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ON THE JUROR UTILIZATION PROBLEM

Melvin Henriksen and George H. Orland*

I. INTRODUCTION

One of the authors, after hearing complaints night after night from his wife who was on jury duty, and finding it too much to bear, agreed to do something about the situation in return for peace. And so this study for the more efficient use of jurors was born. The aspects and magnitude of this problem have been discussed in many places.¹ Basically we are concerned with achieving a better match between the number of jurors in a courthouse on a given day and those used in the judicial process.

We are mathematicians with no previous background in court matters and we have approached the problem in a quantitative fashion. The Harvey Mudd College Mathematics Clinic was kind enough to provide six students: D. Abrahamson, J. Coquillard, J. Irvine, G. Johnson, J. Lavrakas, and D. Taper. The Superior Court of Los Angeles County was kind enough to subsidize the study.²

The solution we have devised is one requiring no legislative changes. It works under the current system as a purely administrative action of local jury commissioners and judges. This assures flexibility and permits modification, if necessary.

We had expected, initially, that our techniques would be much more statistical in nature. Indeed, we had thought we could formulate a math-

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¹A few examples are:

William R. Pabst and G. Thomas Munsterman, "The Economic Hardship of Jury Duty," Judicature, May 1975. Vol. 58, Number 10.

William A. Stoever, "Suggestions for Improving Juror Utilization in the United States District Court for the Southern District of New York," The Institute of Judicial Administration, New York, July 19, 1971.

Leon S. Lasdon, Allan D. Waren, Steven J. Madson, "Juror Management in a Metropolitan Trial Court," Judicature, April 1974, Vol. 57, Number 9.

²Since this study was completed, we have learned that the Superior Court is in the process of implementing these results in the Pomona Courthouse and, in the event that no difficulties arise, in the Norwalk and Long Beach Courthouses as well.

ematical or statistical model for determining the number of jurors needed, and test it easily with the aid of data stored in court records which we could obtain rapidly. Instead we discovered that most of the data we needed was not easily accessible in existing records, and therefore we had to rely almost exclusively on information gathered during the term of our study. For example, while we could find out from existing records how many jurors were sent to a courtroom for a voir dire process, we could not find out how many of those sent had actually been questioned before a jury was impaneled. The Jury Commissioner's office met this problem by designing and distributing forms to supply us with the information we needed. However, the short term of the study forced us to narrow our statistical base and to look for more deterministic techniques.

In addition we had thought that a careful analysis of the court calendar in the late afternoon of a given day would help us to predict the number of court cases that would come to a jury trial the next day. Since fewer than 7% of the criminal cases and only about 9% of the civil cases scheduled to come to trial on a given day actually do come to trial on that day, the calendar proved to be more fiction than fact from our point of view.

At the conclusion of our study made during the spring semester of 1975, we submitted a report to the Superior Court of Los Angeles County. Sections II through IX below come from it, for the most part, verbatim. Section X contains some *a posteriori* reflections as to how the inefficient use of jurors come about and why a remedy is so hard to find.

II. THE STATEMENT OF THE PROBLEM

This study recommends a system to improve the utilization of jurors in the Los Angeles County Superior Court System. Presently the percentage of available jurors participating in court proceedings on any given day is very small. This means that the costs of operating the jury system are unnecessarily high, and the juror's time is spent less productively than it could be.

Over 125,000 citizens will serve on jury duty in Los Angeles County in 1975, and even more are expected to be called in 1976. Someone who is selected for jury duty reports to a courthouse for a period of one month during which time he is paid \$5 for each day he is present in a courthouse, plus a travel expense of 15^{e} for each mile between the courthouse and his home (one way only). There are hidden costs to the community involved in using jurors inefficiently. For example, during the period of jury service, most employers pay their employees the difference between the daily juror fee and their regular salaries.

At present the jury supervisor in each courthouse tends to call for as many jurors as he feels are necessary to cover any eventuality, since he is not as concerned with expense as with his ability to furnish a panel of jurors when a judge requests one. When a jury trial is ready to begin, a judge orders a group of jurors for his courtroom from the jury pool. The jurors are usually sent to the courtroom in panels of about 30. They are questioned until a jury of 12 members and perhaps one or two alternates has been selected.

Rarely is the entire pool exhausted in forming panels, and rarely need 30 people be questioned in order to impanel a jury.

