STATE OF MINNESOTA
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DEPARTMENT OF CORRECTIONS
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February 6, 1979

Mr. William Swanstrom
Olmsted County Courthouse
Rochester, MN 55901

Dear Bill:

Dave asked that we respond to you regarding the reanalysis of the Social Control Study which was conducted for the Evaluation Committee of the Dodge/Fillmore/Olmsted Advisory Board.

The reanalysis of the social control data raised a number of substantive and technical issues, concerning the original Social Control report. Most of the issues relate to one of the following topics: 1) data decision rules; 2) interpretation of analysis; 3) conclusions based on DFO reanalysis; and 4) alternative/additional hypothesis concerning social control. Comments regarding the reanalysis are included in the following discussion of those four topics.

1. Data Decision Rules

There are two major areas in which the DFO researchers arrived at data decision rules that substantially departed from decisions which were made in the original analysis. The first area concerns the placement of individuals in Dodge/Fillmore/Olmsted dispositional groups. The second departure involves the DFO deletion of cases from the analysis that had missing data on any of the five discriminating variables. A third data editing difference was suggested in the DFO reanalysis. The DFO reanalysis mistakenly stated that age at first conviction was ignored in the original analysis for cases in which the current offense was the first offense. This is not the case, however, as in the original analysis age at current conviction was used as age at first conviction for offenders who had no prior convictions or adjudications.

There is little question that the two different decision rules adopted in the DFO reanalysis resulted in a substantial alteration of the data sets for the Dodge/Fillmore/Olmsted area. The Ramsey and Anoka area data sets were affected only by the second decision rule and therefore the overall impact on those data sets was less extensive than in the Dodge/Fillmore/Olmsted area. A decision rule regarding the placement of individuals in Dodge/Fillmore/Olmsted dispositional groups was necessary because the

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Dodge/Fillmore/Olmsted Community Corrections Systems

To: Christine Lundy

From: DAVID A. ROONEY
Community Corrections
Administrator

Date: March 14, 1980

Subject: √ Social Control Revisited

Enclosed please find a copy of the Corrections study you requested. If we can be of any further assistance, please do not hesitate to contact us.

DAR:tle

small numbers dictated that the entire PORT and institution population be included for the study, and some individuals were members of both populations at different points in time during the four year study period. There are numerous options for dealing with this type of situation, three of which are to 1) delete the individuals from the analysis entirely; 2) place individuals in only one group on the basis of either a random or systematic decision rule; or 3) place individuals in each population group in which they were a member. The advantage of the first option is that the data analysis conceptualization is easier in that the data sets only include individuals who have received one of the two dispositions during the time frame. The two major disadvantages of that decision rule are 1) the loss of data through the deletion of cases; and 2) a distortion of the two populations the data is supposed to reflect.

The second option, i.e., to place an individual in only one population, which was chosen in the DFO reanalysis, has an advantage similar to that of the first option. For analytic purposes, it is conceptually "cleaner" and easier to place an individual in only one population, even though the individual had been a member of both. The basis of the decision rule for placement in the DFO reanalysis is not explicit, but it appears that individuals were systematically placed in the population in which they were initially members, and excluded from the population in which they were subsequently members. An alternative placement procedure would have entailed randomly assigning individuals to one or the other population. The advantage of a random assignment is that it prevents underrepresenting the seriousness of the population over the time frame. Seriousness of offenders is at least in part a function of criminal history, and by systematically choosing offenders at a lesser point in seriousness, the area's offender populations are not being accurately reflected in the data. The analytical advantage of conceptual simplification is somewhat reduced as a result of the decision rule for systematic placement and the consequent bias concerning offender seriousness that enters the data sets. There is, of course, less data lost in placing individuals in one population rather than deleting them entirely; but the description of the two populations (especially the institutional population) is being distorted by systematically excluding members of the population from the data sets.

In the original analysis, the third option was chosen. Since populations were included in the study and the populations (especially the institutional population) were small, an individual was placed in both the PORT and institution populations when the individual had been a member of both populations over the study's time frame. It was, and is, believed that systematically excluding several individuals from a very small population results in an inaccurate description of that population. We disagree that such placement is "inappropriate" for two additional reasons: 1) to do so implies that the dispositional decisions were inappropriate; and 2) the placements occur at different points in time, and while the individuals are the "same" in some senses, they are not the "same" in others, e.g. in terms of criminal history. That is presumably why different dispositions are given to the same individual over the course of his criminal career. The decision rule adopted in the original analysis has two advantages over the other options; 1) it retains more data and provides a more complete description of the populations and 2) it provides a more

accurate and a less biased representation of population groups and dispositional outcomes in the Dodge/Fillmore/Olmsted area.

Basically, the same kind of reasoning was used concerning the decision rule on the treatment of missing data. The two options which exist in handling missing data in multivariate analysis are to delete cases in which data on any analytic variables are missing (the DFO decision rule), or to retain the cases and apply an estimating procedure to assign a value to the missing variable. The advantage of the first option is that estimations are not necessary and no biases will enter the data from the estimation procedure. The most obvious disadvantage is loss of data (PORT population - 13%, 8 out of 60 cases; Bremer population - 5%, 4 out of 73 cases).

