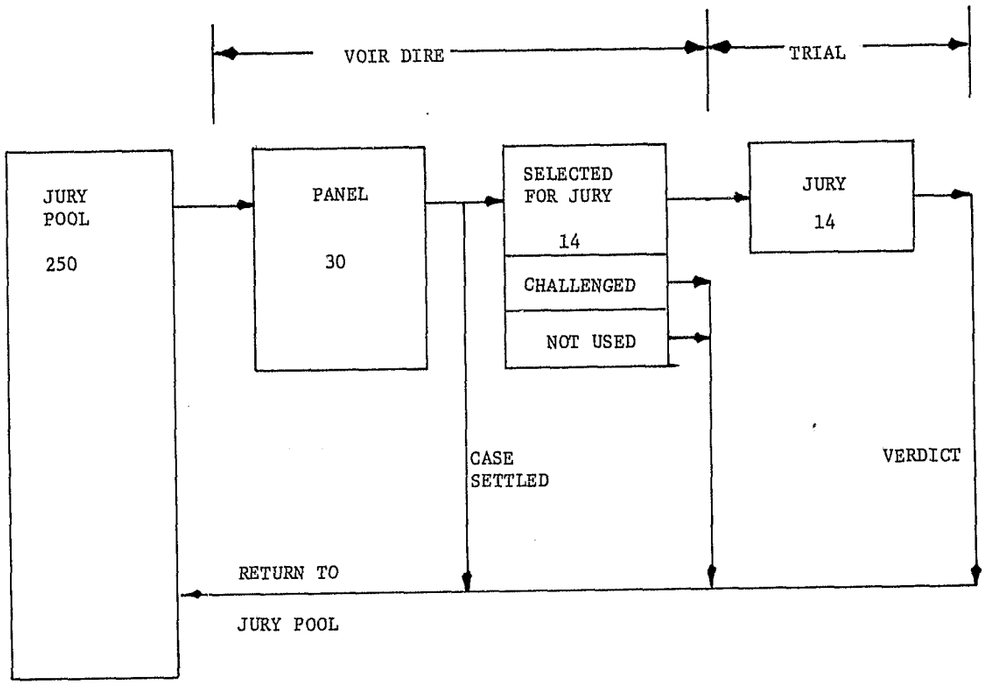


FIGURE 1. FLOW CHART OF JUROR SELECTION

a case. The number of jurors required for the pool of a single court or court room would be equal to the size of the largest expected panel, thus two or more times the number needed for the trial. When many court rooms use a common pool together, then the number needed for the pool depends upon the number of courts in session and the number of simultaneous panels. The largest number of jurors in use in panels or in trials during a day is called the "daily peak." The number required for the pool is thus equal to the largest expected daily peak. The development of the distribution of these daily peaks, and the use of this distribution for the purpose of estimating pool size are important contributions to this study.

Data Used

The some 245 cases called for jury trial in January, February, and March, 1970, are used as basic data in the study. For each case, some ten points of information were obtained from two original sources; the individual case panel sheets containing the list of names of jurors sent, and the daily sheet of jurors needed. These sources provide information on the time the panels left the jury lounge for the voir dire, the number in the panel, the number challenged or not reached, and the number selected for the jury. The name of the judge is also coded in the record. The time those not needed returned to the jury lounge is taken as the end of the voir dire and the beginning of the trial. The time the jurors return from a trial to the lounge is taken as the end of the trial. Nowhere in the offical case records are these times available; they have not before been brought together for

analysis of the operation.

This information is then fed into a computer to determine the times and numbers used in each case and their distribution. The number used for each 10-minute period of each day is also determined, to ascertain the average peak numbers for each day and to compute their distributions.

Operating Times

The voir dire or panel times are shown in Figure 2, the median time being calculated as 45 minutes and the average time as 57 minutes. Three long and unusual voir dires are excluded from the data as "outliers" which needed to be studied further. The distribution of panel times is shown to be log-normal as might be expected for this type of time utilization event.

The trial times are shown in Figures 3 and 4 for both criminal and civil cases, and for morning and afternoon starts. Some 12 long cases, over 31 hours, are excluded as outliers. Why cases starting in the afternoon require more time than those starting in the morning is not yet explained, although the arbitrary assumption that the court day is six hours long may be involved. If the actual court day is shorter, then the times of those cases going on to the next day will be biased by the exaggeration. Then, too, there may be other factors--complicated cases may require longer pre-trial preparation, such as the handling of pre-trial motions and thus delay the case start by that extent.