Our goal is to achieve a better match between the number of jurors in a courthouse on a given day and the number that is to be used in the judicial process.

Los Angeles County is divided into nine judicial districts. We concentrated our efforts in the Pomona Courthouse, which is the courthouse for East District. We felt that by tackling only one part of the whole system, we could be more thorough, and later we could apply what we learned to the other districts of the county. In what follows we make specific recommendations on how to reduce substantially the number of jurors waiting in the jury assembly room at that courthouse on any given day. We indicate also how the methods used to obtain these reductions can be used to achieve similar reductions in other courthouses.

III. THE METHOD USED AND SOME LIMITATIONS OF THE RESULTS

We devised a relatively simple mathematical model and used it on the data gathered for us from several districts of the Superior Court. More explicitly, we attempted to:

- (A) Determine the "best" number of jurors to send to a courtroom for a voir dire process.
- (B) Predict one (working) day in advance the maximum number of new jury trials that can begin on the following day.

Solving these problems will clearly tell us the maximum number of jurors needed each day.

In Sections IV and V, we will describe explicitly what methods were used, and what kinds of data proved to be useful in solving the problems posed in (A) and (B). Our numerical results are valid only for the Pomona Courthouse, and they are valid there only if the number of courtrooms in which jury trials can be held remains essentially the same as it is now, and only if the nature of the trials held at the Courthouse does not change substantially. Our methods can, in our opinion, be modified to apply to other courthouses in a way that we will describe later.

IV. DETERMINING THE SIZE OF A JURY PANEL

Jury supervisors and court clerks at the Long Beach, Norwalk, and Pomona Courthouses filled out forms (a copy is attached) which supplied us with the size of each jury panel sent into a courtroom for a jury trial and the number of jurors actually examined by attorneys or a judge before either a jury was impaneled or the case was settled without a jury trial. Naturally, the size of the panel one sends into a voir dire³ depends on two factors:

- 1. How confident does one want to be of having enough jurors for the voir dire?
- 2. How many alternate jurors will be selected for this trial?

To really answer the first question, the costs involved must be analyzed. If the first group of jurors sent into a voir dire is too small, another group must be sent from the jury pool. This will waste court time and, of course, there is a cost involved. However, there is also a cost involved in calling up too large a panel. Thus, one must weigh these costs against each other, or in other words, a cost-benefit study must be undertaken. Since the available time and data did not permit such a study we would use a confidence level selected by the Court.

We say that a certain panel size will be sufficient to supply enough jurors for the voir dire process at a confidence level of 80%, 90% or 95% if a panel of that size will be sufficient for the voir dire process 80%, 90% or 95% of the time, respectively. In other words, it is not sufficient 20%, 10% or 5% of the time, respectively. The confidence level to select – depends on the relative costs discussed above.

The second question is again one we need not answer. It is decided by the trial judge. (Generally the expected length of the trial seems to affect the number of alternates decided upon.)

Using the data obtained from the Pomona Superior Courts, we determined the appropriate number of jurors to send to a courtroom; this is given in Table A.

	<u> </u>	iona Courtinot	150	
		confider	nce level	
		.80	.90	.95
jury	12	22	23	25
size	13	23	25	27
	14	25	27	28

TABLE A Panel size needed to fill a jury of given size at the Pomona Courthouse

What happens should a panel be insufficient to yield a jury? Under the proposed system there will almost always be extra jurors in the assembly room. It might be that not all the jurors were called from the assembly room to voir dires. In addition, jurors usually appear in the assembly room during the course of the day after being dismissed from a jury or from the voir dire process for some other trial. Therefore, if more jurors are needed in a courtroom for a voir dire, they may be readily called from the assembly room. The resulting inconvenience would be a delay of about 20 minutes so that a new panel could be sent up and

³We use the term *voir dire* for the process whereby the individual members of a jury panel are accepted or rejected for service on a particular jury as a result of an examination by the judge and attorneys involved.

briefed by the judge on the facts of the case. Very seldom would a courtroom be unable to get any jurors at all on the same day they are requested. In any case, as will be evident in the next section, this sort of delay will take place only rarely if our recommendations are followed.

The statistical methods used to develop Table A can be used to develop tables that will be valid at other courthouses. This table must also be revised whenever the cases tried in the courthouses change substantially in nature or the rules for the voir dire process are changed. These statistical methods are described in Appendix I below.