If it could be assumed that missing data were randomly distributed among various types of offenders, loss of data would be the primary and perhaps the only disadvantage of deleting cases. However, that assumption is very tenuous in the area of criminal justice. Missing data is likely to occur relatively frequently for two types of offenders, the "least serious" and the "most serious" offender. Information on offenders who have had relatively little contact with the criminal justice system over time tends to be incomplete. The reasons for that are probably that infrequent contact has not provided as much opportunity for information to be collected and/or the offender is not viewed as serious enough to demand as thorough an amassment of information as in other cases. The other type of offender for which specific items of information are likely to be missing are the very serious offender, especially older individuals, who have established extensive adult criminal histories. In those instances earlier (e.g. juvenile) history "decays" in the information sources because it is deemed irrelevant and unnecessary for further dispositional decision-making. The nonrandom nature of missing data in criminal justice argues against casewise deletion as the method for handling missing data. Since the offenders in PORT tend to be young, the deletion of cases should not be affected by the decay factor which exists for older, more serious offenders.

The deletion of cases with missing data will substantially change the data set by excluding the less serious offender. The distortion caused by casewise deletion (excluding 13% of the 60 PORT cases) was viewed as substantially more serious than distortion introduced by estimating the missing values of a variable. It should also be noted that if the information is missing in the informational sources for the data set, it is likely that it was missing for dispositional decision makers as well. Common sense, decision theory, and empirical studies of dispositional decision making suggest that in the face of incomplete information, decision-makers make inferences about missing information on the basis of information they do have on the case at hand and on their knowledge of similar cases. That is essentially what the estimation procedure used in the original analysis does. As a result the data decision for handling missing data in the original analysis more accurately reflects both the actual dispositional groups and the dispositional decision making process than does the decision rule adopted in the DFO analysis.

The data sets for the Dodge/Fillmore/Olmsted area changed substantially in the DFO reanalysis. Approximately 13% of the PORT population was excluded

from the analysis due to missing data and those cases would tend to be less serious offenders. Seventeen percent of the institutional population were similarly deleted from the data set because they had received prior PORT dispositions earlier in the time frame. Data simplifications to facilitate statistical techniques, conceptual clarity, and researcher convenience are certainly appropriate in some situations, but those decisions can be costly in terms of reflecting the reality that is the subject of the analysis. The data set that emerges in the DFO analysis is conceptually simpler than that used in the original analysis, but it is not an accurate reflection of the reality of dispositional groups and dispositional decision making in the Dodge/Fillmore/Olmsted area.

There is little doubt that the changes in the data set substantially affected the Dodge/Fillmore/Olmsted results in the subsequent discriminant analysis. (62% alternative to probation compared to 80% alternative to probation in the original analysis). The data set for Bremer House was altered only slightly - 5% of the Bremer House cases were deleted due to missing data and the DFO discriminant analysis indicated results relatively similar to that obtained in the original analysis (59% alternative to probation compared to 64% alternative to probation in the original analysis).

2. Interpretation of Analysis

It is apparent that the major analytical differences between the original analysis and the reanalysis lie in the different data sets that were used and the interpretation of the results of the analysis. The technical matters that were raised previously by the DFO Evaluation Committee (October 27, 1977) and the response to those concerns (November 9, 1977) will not be reiterated here. The effect of the different data sets was addressed in the previous section; differences in the interpretation of the analysis remain to be explored. The two interpretations of the discriminant analysis results offered by DFO are that 1) the discriminant analysis "severely misclassified" (roughly 20% of the time) dispositional groups and 2) the discriminant classification does not differ significantly from a chance separation of PORT and Bremer clients.

The interpretation offered that the discriminant technique "severely misclassified" cases is puzzling and an explanation supporting that interpretation is lacking in the DFO reanalysis. It appears that the DFO researchers believe that a 75% to 82% level of "correct" classification is too low and believe that the discriminant classification of cases should be substantially higher (95% perhaps). However, if that is the expectation or standard suggested by the DFO researchers, it is difficult to understand why it is the expectation or standard applied in this substantive area. Everything we know about decision making in criminal justice indicates that disparity exists in all discretionary decision making. This is particularly true of dispositional decision making, as study after study shows. The issue of whether existing disparity is warranted or unwarranted and the issue of what constitutes warranted or unwarranted disparity need not be dealt with here, but it is important to remember that disparity does exist. Knowing that similar offenders receive different dispositions, we also know that there should be some overlap among dispositional groups. Rather than being alarmed that the

technique does not discriminate "better", i.e., classify a higher proportion of "correct" cases, the fact that the technique appears to be sensitive in identifying the disparity in dispositional decision making and the overlap among dispositional groups that we know exists is reassuring. The "severe misclassification" is a sensitive reflection of reality and is not a failure of the technique or its application.

The surprising feature of the discriminant classification is that it classified individuals into their respective groups as well as it did. Substantively, the relatively high discrimination indicates that there is considerably less disparity (i.e., more consistency in dispositional decision making in these jurisdictions than in other jurisdictions around the country which have been studied. The decision in the original analysis regarding the classification of cases with marginal probabilities (explained on page 16 Social Control Issue) merely reflects the understanding that cases with marginal probabilities should not be classified as disparate. That explanation should have been made explicit in the original report and would have perhaps prevented the misinterpretation by the DFO reanalysis concerning the purpose and meaning of that classification decision.

The general tenor of the DFO reanalysis and the apparent standards applied to the functioning of the discriminant technique suggests the need to emphasize a more general point about the application of statistical techniques in social science or, for that matter, any kind of research. Statistical techniques cannot be intelligently applied in a vacuum nor can the results of statistical analysis be intelligently interpreted without a thorough understanding of the subject matter to which they are applied. The "severe misclassification" interpretation offered in the DFO reanalysis is very disturbing in that it appears to have been made in a vacuum, without reference to existing knowledge about dispositional decision making. A "weak" discriminant function is only "weak" in comparison to some standard of comparison. The DFO reanalysis is not explicit as to the standard that is being used in making that judgment, but the discriminant function is not "weak" by any social science standards and it is "strong" when compared to other multivariate analyses in the area of dispositional decision making. Standards applied to statistical techniques and interpretations of analysis that are unrelated to a substantive area are not only inappropriately applied, they inhibit rather than enhance understanding.