Frequency distributions are shown for both criminal and civil

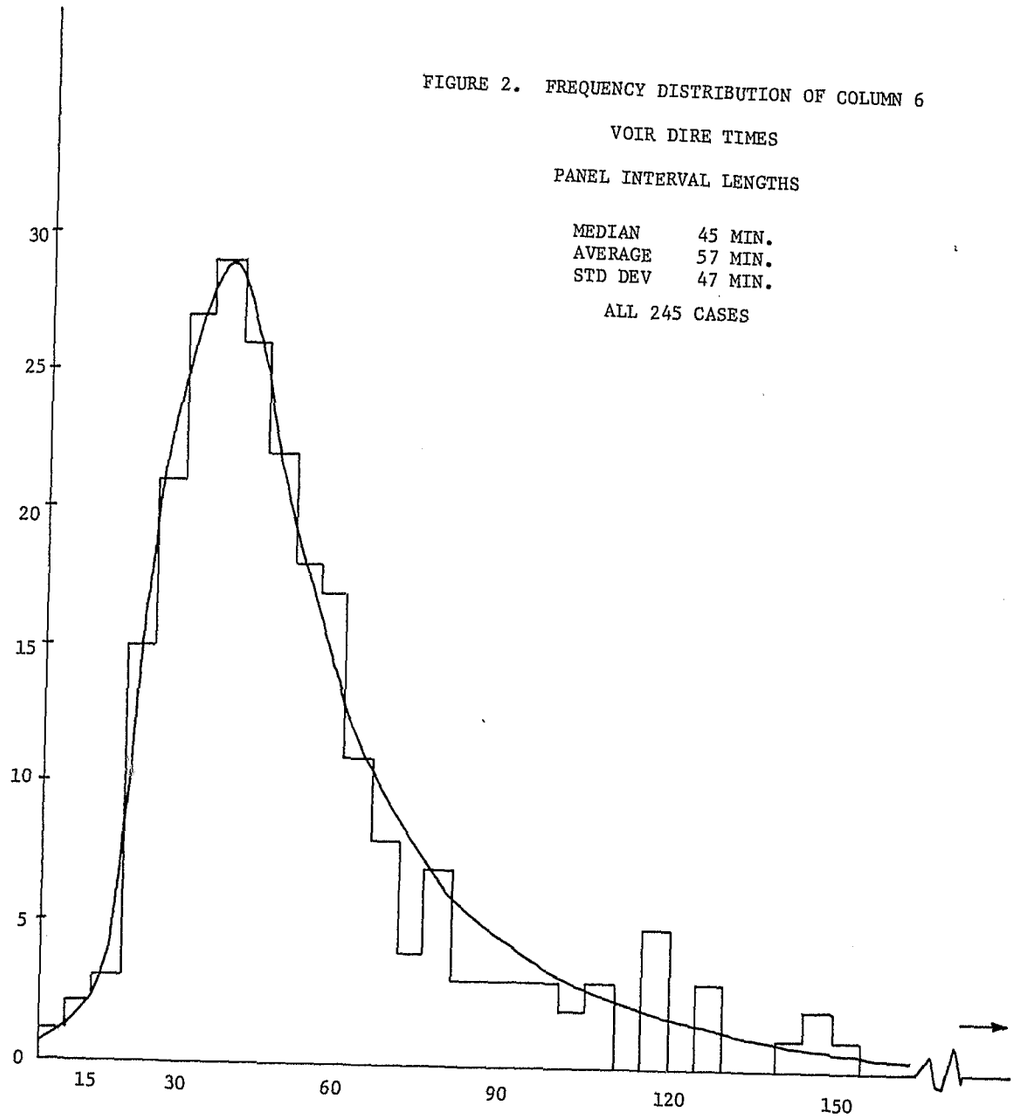


FIGURE 2. FREQUENCY DISTRIBUTION OF COLUMN 6

VOIR DIRE TIMES

PANEL INTERVAL LENGTHS

MEDIAN	45 MIN.
AVERAGE	57 MIN.
STD DEV	47 MIN.

ALL 245 CASES

FIGURE 3. FREQUENCY DISTRIBUTIONS OF THE LENGTH OF TRIALS IN HOURS.

(AFTER VOIR DIRES)