Obviously this Table is not intended for use in very long or highly publicized trials.

V. DETERMINING THE MAXIMUM NUMBER OF NEW JURY TRIALS THAT CAN BEGIN TOMORROW AND THE NUMBER OF JURORS NEEDED IN THE ASSEMBLY ROOM

To determine the maximum number of trials that could begin on a given day, we used a form designed for the Superior Court at Pomona which was introduced there on March 11, 1975 (a copy is attached). It is called a status report. The purpose of this report is to indicate the scheduled activity in a courtroom on the following day.

At this point it is necessary to mention that within the geographic limits of Los Angeles County there are Municipal Courts. The Superior Court supplies them with jurors out of its own pool and so, when calculating the number of jurors needed in the assembly room, their needs must be reckoned with.

Each department of the Superior Court completes a status report by 4:45 p.m., so that the information can be turned over to the presiding judge by 8:30 a.m. on the following morning. No such written forms are in current use in the Municipal Court. (The possibility of their introduction has been discussed with officials of that court.)

Using these status reports we are able to estimate an upper bound on the number of trials that will start on the coming day. Each report supplies us with the following pertinent information:

1. It states whether a trial is currently in progress in the courtroom.

- 2. If a trial is in progress, the report indicates the phase the trial is in as of the end of the day, *i.e.*, whether the defense or prosecution has presented its case, the jury has been instructed, or the jury is deliberating. It also gives the attorneys' estimates of the trial length, and the expected date on which the jury will be instructed.
- 3. A list of matters scheduled for the next day is included. In addition, a list of cases that are trailing, *i.e.*, that had been postponed only because of the lack of an available courtroom, appears on the form.
- 4. Finally the form tells whether the courtroom is expected to go dark (*i.e.*, will not be in session) the next day.

Although these status reports are highly useful in predicting the maximum number of trials one day in advance, we found several problems. As stated earlier, we do not have these forms for Municipal Court. Also, there are quite a number of gaps in the existing records. Some status reports are incomplete or totally missing. Also, there is an ambiguity in the status report form. If the status report indicates that a trial is in the jury selections process, it could mean either that potential jurors are already in the courtroom or that the jurors are to be sent in the next morning.

Using the status report forms we had, we predicted for each day the maximum number of trials that could start on the following day. Then, assuming twenty-five jurors would be needed for each jury trial, we determined how many jurors would probably be needed in the jury pool. (The panel size of 25 was an approximation based on the results presented in Part III above using a 95% confidence level and a jury of 12.)

We also obtained data on the number of Superior or Municipal Court trials that actually started, the number of jurors sent into courtrooms and the number actually examined before a jury was selected, and the number of jurors in the assembly room that day from the forms filled out by court clerks and jury supervisors to which we referred in part III above. A comparison between our predictions and what actually took place, together with the number of jurors that would have been saved if our predictions had been used is presented on page 322 in Table B.

We reach the following conclusions from the data in Table B.:

- (i) In no case did our predictions underestimate the number of Superior Court trials actually held.
- (ii) While there were a number of days when we would have had fewer jurors in the assembly room in the morning than were called to courtrooms, there is no evidence that fewer were available than needed for the voir dire process, even allowing for Municipal trials. Even on April 21 when only 75 prospective jurors would have been available for 4 trials, since two of the trials began in the morning, and at least one began in the afternoon, it would have been possible to "recycle" the jurors enough to fill 4 juries. A similar statement could be made about April 14.
- (iii) Perhaps the most "dangerous" of the predictions made were on those days when only 25 were to be kept in the assembly room. Even then, it is not evident that the number of jurors present was inadequate.
- (iv) If our predicted number would have been adequate, we would have saved 1704 out of the 2954 present in the assembly room during this period; that is, we would have saved over 57%.
- (v) If we had predicted the need for an additional panel of 25 for each of the 24 days involved in order to cover the possibility that a Municipal Court jury trial might start, we still would have saved 1104 out of 2954 jurors in the assembly room. That is, we would have saved over 37%. Moreover, this number of