The interpretation of tests of statistical significance in the DFO reanalysis is both inaccurate and inappropriately applied. Tests of statistical significance are only useful for inferring analytical results from a random sample to a population from which the sample was drawn. A significance level of .10, for example, indicates that if 100 samples were drawn from the population, in 10 of those samples the results would probably differ significantly from the results in the current sample. Conversely, similar results could be expected to be found in the remaining 90 samples. Some of the groups contained in the study (including all of the Dodge/Fillmore/Olmsted groups) are populations rather than samples, and those groups do not contain sampling chance variation. Differences found in a population are simply the differences that empirically exist and statistical significance and chance variation

have no meaning when applied to populations.

Furthermore, even if statistical tests of significance could appropriately be applied to this situation, the DFO interpretation attached to significance levels is both ambiguous and incorrect. At some points the DFO researchers seem to be saying that "nonsignificance" indicates a 50/50 split in the PORT population, i.e., 50% of the residents are in PORT as an alternative to probation and 50% of the residents are in PORT as an alternative to state incarceration. At other points, the DFO researchers seem to be saying that "nonsignificance" indicates that the probable alternative for each PORT resident is .5 probability of prison and .5 probability of probation. Neither interpretation is correct. Rather a .10 level of significance merely refers to the number of samples (i.e., 90) out of a hypothetical 100 samples drawn from a single population in which similar results could be expected to be obtained.

3. Conclusions Based on the DFO Reanalysis

As noted previously, the data sets used in the DFO reanalysis did not accurately reflect the dispositional groups or the dispositional decisions that were made in the Dodge/Fillmore/Olmsted area during the four years covered in the study. Consequently the results of the DFO reanalysis differed from those in the original analysis, showing that the probable alternative for 62% of the PORT residents was probation and the probable alternative for 38% of the PORT residents was state incarceration. (As was noted previously, the Bremer data set was altered less drastically and the results of the analysis differed less dramatically.)

The results of the DFO reanalysis, in spite of the biases that enter into the altered data set, serve to reconfirm the conclusion in the original report. The 62%/38% split in the DFO reanalysis of the altered data set clearly indicates an increase in social control with the use of the PORT program. Some increase in social control is also indicated with the dispositional use of Bremer House, although the more dramatic increase in social control in the Bremer population occurred as a result of probation revocations for technical violations.

4. Additional Hypotheses Concerning Social Control

The DFO researchers suggest that the "real" increase in social control is not resulting from residential treatment centers, but is rather resulting from the use of jails. As was indicated in the Social Control report and in the DOC response to earlier DFO comments, there is considerable evidence to suggest an increase in social control with the dispositional use of jails. The increased use of jail sentences is a more recent phenomenon than residential treatment centers and, of course, was not the research issue addressed in the Social Control study, but it is certainly an area which has been ripe for study for the past two years. Increased social control resulting from dispositional use of jails would indicate a further increase in social control above that which was observed with residential treatment centers.

A more interesting point has been raised by Judge Russell Olson, who has carefully compiled and maintained aggregated data on District Court

dispositions in Olmsted County for a twelve year period. That data demonstrates that the proportion of the total annual dispositions committed to state institutions decreased substantially from the pre-PORT to the post-PORT period. Unfortunately, very little can be inferred from the examination of proportions because the population of dispositions more than doubled from the pre to post PORT periods (an average of 22 dispositions a year in the pre-PORT period, 47 dispositions a year in the PORT/pre-Community Corrections period, and 59 dispositions a year in the PORT/post-Community Corrections period). Although we don't know what the individuals in the dispositional populations look like during the three periods, it is very likely that the substantial increase in the dispositional populations was accompanied by changes in the nature of those populations. Making inferences about the characteristics of individuals who receive particular types of dispositions (e.g. PORT or institutional dispositions) on the basis of aggregated data is always subject to error as a result of the ecological fallacy. Errors resulting from the ecological fallacy are almost certain to be made in a situation with rapidly expanding dispositional population bases.

Because of the changes in dispositional populations, a more useful measure of change over time is the number of individuals rather than the proportion of individuals sentenced to state institutions over time. The pre-PORT period averaged 7.6 state institutionalizations annually; the PORT/pre-Community Corrections period averaged 5.3 state institutionalizations annually; and the PORT/post-Community Corrections period (i.e., jail) period averaged 4.5 state institutionalizations annually. The pre and post PORT data indicate that state institutionalization did decrease somewhat after PORT was established. There is little question that PORT diverted some individuals from state institutionalization. Given the rapidly expanding and changing dispositional population, reliable estimations cannot be made on the basis of aggregated data as to the numbers of individuals probably diverted during PORT's first two years of operation. However, it can be hypothesized that a larger proportion of PORT cases were diverted from state institutions in the first two years than in subsequent years. That hypothesis is based on both empirical and theoretical grounds. The Social Control study found that PORT was decreasingly being used as an alternative to state incarceration during the four years covered in the study (July, 1972 - June, 1976). Extrapolating that empirical trend to the first two years of PORT operation would suggest that a higher proportion of cases were being diverted initially than subsequently. Without data to support the hypothesis, it remains speculative, but organizational theory does offer support for that interpretation. Theory suggests that the establishment of a new program, agency, or institution is generally accompanied by strongly held and often ideologically oriented goals (e.g., diverting offenders from state institutions) which are initially implemented and adhered to. However, over time (and generally in a short period of time) the primary goal or goals become secondary to the emerging goals of organizational survival and organizational maintenance. The exceptions to this pattern of organizational change are rare. One of the interesting findings of the Social Control report is that Bremer House was found to be such an exception. The goal of diverting offenders from state institutions was better achieved in later years of program operation. The

change in goal achievement was accompanied by, and probably resulted from, a change in program administration.