MORNING VS AFTERNOON VOIR DIRE STARTS

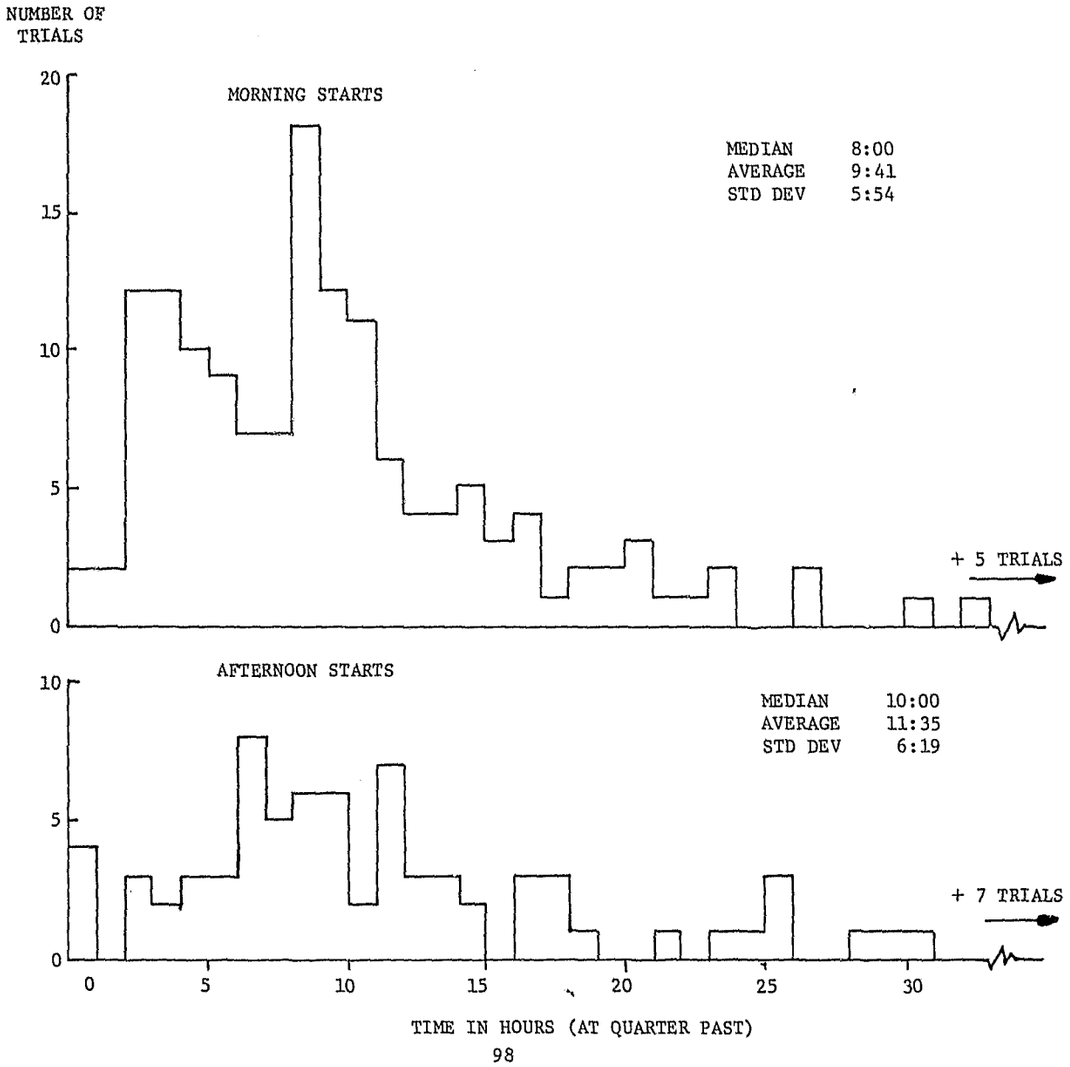


FIGURE 4. FREQUENCY DISTRIBUTIONS OF DURATION OF TRIALS IN HOURS