	Predicted					Number	of Jurors	
	Number of	Predicted	Actual of Ne	Number w Trial		• •	<u> </u>	Could
	Superior	Number of	St	arts			ľn	Have
	Court	Jurors	[1		Assembly	Been
DATE	Trials	Needed	Superior	Municipal	Sent	Examined	Room	Saved
3/19	3	75	0	0	0	0	33	-42
3/20	2	50	0	0	0	0	44	- 6
3/21	2	50	0	1	25	*	56	6
4/2	2	50	1	0	35	18	136	86
4/3	2	50	1	0	40	33	134	84
4/4	1	25	1	0	30	21	111	86
4/7	1	25	0	1	40	* *	88	63
4/8	2	50	0	0	0	0	153	103
4/9	2	50	1	0	35	35†	163	113
4/10	2	50	2	0	60	30 15*	169	119
4/11	2	50	0	2	80	41	154	104
4/14	4	100	4	0	140	66(3 trials) **	177	77
4/17	4	100	0	0	0	0	131	31
4/18	4	100	1	0	35	22	165	65
4/21	. 3	75	3	1	90(3 trials) 65	63 (3 trials) **	155	80
4/22	3	75	2	1	40 40	* **	152	77
4/23	1	25	0	1	40	13	112	87
4/24	1	25	1	1	40 40	18 *	137	112
4/25	2	50	2	0	65	51	131	81
4/28	1	25	0	0	0	0	116	91
4/29	1	25	0	0	0	0	150	125
4/30	3	75	0	0	0	0	175	100
5/2	2	50	0	0	0	0	112	62
TOTA	NL 50	1250	19	8			2954	1704

TABLE B Number of new jury trials predicted versus number of new jury trials held and potential number of jurors saved at the Pomona Courthouse

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*No voir dire held. Case settled in courtroom.

†Data suspect. Figure is probably too high. **Data not supplied.

jurors would have almost certainly filled all judicial needs during this period.

(vi) It would appear that a maximum of 125 jurors in the assembly room would have supplied all judicial needs at Pomona, not only during this 24 day period, but for all court days between March 17 and May 30, 1975. No more than 4 new jury trials began on any day in this period, and the only two days when 4 new trials started are exhibited in Table B.

It would appear, therefore, that unless the number of courtrooms suitable for jury trials is increased, a maximum of 125 jurors would be needed at Pomona on any given day.

On 14 of the 24 days listed in Table B, there were more than 125 jurors in the assembly room and, as a result, 532 juror days were wasted. Had a policy of having no more than 125 jurors in the assembly room been followed, an average of 22 fewer people could have been called to jury duty each day during this period.

VI. SPECIFIC RECOMMENDATIONS FOR THE POMONA COURTHOUSE AND THEIR COSTS AND BENEFITS

On the basis of the conclusions reached in Section V, we make the following recommendations for the Pomona Courthouse:

- No more than 125 jurors would seem to be needed in the Pomona Courthouse on any given day unless conditions change substantially. This would save an average of 22 jurors per day. Assuming that each juror costs the County \$6.50 per day (\$5 for a jury fee and a travel allowance for 10 miles at 15[¢] per mile) on the average, and assuming the Courthouse is in session for 250 days per year, if this recommendation were implemented, the County would save over \$35,000 per year.
- 2. Daily status reports should continue to be filled out accurately and without ambiguity by Superior Court clerks, and a similar form should be developed for and used by the Municipal Courts. Copies of these status reports should be in the hands of the jury supervisor no later than 4 p.m. in the afternoon so that he can use them to predict the maximum number of jurors that will be needed in the assembly room the next day. We indicate explicitly how he can do so in Appendix II below.
- 3. The cooperation of judges must be obtained to hold jury panels at the Pomona Courthouse down to the size indicated in Table A. Under unusual circumstances, e.g., if the trial is expected to be a long one, or if there are a large number of defendants or litigants, the judges must use judgment in determining panel size.
- 4. As indicated in Part V, according to our most conservative estimates, in which no use was made of daily status reports from the Municipal Courts at Pomona, an average of 45 fewer jurors per day would be

needed in the jury assembly room. Under the same assumptions for the cost of jurors made in (1) above, this would save the County over \$73,000 per year.

To actually adjust the pool size each day, a system must be designed and tested which tells each juror whether to report on a given day. Doing this involves a phone system. Each juror would be required to telephone an answering service after 5:00 p.m. for his next days's assignment. When the jury supervisor has determined the number of jurors by the method outlined in Appendix II, he will select this number randomly from the list of jurors eligible for service on the following day. The jury supervisor should supply the answering service with this list of juror assignments each afternoon. The size of this list might have to be adjusted depending on how reliable the jurors are in telephoning the answering service.