I hope that these comments are of use to you and the Evaluation Committee. Also, I would suggest that the Committee may wish to re-read the original report as part of their renewed deliberations as I fear that the dialog on this subject has become increasingly disconnected from the actual content of the report and increasingly colored by inaccurate statements regarding the report's alledged findings and conclusions.

Sincerely,

Gerald J. Strathman

Gerald J. Strathman, Director
Research and Information Systems

GJS:mjk

SOCIAL CONTROL REVISITED
A REASSESSMENT OF THE FINDINGS OF THE JUNE 1977, DEPARTMENT OF CORRECTIONS STUDY:

The effect of the availability of community residential alternatives to state incarceration on sentencing practices: The Social Control Issue

October 5, 1978

The reanalysis was prepared by:

Lawrence Collins, Chairperson, Evaluation Committee
Kenneth Offord, Bio-statistician, Mayo Clinic
William Swanstrom, Program Evaluator, Community Corrections

Under the review and approval of the Evaluation Committee:

Lawrence Collins, Chairperson
Isabel Huizenga, member
Dr. Hal Martin, member
Fran Bradley, member
Richard Portillo, member
Ken Offord, member
David Rooney, Administrator

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1. Framework for Reanalysis

In June, 1977, the Minnesota Department of Corrections completed a study of social control. This study concluded that an unintended result of PORT type residential projects was that they were increasing the level of social control in the correctional system. In other words, residential projects were being used primarily as an alternative to probation rather than as an alternative to institutionilization. Based upon the above conclusions, the study raised some rather serious questions regarding the increased economic costs, recidivism measures, and increased social control for the majority of the residential clients who were considered to be probation-type clients. The findings of this study received national, state and local attention. The findings were of particular interest to the Dodge-Fillmore-Olmsted Community Corrections Advisory Board since one of its major programs is the PORT Corrections Center which was the first PORT program in Minnesota and one of the first in the nation.

Members of the Advisory Board and other interested citizens and staff were provided copies of the Social Control Study*. In addition, a rather large group of interested parties attended a presentation of the findings of the study from a representative of the Department of Corrections in September, 1977. During the review process, a number of substantive questions were raised about the study design, data analysis, results, and conclusions. The focal point for these questions was the Evaluation Committee of the Community Corrections Advisory Board. In October, a letter was sent by the Evaluation Committee to the department detailing its concerns regarding the study. (see appendix A) Essentially there were three major objections: (1) the appropriateness of the statistical techniques that were used and the need for additional analysis of the data. (2) the exclusion of jail clients as a major dispositional group, (3) the weakness of the criminal activity and economic benefits measures. In November 1977, the department responded to these concerns basically reaffirming its approach, "the research methods

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*"The Effect of the Availability of Community Residential Alternatives on Sentencing Practices: The Social Control Issue", Minnesota Department of Corrections, June 1977, hereafter referred to as the Social Control Study.

and methodologies employed in this study are in all cases appropriate and properly applied." (see appendix B) Finally, the department offered the data used in the Social Control study to the Evaluation Committee for independent examination and analysis.

Since this study was of potential usefulness to the Advisory Board, it was decided that the Evaluation Committee would undertake the reanalysis of the data. The commitment was underscored by the encouragement and support of Judge O. Russell Olson and by a timely commitment of the necessary data processing resources and statistical expertise by the Mayo Clinic Statistical Unit. The reanalysis was conducted in two phases. The first phase was simply obtaining and verifying the data, this took from February through July, 1978. The actual reanalysis was conducted July through August, 1978. The data modification and reanalysis required about four man weeks of effort (160 hours) and approximately $100 in computer costs.

Purpose of Reanalysis

The primary purpose of the reanalysis of the Social Control data was to determine whether the results and conclusions of the study would be sustained if the statistical objections were removed. A secondary purpose of the study was to determine if any additional data could be brought to bear upon the social control question.

Organization of Results

The results are organized into two sections: (1) reanalysis of the Social Control data, (2) analysis of additional data. The first section essentially addresses the statistical objections to the study and arrives at a position regarding the original conclusions. The second section has three sub-sections: (1) analysis of Impact Study Data (1972-1976), (2) analysis of Olmsted Court Dispositions (1965-1976), (3) analysis of 1978 Attorney Survey Data. The second section was designed to permit a broader consideration of the social control issue in order that the results of the first section might be better understood. The second section was also designed to support on refute findings from the first sections.

II. Results

A. Reanalysis of the Social Control data

1. Data editing

The first step in the reanalysis was to examine the raw data in order to resolve any coding on classification problems. There were five cases in the study that inappropriately entered more than one group. All of these cases involved Dodge-Fillmore-Olmsted, (hereafter DFO) PORT and prison cases. Four of the five cases were originally in PORT and subsequently placed in an Institution - they were taken out of the Institution group. One case was first in an Institution and subsequently placed in PORT - this was taken out of the PORT group. A second change was made in the definition of the variable - Age at First Adjudication or Conviction. In the Social Control data if it was a first offense, this variable was ignored in the computations. This variable was the only variable to be redefined in the reanalysis. This variable was recoded so that near every case had a value. If it was a first offense, then age at current offense was used as age at first adjudication. If there was a prior adjudication or conviction with age unknown, the value was treated as missing. The data editing culminated in the need to recompute wherever applicable the means, medians and standard deviations on disposition related variables. The medians are presented as the means in skewed distributions are not useful measures of central tendency. The results of these recomputations are contained in appendixes C, and a copy of the data used in the reanalysis is contained in appendix F.