(AFTER VOIR DIRES)

CRIMINAL VS CIVIL

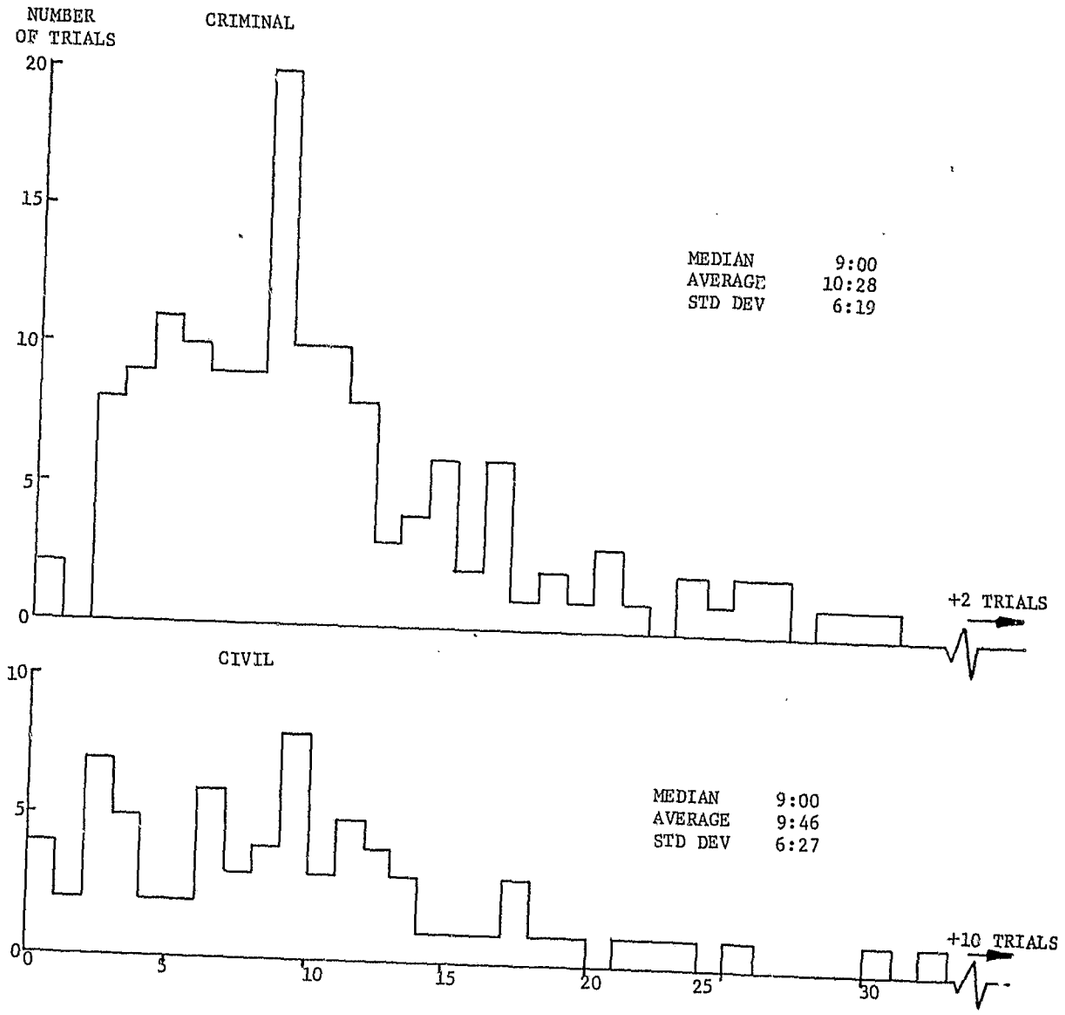
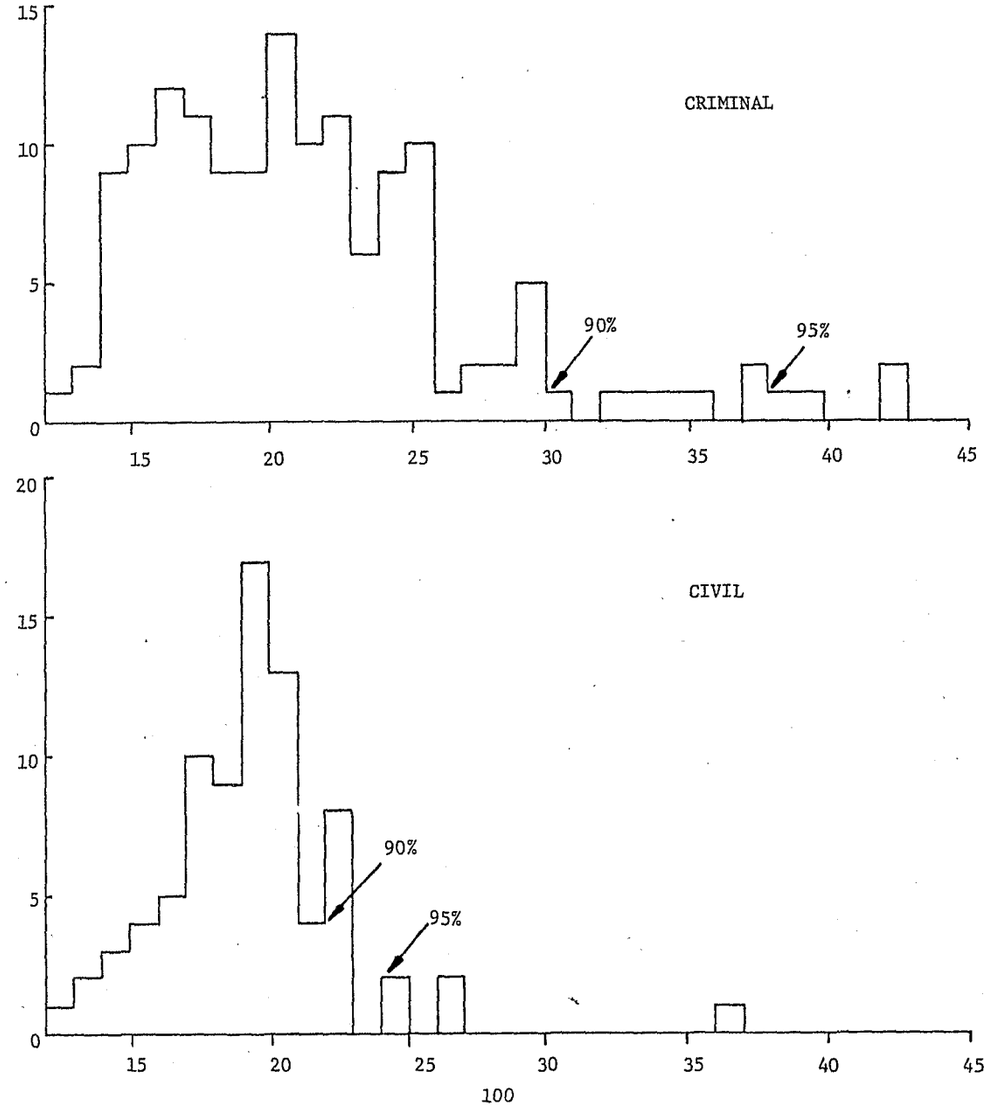