On the days when a juror is not required to report to the courthouse, he might go about his regular business, but naturally, he would not be paid by the County. We expect that jurors would still be notified by mail, three weeks in advance, about their jury service. We recommend that the jurors come to the courthouse for an orientation on the first day of their service to be instructed on the use of the telephone system. Accordingly, on days when new jurors report for orientation, the jury supervisor can reduce the size of the phone list.

We have not had the time to develop such a telephone system thoroughly or to get an accurate estimate of its cost. Supposing someone were hired for 5 hours a day at \$3 per hour to answer the telephone, then it would cost \$15 per day or \$3,750 per year, which is a small amount compared to the potential saving of \$73,000 per year. It may be feasible to utilize an automatic telephone answering service which can be more economical.

We are convinced, moreover, that our recommendations, would enable the County to reduce the number of jurors needed by the Pomona Courthouse by much more than the 37% discussed in (v) of Section V.

VII. WAYS TO USE THE TECHNIQUES DEVELOPED AT THE POMONA COURTHOUSE TO IMPROVE JUROR UTILIZATION AT OTHER COURTHOUSES

The techniques described in Section III and Appendix I, used to predict the number of jurors one needs to send to a voir dire process, carry over verbatim to any courthouse. We would guess, but are not certain, that the results would not be much different at courthouses outside of Long Beach, Norwalk, and Pomona, except possibly in the Central District which handles more of the unusual and lengthy trials.

Daily status reports, similar to the ones described in Section V, should be designed for other courthouses, but only after consulting judges and court clerks to make sure that they meet local needs. They can be used to predict how many new jury trials can start the next day on the basis of the number of courtrooms available. If the results for the other courthouses are similar to those obtained for Pomona, it will be possible to reduce the maximum number of jurors in the assembly room at each courthouse by a fixed amount, and also to further reduce the number of jurors in the assembly room depending on the conditions for that particular day.

Again some system for notifying jurors whether to report for jury duty the next day must be devised for each courthouse. Since our system for doing this at Pomona remains to be tested, we hesitate to recommend its adoption elsewhere. It may be a more complicated problem in a large courthouse than in the courthouses of the outlying districts.

In summary, while we believe that recommendations similar to the ones made in Section VI for the Pomona Courthouse can be made for each of the other county courthouses, they may vary, to some extent, from courthouse to courthouse.

That is, the problem of how to reduce the number of jurors needed to carry out the judicial process in Los Angeles County will probably have to be solved on a courthouse by courthouse basis, even though techniques discovered at one courthouse will help at other courthouses.

VIII. RECOMMENDATIONS FOR FUTURE STUDIES

During the brief time interval available for this study we posed numerous problems, the answers to which could be used to improve juror utilization even further. Here are several.

We would like to devise a method for finding out on the day before for which cases an uncontested continuance will be requested, or which cases will very likely be settled by plea from the Public Defender's office and/or the District Attorney's office. Similar information might be obtained concerning civil cases. Knowledge of this sort would reduce the uncertainty about the number of new trials that can start the next day. Contacts we have made with the Public Defender's office and the District Attorney's office at the Pomona Courthouse have encouraged us to believe that with their cooperation it might be possible to secure such information in advance.

We would like to have analyzed the advantage which results from the fact that when many cases start on the same day they usually start at different times. Such analysis would allow for the recycling and more efficient use of jurors. An even more delicate study might enable us to estimate, for a trial that has been in progress for several days, when it will end so that its discharged jurors might also be recycled. Then, with the reduced number of jurors required each day, we could turn our attention to the shortening of the present 30 day tour of duty.

There are many other problems that will come to mind to future investigators as more courthouses are studied. We conclude with only one more of them.

From time to time, especially in the Central District, there are highly publicized or unusually long trials for which a large number of jurors are needed for a voir dire that proceeds over several days. How many jurors should be sent at one time to the courtroom for such trials? How many such prospective jurors can be questioned in one day? While knowing in advance that such exceptional trials will need a very large jury panel (so large that Table A or its equivalent will not be valid), how can we minimize waste of prospective jurors?