2. Assumptions of Normality

Two key assumptions of linear discriminant analysis (the major statistical technique used in the Social Control Study) are equality of variance and covariances among variables in the different groups and that the variables to be compared are normally distributed. A normal distribution is characterized by a distribution which looks like a bell-shaped curve. (see appendixes D and E). Visual examination of these tables reveals they are highly skewed. Severity of Current Convictions is the only variable that met

the normality assumptions for the linear discriminant analysis.

The result of a violation of the equality of variance and covariance assumptions is that a different discriminant analysis technique should have been used - the quadratic discriminant function. The use of a quadratic discriminant function and the use of transformed variables to more closely meet the normality assumptions resulted on renalysis in a different split of PORT and Bremer clients into probation and institution.

3. Univariate Associations Between Dispositions And Selected Variables

The key finding of the Social Control study was that the discriminant function separated the residential clients on the selected variables such that a majority of the residential clients more closely resembled probation rather than institution clients. This finding implies that there is an overriding similarity between residential and probation clients on the selected variables. When using Anoka as the control group, the discriminant analysis takes all of the selected variables into account simultaneously and then classified PORT and Bremer clients into probation or institution groups. Unfortunately, the discriminant technique does not indicate the degree of association between comparison groups on selected variables. Univariate analysis allows us to examine how comparable or distinct the various groups are on a variable by variable basis. Tables 1 and 2 have a difference (diff) indicated where the comparison groups are different on the variable being considered. Where a same is used, there was no significant difference detected between the comparison groups. The following five variables were the only variables actually used in the Social Control study and form the basis for the results:

1. Age at sentence
2. Age at first adjudication or conviction
3. Number of juvenile adjudications
4. Number of adult convictions
5. Severity of current conviction

An examination of Table 1 is quite revealing. A chi-square test revealed that DFO Institution vs PORT vs Probation are significantly different (the three groups are not all comparable) on all five variables. The following tables summarize the results of Table 1.

DFO PORT is comparable to DFO Institution on:	DFO PORT is distinct from DFO Institution on:
2. Age at first adjudication or conviction	1. Age at sentence
3. Number of juvenile adjudications	4. Number of adult convictions
5. Severity of current conviction	

DFO PORT is comparable to DFO Probation on:	DFO PORT is distinct from DFO Probation on:
1. Age at sentence	3. Number of juvenile adjudications
2. Age at first adjudication of conviction	5. Severity of current conviction
4. Number of adult convictions	

DFO PORT is comparable to DFO Institution and DFO Probation on three variables and distinct on two others. Another important question is how does DFO compare to Anoka the control county? Anoka Institute vs Anoka Probation vs DFO PORT are not all comparable on all five variables.

DFO PORT is comparable to Anoka Institution on:	DFO PORT is distinct from Anoka Inst. on:
2. Age at first adjudication or conviction	1. Age at sentence
	3. Number of juvenile adjudications
	4. Number of adult convictions
	5. Severity of current conviction
DFO PORT is comparable to Anoka Prob. on:	**DFO PORT is distinct from Anoka Prob. on:**
1. Age at sentence	2. Age at first adjudication or conviction
5. Severity of current conviction	3. Number of juvenile adjudications
	4. Number of adult adjudications

These results yield no clear pattern on a variable by variable basis regarding the comparability of DFO PORT to probation or institution groups in DFO or Anoka Counties.

TABLE 1

Univariate Associations Between Dispositions And Selected Variables For PORT versus Dodge-Fillmore-Olmsted and Anoka Counties

SELECTED VARIABLES·

Diff = significant difference at the p <= .05 level
Same = not significantly different at the p > .05 level

Comparison	Groups	Age at [1]	Age at first adj. or conv. [2]	Number of juvenile ad. [3]	Number of adult conv. [4]	Severity of current conviction [5]
Dodge/ Fillmore/ Olmsted	1) DFO Inst. vs DFO Probation vs DFO PORT	Diff	Diff	Diff	Diff	Diff
	2) DFO Inst. vs DFO PORT	Diff	Same	Same	Diff	Same
	3) DFO Probation vs DFO PORT	Same	Same	Diff	Same	Diff
Anoka	1) Anoka Inst. vs Anoka Prob. vs DFO PORT	Diff	Diff	Diff	Diff	Diff
	2) Anoka Inst. vs DFO PORT	Diff	Same	Diff	Diff	Diff
	3) Anoka Prob. vs DFO PORT	Same	Diff	Diff	Diff	Same

Categorical grouping of data used for the univariate analysis

1. Age at sentence categories used: less than or equal to 20 years, 21-25, 26-30, 31 years or older.
2. Age at first adjudication or conviction categories used: less than or equal to 15 years, 16-20, 21 years or older
3. Number of juvenile adjudications: 0, 1, 2, 3 or more
4. Number of adult convictions: 0, 1, 2 or more
5. Severity of current conviction: 0, 1, 2, 3, 4 or higher

[1] A chi-square test for statistical significance was used at the one in 20 or .05 two-tail level. Appendix E and F contain the chi-square value. Two-tail P value (chance of observing what we did or something more extreme in either direction in fact the underlying groups were the same). The degrees of freedom associated with the chi-square test and the data.

Table 2 can be similarly examined. Ramsey Institution vs Ramsey Probation vs Ramsey Bremer are significantly different on all five variables.