FIGURE 5. COLUMN 12 - NUMBER USED IN PANEL



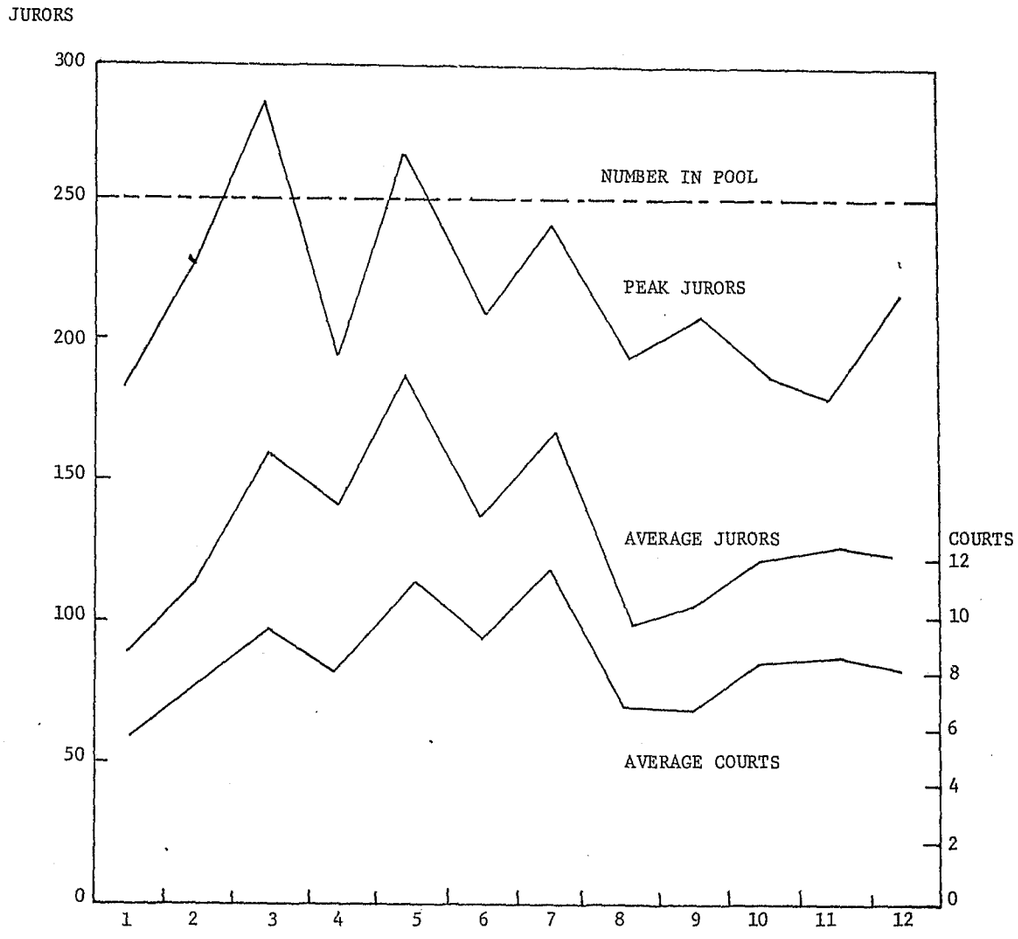


FIGURE 6

PEAK AND AVERAGE NUMBER OF JURORS UTILIZED,

AND AVERAGE COURTS IN SESSION BY WEEKS

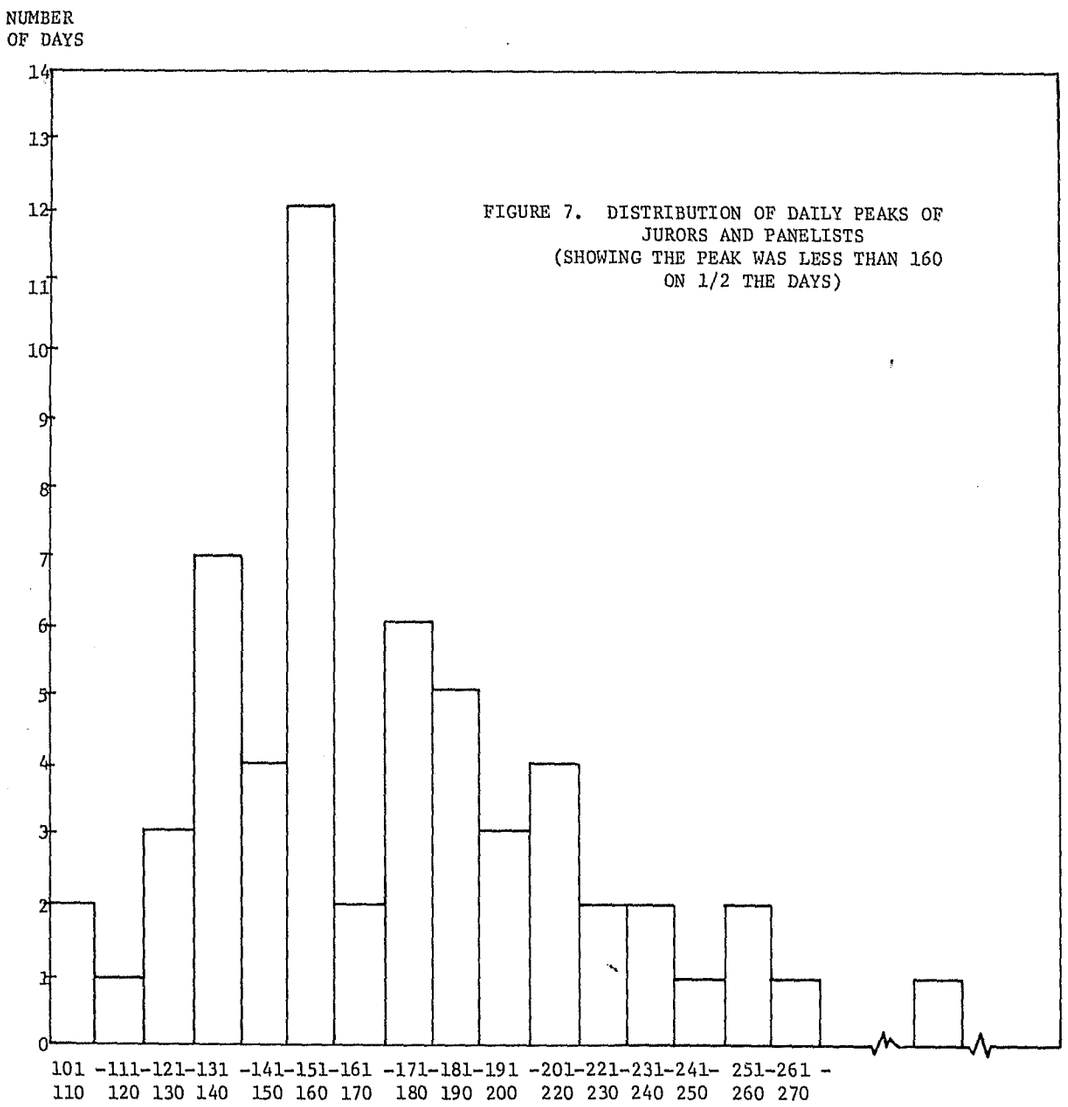


FIGURE 7. DISTRIBUTION OF DAILY PEAKS OF JURORS AND PANELISTS (SHOWING THE PEAK WAS LESS THAN 160 ON 1/2 THE DAYS)

TABLE 1.