IX. ACKNOWLEDGEMENTS

In the course of our study, we talked with many individuals, mostly from the Superior Court system, about various aspects of the jury system. Almost all of them gave freely of their time. While we cannot acknowledge all of them explicitly, we would like to express our thanks to Messrs. Goodwin, Holtzendorff, Vargas, and Ms. Rivetuso of the Jury Commissioner's office in Los Angeles; Mr. Frank Zolin, the Executive Officer of the Superior Court; Judges Gustaveson, McClain and Egly of the Pomona Court; Messrs. Cox, McGary, and Sloan, and Ms. Moreno of the County Clerk's office at Pomona; Attorneys Gross and Hofman of the District Attorney's office in Pomona; S. A. Mathiesen of the Public Defender's office at Pomona; and Ms. Ortiz, the jury supervisor at Pomona.

X. SOME A POSTERIORI REFLECTIONS

As everyone knows, the courts are overcrowded, and subject to loud public criticism both from those who feel that criminals are coddled by the courts, and those who feel that they discriminate against various minorities and the poor. Both the victims of crimes and those who are accused of committing them have rigorous defenders, but who stands up for the juror? A liberal system of occupational exemptions together with a policy of excusing those who protest vigorously combines to eliminate those who might protest most effectively against inefficiency. [When is the last time you heard of someone going to jail for refusing to serve on a jury?]

Jurors are "supplied" by the Jury Commissioner's Office and "used" by judges and attorneys. The job of getting enough jurors to the right place at the right time in a County as large as Los Angeles, while observing the complicated laws on juror eligibility, is Herculean in scope. The Jury Commissioner's Office lacks the personnel, time and authority to see to it that jurors are used efficiently. Neither is it reasonable to expect judges or trial attorneys to assume this as an additional responsibility. Anyone who implements a system of the sort we have devised must have the time and authority to get the cooperation of many individuals who at present rarely work together.

While we eventually got the cooperation of almost everyone in the court system with whom we talked, we were told repeatedly that there was no "mathematical" solution to the problem of juror utilization. Many different individuals reminded us of the Manson trial and the many variables that effect the jury selection process. Each of them seemed to be convinced that we were seeking an "exact" solution which would supply a universal number of jurors that would work for all trials. Some seemed to suspect that we were "efficiency" experts out to abolish their job, and some just were busy people who resented taking time from their job to answer questions of dubious importance. We seemed to be adding to their burdens rather than lightening them.

Why isn't a system that would appear to save so much money and juror time being tested, refined, and implemented more rapidly? It is tempting to blame the devil of bureaucratic inefficiency and to try to exercise it by denunciation. We do not believe, however, that this will solve the problem. More research is needed, and field testing costs money. The money saved by using fewer jurors comes in later, and very likely would just revert back into general funds. Meanwhile, because of the poor condition of the economy, budgets everywhere are being cut and the Superior Court of the County of Los Angeles is no exception. So, as often happens, it is much easier to waste money than it is to save it.

APPENDIX I DERIVATION OF TABLE A

We assume that the process of questioning a potential juror for fitness to serve on a jury is an independent Bernoulli trial. Based on this, we believe that the number of potential jurors X needed to obtain a panel of size R is a random variable with a negative binomial distribution. This distribution gives the probability that X Bernoulli trials will be needed to obtain a fixed number R of successes, where the probability of success on an individual trial is p. The distribution has this form:

$$\left(\frac{X-1}{R}\right)p^{R}(1-p)^{x-R}$$
 for $x \ge R$

In order to estimate a value for p we collected data from the Long Beach, Norwalk, and Pomona Court Houses. From this data our estimator \hat{p} of p is given by

$$\hat{\mathbf{p}} = \frac{\mathbf{T}}{\mathbf{N}}$$

where T was the total number of jurors impaneled and N is the number questioned. This estimator \hat{p} has many statistically optimal properties. It is a maximum likelihood estimator, in addition to being complete, sufficient, unbiased, consistent, and of minimum variance.

Now we want to find an upper confidence bound K on X for a given confidence level 100a%. Thus K is given by:

$$P[X \le K] = \sum \frac{K}{n=R} \left(\frac{n-1}{R}\right) p^n (1-p)^{n-R} = \alpha$$

For appropriate values of α and R, we computed K and the results are summarized in Table A in the body of the paper.