Ramsey Bremer is comparable to Ramsey Institution on:	Ramsey Bremer is distinct from Ramsey Institution on:
2. Age at first adjudication or conviction 3. Number of juvenile adjudications	1. Age at sentence 4. Number of adult convictions 5. Severity of current conviction
Ramsey Bremer is comparable to Ramsey Probation on:	**Ramsey Bremer is distinct from Ramsey Probation on:**
5. Severity of current conviction	1. Age at sentence 2. Age at first adjuducation or conviction 3. Number of juvenile adjudications 4. Number of adult convictions

Ramsey Bremer is comparable to Ramsey Institution on two variables and Ramsey Probation on one variable.

Ramsey Bremer is comparable to Anoka Institution on:	Ramsey Bremer is distinct from Anoka Institution on:
2. Age at first adjudication or conviction 3. Number of juvenile adjucations	1. Age at sentence 4. Number of adult convictions 5. Severity of current conviction
Ramsey Bremer is comparable to Anoka Probation on:	**Ramsey Bremer is distinct from Anoka Probation on:**
5. Severity of current conviction	1. Age at sentence 2. Age at first adjudication or conviction 3. Number of juvenile adjudications 4. Number of adult convictions

TABLE 2

Univariate Associations Between Dispositions And Selected Variables For Bremer versus Ramsey and Anoka Counties

SELECTED VARIABLES

Comparison	Age at sentence[1]	Age at first adj. or conv.[2]	Number of juvenile ad.[3]	Number of adult conv.[4]	Severity of current conviction[5]
Ramsey 1) Inst. vs Prob. vs Bremer	Diff	Diff	Diff	Diff	Diff
Ramsey 2) Inst. vs Bremer	Diff	Same	Same	Diff	Diff
Ramsey 3) Prob. vs Bremer	Diff	Diff	Diff	Diff	Same
Anoka 1) Inst. vs Anoka prob. vs Bremer	Diff	Diff	Diff	Diff	Diff
2) Anoka Inst. vs Bremer	Diff	Same	Same	Diff	Diff
3) Anoka Prob. vs Bremer	Diff	Diff	Diff	Diff	Same

Categorical groupings of data used for the univariate analysis

1. Age at sentence categories used: less than or equal to 20 years, 21-25, 26-30, 31 years or older.
2. Age at first adjudication or conviction categories used: less than or equal to 15 years; 16-20, 21 years or older.
3. Number of juvenile adjudications: 0, 1, 2, 3 or more
4. Number of adult convictions: 0, 1, 2, 3 or more
5. Severity of current conviction: 0 or 1, 2, 3, 4 or higher

Diff = significant difference at the $p \leq .05$ level

Same = not significantly different at the $p > .05$ level

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[1] A chi-square test for statistical significance was used at the one in 20 or .05 two-tail level. Appendix E and F contain the chi-square value. Two-tail P value (chance of observing what we did or something more extreme in either direction in fact the underlying groups were the same). The degrees of freedom associated with the chi-square test and the data.

These results yield no clear pattern on a variable by variable basis regarding the comparability of Ramsey Bremer to probation or institution groups in Ramsey or Anoka Counties. One might note, however, that the comparable variables between Bremer and the institution and probation groups are nearly the same for the Ramsey and Anoka groups. On comparing tables 1 and 2 for PORT and Bremer versus Anoka patterns of similarity and difference exist in both tables suggesting that PORT and Bremer are somewhat comparable on these five variables.

4. *Univariate Analysis Summary*

The failure of the univariate analysis on a variable by variable basis to yeild any consistent pattern regarding the relationship of residential (PORT/ Bremer) to either probation or institution groups makes the overriding argument which associates residential with probation groups difficult to sustain.

5. Reclassification of Data Using Discriminant Analysis

One of the major objections to the Social Control study[1] was the manner in which the discriminant analysis technique was applied. Referring back to the normality discussions (see p. 3) it is clear that the first four of the five variables were highly skewed - not normally distributed. Logarithmic transformations were made on these four variables in an attempt to correct this problem. In addition, for the reanalysis we reprocessed the new data using the quadratic discriminant function. Equal prior probabilities were used. Finally, some of the key findings in the Social Control study were affected by manual intervention with the discriminant technique by assigning group membership based upon criteria other than the discriminant function.[2] This made the discriminant appear to be performing "better" than it in fact did in evaluating the overlap among dispositional groups.[3]

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[1] see Evaluation Committee/appendix A.

[2] The Effect of the Availability of Community Residential Alternatives to State Incarceration on Sentencing Practices: The Social Control Issue, Minnesota Department of Corrections, June 1977, p. 16.

[3] Ibid, p. 19.

Table 3 is a summary of the findings from the discriminant analysis in the reanalysis of the Social Control data for Dodge-Fillmore-Olmsted and Ramsey Counties. The primary difference between these tables and the Tables 7 and 8 in the Social Control report is an increase in the overlap between these groups and a corresponding reduction in distinctiveness.

TABLE 3@
Overlap Among Dispositional Groups

Group Being Classified	Actual Disposition	N+	Predicted Dispositions: Probation	PORT/ Bremer	Institution	%Correctly Classified (overa
Dodge/Fillmore/ Olmsted	Probation	56	41 73%	12 21%	3 5%	73%
	PORT	52	11 21%	37 71%	4 8%	71%
	Institution	19	1 5%	5 26%	13 68%	68% (72
Ramsey	Probation	105	75 71%	23 22%	7 7%	71%
	Bremer	73	14 19%	54 74%	5 7%	74%
	Institution	98	4 4%	20 20%	74 76%	76% (74

+ Number of clients with complete data on the five selected variables.