Days of Peaks Exceeding 225 Jurors

Week/Day	Daily Peak	Time Span	Simultaneous: Panels	Trials	Other
2 3	226	1110-1130	5	2	
3 1	283	1200-1520	4	6	Large panel of 120 for "Washington 9"
3 4	231	1110-1120	3	9	
5 1	253	1020-1150	6	9	
5 2	263	0910-1540	2	11	Large panel of 100 held all day
5 4	247	1040-1550	3	11	
7 3	242	1030-1120	3	12	

trials. The forms of these distributions suggest that there might be many sub-classes collected in the total, especially in the case of the civil trials. But, the data available so far do not enable us to identify these subgroups precisely.

Numbers of People Used

The average number of people used each day is computed as a weighted average based on time involved. Thus, on day 1/1 (first day of the first week), the peak number of jurors used was 128; but each of these was used less than half time with the resultant average being 61.52 jurors. This average number was 0.25 of the official pool size of 250. On this day, there were 3.07 courts in session and the ratios of peak and average jurors to the courts in session were 41.67 and 20.03 respectively. Each following day can be interpreted in a similar manner.

The daily average number of jurors used varies from a low of 55.02 (0.22 of the pool) on day 1/5 to a high of 238.45 (0.95 of the pool) on day 5/2. The average of these daily averages is 125, just half the pool. The average daily peak averages 173.5 but varies from 106 on day 1/5 to 283 on day 3/1. The peak runs over the pool of 250 on three occasions; that is possible because jurors are released from large panels as soon as challenged and thus makes them available for other panels.

On seven days of the 59-day study period, the daily peaks exceeded 225 jurors. The circumstances surrounding these days are shown in Table 1. As might be expected, the high daily peaks result from a

large number of simultaneous starts, many courts in session with additional "start-up" demands, or panels of an unusually large size.

These circumstances suggest that some action might be taken to avoid simultaneous panels, to encourage more uniformity in the number of courts in session, and to handle large panels outside of the regular pool. Computer simulation makes possible some estimates of the effect of these measures.

Computer Simulation

Computer simulation makes it possible to study the effects of replaying the records under nearly the same conditions or those purposely changed. Each case can be considered a card to be redealt in random order to develop additional months of experience on what might have happened to the daily peaks and the other parameters of interest. The counterpart to past experience, however, is difficult to create when the rules of the game are not easily codified, so rules for the simulation were developed. The most important of these was that the number of courts in session be fixed at either 6, 9, or 12, and that a new case be started as soon as a previous case was finished provided it ended before 1500, or 3:00 p.m. The actual cases were selected at random rather than the usual simulation practice of using smoothed distributions inasmuch as the original distributions did not lend themselves to such treatment. Various factors were thrown in, such as delaying the start of a voir dire panel until 30 minutes after a previous one started. Another variation was allowing only morning starts, and this was followed by allowing morning starts with

a half-hour delay. It turned out that these variations from the continuously operating n-court models seriously diminished the number of "starts per day," that is, the number of cases handled by jury trial, and so were not carried through. The results of the four basic simulations are shown in Table 2. These simulations were carried out for a period of 400 days, equivalent to 20 full court months, using the case records over and over again. For instance, in the 12 month simulation, a total of 2,407 cases were replayed. Each of the original 245 cases was used nearly ten times over.

Table 2 shows that the number of daily starts depends primarily on the number of courts in session, being about one-half start per day per court in session. This ratio depends obviously on the average length of the case, voir dire plus trial. The daily peak per court is very regular--just under 19 jurors for the 9 and 12 court systems. The upper limit (the 96th percentile) of jurors per court is also quite regular, about 24 per court. These factors may be useful in planning the number of jurors a court system needs.

An interesting part of Table 2 is the comparison between the observed experience and the simulations. The actual experience showed that there were 4.1 starts per day; this is equivalent to a simulated 8.2 continuously-operating court system, but the actual number of courts in session varied from 5 to 15. The average daily peak of 173.5 experienced was much like the simulated 9-court peaks, but the standard deviation of the observed peaks was 39.98 in contrast to the simulated standard deviation of 23.18. This difference

TABLE 2

Simulation of 6, 9, and 12 Courts
Versus Actual 1970 Experience

(Based on 20 months of simulation, 3 months actual)

	Simulation				Actual
	6-Court	9-Court	9-Court w/Delay	12-Court	1970
Voir dire starts per day					
Average	2.90	4.54	4.44	6.02	4.1
Standard Deviation	1.39	1.73	1.71	2.18	---
Daily peaks of jurors					
Average	118.43	169.93	168.44	223.45	173.50
Standard Deviation	22.32	23.18	24.90	26.29	39.38
Upper daily peaks (96th percentile)	170	220	240	285	243
Daily peak/court	19.74	18.88	18.72	18.62	---
96th percentile/court	28.33	24.44	26.66	23.75	---

is explained by the variation in the actual number of courts in session, the wide swings in the upper limit reflecting the shifting base. The observed upper daily peak of 243 (at about the 96th percentile) is much larger than that of 220 expected for the simulated 9-court system since it reflects an apparent short time plateau in the number of courts.

The distribution for the simulated 9-court system is fairly regular, and is what might be expected from this type of operation, since it conforms closely to the theoretical Gumbel extreme value distribution. The exact probability limits for this distribution can be read from the Gumbel tables. This distribution suggests that the upper limit of the daily peak (96th percentile) is about 1.3 times the average daily peak.

The simulations also show how difficult it is for a judge to estimate whether he will need a panel for the following day, assuming that his court is operating continuously. The simulations suggest that there is one-half case start per court per day, so if a trial is in progress at the end of the day, there is a 50-50 chance that it will end the next day in time for another to begin. The uncertain length of trials makes estimating the next day's panel needs similar to tossing a coin. The evidence over the 3-month period from the daily sheets shows that 522 panels were requested, but that only 245 were used. The point is that an individual judge could probably predict his panel needs more closely, but someone predicting the panel needs for an entire 9-court or 12-court system might do so more accurately.