APPENDIX II USING STATUS REPORTS TO PREDICT THE NUMBER OF NEW JURY TRIALS

We assume that status reports similar to those used by the Superior Court will also be used by the Municipal Courts with appropriate modifications. We assume also that these reports will be delivered to the jury supervisor absolutely no later than 4:00 p.m. of the day they are filled out.

He should assume that no new jury trial can start in a given courtroom if any of the following happen:

- 1. The courtroom is scheduled to go dark.
- 2. A trial is in process that will almost surely continue through all or most of the next day. More explicitly, if the jury has not as yet been instructed, it is unlikely that a jury trial will start the next day.

Otherwise, it should be assumed that a new jury trial might start. In particular, if a courtroom has not been used on a given day the jury supervisor should assume that a new trial might start the next day.

There will be some ambiguous situations. We resolved all such ambiguities in preparing Table B by erring always on the conservative side, *i.e.*, by assuming that a new jury trial might start. The jury supervisor could consult individual court clerks by telephone to help resolve ambiguities, and do a more accurate job of predicting than we did.

To determine how many jurors will be needed the next day, we multiplied the number of new trials by 25. This corresponded to a confidence level of 95% with a 12 person jury. In other cases use Table A.

EAST DISTRICT CALENDAR DAILY STATUS REPORT BY DEPARTMENTS

DEPARTMENT		DATE		
Case presently on trial in	n this depa	artment is #		
TITLE		VS		
Trial began on		(0	date)	
Estimated length of trial	was			
Trial isJURY		NON-JURY		
If jury, estimated date ju	ry will be	instructed is		
If non-jury, estimated da conclude is	te present	ation of evidenc	e will	
Trial is presently in	Jury	selection:	People's or Plaintiff's c	ase;
Derendant s ca		Argument,	Instruc	
There is trailing for trial	k proper b is this dep	ox) partment:		
Case # Title	Date Set	Time estimate	Jury/Non-J	ury
There are prelimi (date) c	nary matte onsisting e	ers set in this De of: (Number of e	epartment ton each)	norrow
Defaults P & S, V/P	Small C	aims Appeals	Adoptions	MSC
This Department plans t	o be DAR	K tomorrow:		

his Department plans to be DARK tomorrow:

_____All day: _____ Half day: (insert AM or PM)

This report is to be completed daily and submitted one copy to each Department and the Criminal Master Calendar Department.

SUPERIOR COURT-JURY DIVISION ASSIGNMENT SECTION DAILY JURY REPORT-____ DISTRICT

DATE:_____

1. Jurors in assembly room for assignment	<u></u>
2. New Jurors	<u></u>
3. Total jurors available for assignment	
4. Jurors in courtrooms (process of selection)	
5. Jurors serving on cases	
6. Total jurors in service (1, 2, 4 & 5)	
7. Jurors in assembly room at 11:45 A.M.	
8. Jurors in assembly room at 3:30 P.M	
9. Jury panels assigned – Criminal Civil	
10. Number of jurors assigned	_
 Special Panels assigned (included in 9 & 10) 	

NUMBER OF JURORS	CIVIL	CRIMINAL
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	NUMBER OF JURORS	NUMBER OF JURORS CIVIL

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SUPERIOR COURT JUROR UTILIZATION STUDY

ATTN: COURT CLERK

The Court is conducting a Juror Utilization Study. This study will begin March 17, 1975, and end on May 30, 1975.

Please complete this form during the voir dire examination of the case currently assigned to your department or division. When the jury has been selected, please give the completed form to one of the jurors returning to the Jury Assembly Room and ask that they give it to the Jury Supervisor.

Thank you,

Frank S. Zolin Executive Officer

DATE:	_DEPARTMENT/C	DIVISION
CASE NO		
TYPE OF CASE: CRI	MINAL	CIVIL
1. TIME JURY DISPA	TCHĘD	
2. TIME & DATE VOI	IR DIRE BEGAN_	
3. TIME FIRST JURO	R WAS EXCUSED)
4. TIME & DATE VOI	IR DIRE CONCLU	DED
5. NUMBER OF JURG	ORS SWORN	TIME
6. NUMBER OF JURO DURING VOIR DI	ORS NOT QUESTIC	ONED
7. ESTIMATED TRIA		·

JURY SUPERVISOR

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1. DATE, TIME JURORS REPORTED TO ASSEMBLY ROOM AFTER JURY DISMISSED_____