@See page 14

The reduction in distinctiveness is an important consideration. What is occurring here is a severe misclassification of the extreme groups: probation/institution. If the study based on the discriminant technique using the five selected variables is to be considered useful, the discriminant techniques should clearly classify the extreme groups back into their appropriate categories. Based on the fact that somewhat less than three out of four members in each group are correctly classified, the bedrock of the study appears to be rather weak. Further evidence of a weak discriminant function is provided in Table 4. The discriminant function should separate the probation and institution groups of the control county into their correct dispositions, yet only eighty-two percent of the Anoka comparison group were correctly classified into either probation or institution. One of the major assumptions of this study is that Anoka, the control county, would be a strong reference point because there was no residential alternatives, and therefore probation and institution groups would be quite distinct. Another interesting analysis is the extent to which the Anoka County discriminant function can correctly classify the DFO and Ramsey groups. The probation and institution groups in both counties were also severely misclassified using the Anoka County discriminant function. The fact that the institution and probation groups were misclassified roughly 20 percent of the time would demand that the interpretation attached to the split of the residential (PORT/Bremer) clients into probation and institution dispositions be made with extreme caution.

TABLE 4@

Overlap Among Dispositional Groups

Group Being Classified	Actual Disposition	N+	Predicted Dispositions: Probation	Predicted Dispositions: Institution	%Correctly Classified (overal
Anoka	Probation	93	80 86%	13 14%	86%
	Institution	78	18 23%	60 77%	77% (82
Dodge/Fillmore/ Olmsted using Anoka County	Probation (DFO)	56	46 82%	10 18%	82%
	PORT (DFO)	52	32 62%	20 38%	---
	Institutio (DFO)	19	7 37%	12 63%	63%
Ramsey County using Anoka County	Probation (Ramsey)	105	77 73%	28 27%	73%
	Bremer	73	34 47%	39 53%	---
	Institution (Ramsey)	98	17 17%	81 83%	83%

+Number of clients with complete data on the five selected variables.

@see page 14

The classification of the DFO PORT group based on Anoka resulted in a distribution of sixty-two percent (62%) to probation and thirty-eight percent (38%) to PORT. Using a coin toss analogy, there is a greater than ten percent (10%) chance that one could arrive at these sample results through the flip of a coin. Similarily, the Bremer group classification approaches a 50/50 split using the Anoka data, a result which infers that PORT/Bremer clients are as likely to have been prison bound as probation bound.

Table 5 displays the use of the discriminant function to classify PORT/Bremer based on each respective study county. Using the DFO data, one can classify PORT clients sixty-two percent (62%), to probation and thirty-eight percent (38%) to institution; a result that could be obtained at least one in ten times via a coin toss. The Ramsey/Bremer clients were classified fifty-nine percent (59%) to probation and forty-one percent (41%) to institution. These results are comparable to those obtained when the Anoka County discriminant function was used.

One of the most serious criticisms of the results of the use of the discriminant technique is the inability to demonstrate a clear distinction between institution and probation groups. A second criticism is that the resulting predicted dispositional percentage split of PORT/Bremer clients into probation and institution is in keeping with an underlying 50/50 split. If one accepts the fact that the discriminant technique can separate PORT/Bremer clients little better than chance, then it becomes very difficult to argue that increased social control is occuring when approximately half of the PORT/Bremer clients are classified as probation clients and the other half as institutional clients.

TABLE 5@

Overlap Among Dispositional Groups

Group Being Classified	Actual Disposition	N+	Predicted Disposition: Probation	Predicted Disposition: Institution
PORT using D/F/O probation and institution	PORT	52	32 62%	20 38%
Bremer using Ramsey probation and institution	Bremer	73	43 59%	30 41%

@Five variables were used as discriminators.

1. $\ln_e$ (age at sentence)
2. $\ln_e$ (age at first adjudication or conviction)
3. $\ln_e$ (number of juvenile adjudications +1)
4. $\ln_e$ (number of prior adult convictions +1)
5. severity of current offense

The natural logarithm was used in an attempt to correct for the extreme skewness present on the original scale for: 1. Age at sentence; 2. Age at first adjudication or conviction; 3. Number of juvenile adjudications; and 4. Number of prior adult convictions.

In all cases the equality of covariance hypothesis was rejected and a quadratic discrimina function was hence used.

No "adjustment" has been made to the dispositional tables.

+ Number of cases with complete data on the five selected variables.

6. Summary of Reanalysis of Social Control Study

A reanalysis of the Social Control study data was completed after correction of numerous data problems and a reanalysis of the data. The new results did not support the conclusions in the original study. Numerous assumptions regarding the use of discriminant analysis were violated and the ability of that technique to discriminate between residential, probation and institution clients was overstated. Practically speaking, the discriminant function does a poor job of classifying Anoka County institution and probation clients, where one would expect a very clear separation. Finally, the discriminant classification does not differ significantly from a chance separation of PORT and Bremer clients into probation and institution groups thereby making the increased social control argument difficult, if not impossible, to sustain on the basis of the data in this reanalysis.

B. Analysis of Impact Study Data[1]

Concurrent with the reanalysis of the Social Control data was a local effort to examine the broad issue of social control in terms of district court dispositions. It was hoped that in so doing that the impact of the omission of the jail sentences as one of the alternative dispositions might also be assessed. Regardless of the outcome of the reanalysis it was deemed important to examine sentencing trends over time in order that the phenomenon of social control could be better understood. Table 6 represents a summary of district court dispositions on an annual basis by the following areas: Dodge-Fillmore-Olmsted, Anoka, Ramsey. The question to be examined is, what are the sentencing trends.