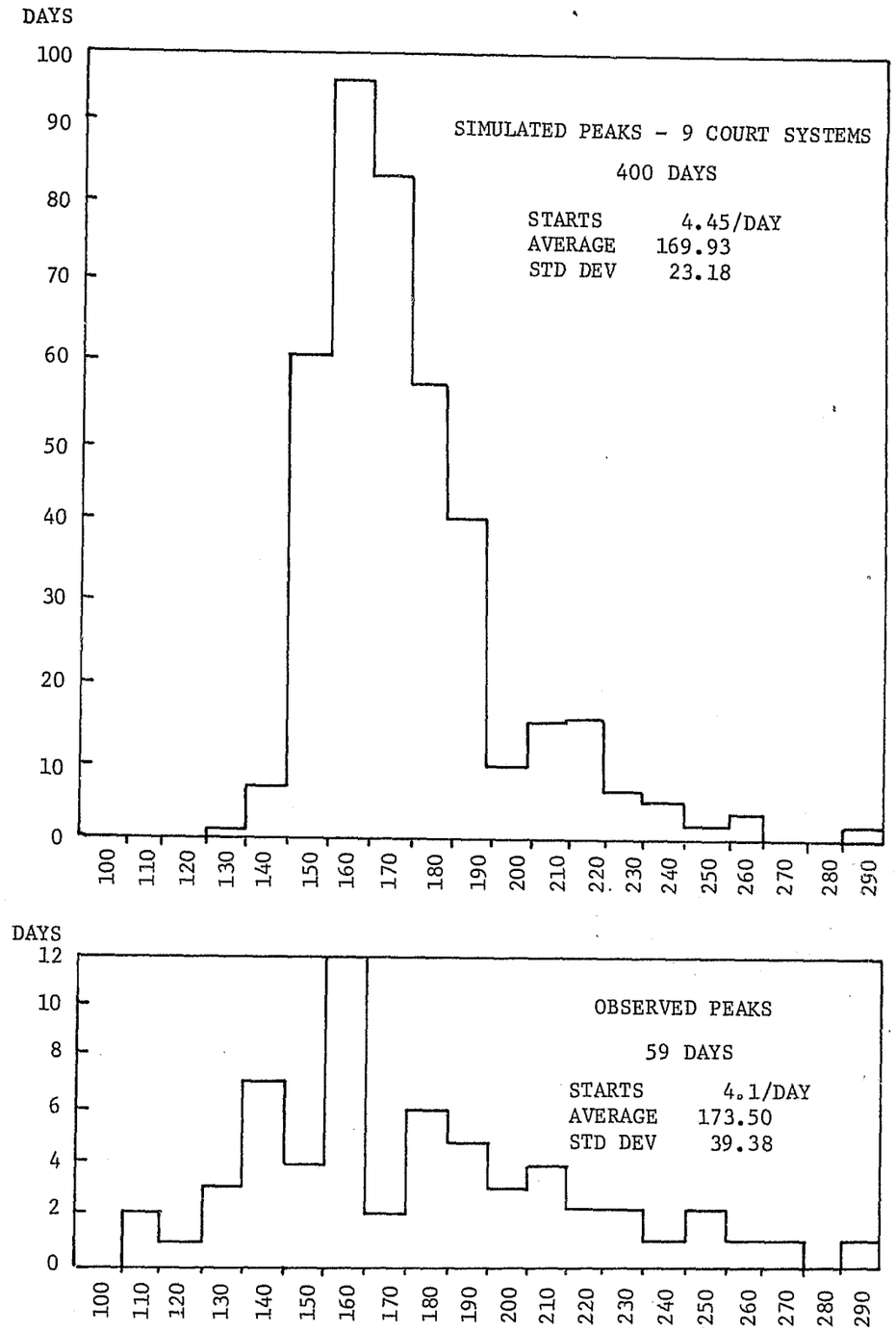


FIGURE 8. DAILY PEAKS OF JURORS ACTUAL VS SIMULATED

Suggestions for Improvement

The original hope of this study was to suggest rules by which jurors' waiting time could be reduced. The study has shown that for a system with a monthly jury pool fixed in advance, the best possible reduction would be from the current 50 percent underutilization to about 35 percent. On practical grounds, however, the real task is to translate this possibility into forms of action that might appeal to the judges, since it is they who generally have the power of decision as to the date and time of case starts, the size of panels, and other factors. Fortunately, court administrators are available to assist in this practical translation task.

Juror utilization might be improved by three types of actions; namely, those intended to smooth out the demand for jurors, actions to adjust the supply of jurors more closely to the demands, and actions to cut down on the number of panelists and jurors needed. Some general administrative suggestions are also made for utilizing a daily computer printout chart to update this utilization information and descriptive charts.

Actions to smooth out the demand for jurors include all those that would tend to make the court operation more continuous and to avoid the daily, weekly, and periodic fluctuations that were so apparent in the study period. Several suggestions seem pertinent:

(1) Encourage earlier voir dire starts, as close to 9:00 or 9:30 a.m. as practical to avoid the present morning peak near 11:00 and the afternoon peak at 2:00 p.m. Spreading out the voir dire starting times would tend to lessen the daily peaks of juror utilization attributable to simultaneous panels.

(2) Encourage Thursday and Friday starts with the same frequency as on other days. This smoothing out of the week would have many effects, for it would lower the Monday and Wednesday case starting peaks, and raise the Tuesday and Thursday ones. This is because of the typical 2-day cycle of cases. The smoothing would also tend to bring the juror utilization on Thursday and Friday up to the level of the other days.

(3) Encourage those judges who do not sit regularly to start cases in off-peak periods, if possible, and to avoid starts on Monday, Tuesday, and Wednesday, as well as weeks like 3, 5, and 7 of the study period when much-publicized cases were started.

Actions to adjust the supply of jurors more closely to the demands would involve giving up the notion of a fixed monthly pool in favor of one based upon daily or weekly anticipated needs. Since the uncertain length of cases makes it extremely difficult for an individual judge to determine his panel needs for the next day, the suggestions here have to do with the estimation of the number of panels needed based on the number of courts now in session, plus the character of voir dire, trial times, and numbers remained the same, an average daily peak of 19 jurors per court is expected, and a maximum peak of 24 per court. If the number of courts in session can be estimated in advance, these factors could provide useful guidelines in determining the numbers that will be needed.

Manning at average peak levels might be supplemented by telephone summons on those days when extraordinary events seemed to be taking place, some rules could be worked out so that when the number used edged toward the average peak, an additional number might be called

which would meet the expected maximum peak.

Tables of numbers of jurors to be called for specific numbers of courts in session could easily be prepared for the administrative clerks. The abandonment of the monthly panel concept in favor of a daily or weekly panel whose size is adjusted to the number of courts in session might reduce the underutilization of jurors to the neighborhood of 20 percent. This would be a significant gain over the 35 percent minimum underutilization possible with a fixed monthly panel.

Actions to lessen the number of jurors needed, either through reducing the size of panels or the size of juries, have been suggested by many sources. To reduce panel size would have a direct effect on underutilization of jurors by changing the average-to-peak relationship. The information obtained on the number of people utilized per panel suggests that civil panels of 23 and criminal panels of 29, excepting murder cases for which 36 would be needed, would cover at least 90 percent of the voir dire needs. Reducing the panels in this way would not have much effect on average juror use, because of the short time of the voir dire compared to the length of the trials. The effect would be to reduce the daily peak needs, and it is estimated that the average daily peak would be reduced from 19 to approximately 17.5 per court. Thus, for a 9-court continuously operating system, a daily peak of 158 might be expected rather than the observed average daily peak of 173.5. The maximum panel size could then be lowered to about 205, a significant reduction from the fixed pool size of about

220 estimated for the 35 percent rate of underutilization. This sizable reduction in the necessary monthly pool size is in addition to that possible from more continuous operation. With panel size reduction and more continuous operation, the underutilization of jurors might be reduced to about 15 percent.

The reduction of the jury size from 12 to 6, especially for civil cases, has been widely discussed. This might halve the need for jurors, but without other changes would have little effect on the utilization ratios developed above. A six-man jury system might also subject those called to much unnecessary waiting time. The basic question in this regard is whether the number of challenges could also be halved, and this is indeed doubtful. If the panel sizes for a six-man jury remain nearly what they are for a 12-man jury, the percentage of jury waiting time would be greatly increased. For a six-man jury system to provide any significant juror time savings, the panel size would have to be proportionately reduced. A six-man jury might involve a reduction in jury deliberation time, which is part of the trial time. The strategy of decision-making might also be different with the smaller jury, but these subjects are outside the scope of this study.

Actions might be taken to remove frequently-challenged people from the jury pool. In the January pool, 14 persons were challenged five times or more; none of them served again on a jury. One man was challenged ten times.

Postscript

This study has analyzed the machinery of juror utilization by statistical methods common to those in operations research and statistical quality control. The 50 percent underutilization of jurors found during the study period, while a considerable improvement over the 85 percent underutilization informally encountered two years previously, fell short of the practical goal of 25 percent to 35 percent theoretically attainable under the pool-type operation. This study has been within the experiences and practices of this one federal court.

Other courts are said to be experimenting with quite drastic changes in juror selection practices. One of these, now being tried in Los Angeles, is that of selecting on one day all the juries needed for the next week or two. The united large pool needs to report only on the day of selection; i.e., the first day of the period; and the jurors selected need report only on the day their case is called. This system saves juror waiting time, but it does mean a great number of people must be assembled on the selection day and may involve considerable waiting on the part of the jurors selected in view of the uncertain day on which their trial might commence.

Other approaches may be suggested by industrial practices in manning those operations which require large start-up crews and involve uncertainty with respect to the length of run. Such approaches can be tested using the study period data base or more recent information. What is essential is that new methods be suggested that can

be understood and implemented by the many court clerks, methods which will achieve a high utilization of jurors without slowing in any way the process of justice.

BIBLIOGRAPHY

Bullen, Dada. "Boredom Often for the Juror." The Courts vs. Crime, The Washington Star, Washington D. C., 1969.

Merrill, Frederic R. and Linus Schrage. A Pilot Study of Utilization of Jurors . American Bar Foundation, Chicago, 1970.

Pound, Roscoe. "Jury", Encyclopedia of the Social Sciences, Volume 7 pp. 492-498, Macmillan Co., New York, 1937.

The Courts, Report of the Task Force on the Administration of Justice, The President's Commission on Law Enforcement and the Administration of Justice, "Treatment of Jurors and Witnesses", pp. 90, 91 170, 171, U. S. GPO, Washington, D. C., 1967.

Court Management Study, Report of the Use of the Committee on the District of Columbia, United States Senate, "Jury Management", pp. 104-107, and Appendix G, "Summary Report of Juror Survey", pp. 174-179, U. S. GPO, Washington, D. C., 1970.

END