[1] The Impact Study is an ongoing research effort by the Minnesota Department of Corrections to monitor the implementation of the Community Corrections Act by recording every district court disposition from 1972 (second half) to present.

TABLE 6A

DISTRICT COURT DISPOSITIONS (1972-1976)

DODGE-FILLMORE-OLMSTED

	Probation and Unsupervised Release	Jail and Workhouse Probation	State Institution	Total
1972-73 Obs. No.	59	8	5	72
% of row total	82%	11%	7%	
exp. no (a)	42	24	6	
Cell Chi-square (b)	7.3*	10.9*	0.2	
1973-74 Obs. No.	44	18	10	72
% of row total	61%	25%	14%	
exp. no (a)	42	24	6	
Cell Chi-square (b)	0.1	1.6	2.5	
1974-75 Obs. No.	34	31	5	70
% of row total	49%	44%	7%	
exp. no. (a)	40	24	6	
Cell Chi-square (b)	1.0	2.3	0.1	
1975-76 Obs. No.	41	47	6	94
% of row total	44%	50%	6%	
exp. no. (a)	54	32	8	
Cell Chi-square (b)	3.3	7.3*	0.5	

Overall Chi-square (6 df) = 37.2

$P < .001$

TABLE 6B

DISTRICT COURT DISPOSITIONS (1972-1976)

ANOKA

	Probation and Unsupervised Release	Jail and Workhouse Probation	State Institution	Total
1972-73 Obs. No.	52	7	28	87
	[illegible]	[illegible]	32%	

TABLE 6C
DISTRICT COURT DISPOSITIONS (1972-1976)
RAMSEY

	Probation and Unsupervised Release	Jail and Workhouse	State Institution	Total
1972-73 Obs. No.	189	120	178	487
% of row total	39%	25%	37%	
exp. no (a)	202	148	136	
Cel Chi-square (b)	0.9	5.3*	12.8*	
1973-74 Obs. No	207	134	173	514
% of row total	40%	26%	34%*	
exp. no. (a)	213	156	143	
Cell Chi-square (b)	0.2	3.2	5.9*	
1974-75 Obs. No	306	190	148	644
% of row total	48%	30%	22%*	
exp. no (a)	268	195	180	
Cell Chi-square (b)	5.4*	0.2	5.7*	
1975-76 Obs. No	219	229	120	568
% of row total	39%	40%	21%	
exp. no (a)	236	172	158	
Cell Chi-square (b)	1.3	18.3*	9.5*	

Overall Chi-square (6 df) = 68.8
$P < .001$

a. expected number if dispositional and time were not associated
b. Cell Chi-square reflects disparity between observed and expected numbers in each cell.
* Values over 4.00 represent statistically significant disparity between observed and expected numbers.

As can be seen from the preceding tables, there has been a downward trend in the use of probation and unsupervised release, and in the use of state institution in Ramsey and Dodge-Fillmore-Olmsted Counties. Conversely there is a statistically significant increase in the use of jail and workhouse in these Community Corrections Act Counties. Anoka is a non-community corrections act county and has had a fairly constant year-to-year proportion of dispositions in each disposition category.

Impact Study Summary

These tables point out the need to redirect attention regarding the social control issue away from the residential programs and towards the jails and workhouses where it appropriately belongs. This point is particularly highlighted in Ramsey County where there have been approximately 60 Bremer House clients over four years. The context in which this occurred was with a declining probation and institution trends and increased jail use. It is difficult to argue that the 60 Bremer House clients had any impact at all in the social control of the approximately 2,200 Ramsey District Court dispositions.

C. Analysis of Olmsted District Court Dispositions (1965-1976)

A further data source that was used to increase understanding of the Social Control question was the annual summary data published by Judge O. Russell Olson. This data is contained in Tables 7A and 7B. Table 7A is a summary table of the Olmsted District Court dispositions in the pre-PORT era of 1965-1969 and in the two three-year intervals following implementation of PORT. The question to be answered by this analysis is what trends are occurring in the social control phenomenon.

TABLE 7A

OLMSTED DISTRICT COURT DISPOSITIONS (1965-1976)

		Probation	Fine	PORT	Jail	Prison	Total
1965-69 (Pre-PORT)	Obs. No.	66	0	1	6	38	111
	% of row total	59%	0%	1%	5%	34%	
	exp. no.	46	7	13	28	17	
	Cell Chi-square	9.2*	7.4*	11.5*	16.9*	25.9*	
1970-73	Obs. No.	79	22	31	32	21	185
	% of row total	43%	12%	17%	17%	11%	
	exp. no.	76	12	22	46	28	
	Cell Chi-square	0.1	7.5*	3.3	4.2*	1.9	
1974-76	Obs. No.	45	9	24	77	12	167
	% of row total	27%	5%	14%	46%	7%	
	exp. no	69	11	20	42	26	
	Cell Chi-square	8.1*	0.4	0.7	30.4*	7.2*	
							463

Overall Chi-square (8 df) = 134.8
$P < .001$

Note: It should be emphasized that the definition of a type of felony crime changed during the periods under consideration. During the period of 1970-1973, marijuana possession was considered a felony. The district court disposition for simple possession of marijuana in 1970-1973 was fine. The decline in the use of fine 1974-1976 coincided with a redefinition of possession of marijuana from a felony to a misdemeanor.

a. expected number if dispositional and time were not associated
b. Cell Chi-square reflects disparity between observed and expected numbers in each cell
* Values over 4.00 represent statistically significant disparity between observed and expected numbers

OLMSTED DISTRICT COURT DISPOSITIONS (1965-1976) --- continued

TABLE 7B

		A. Fine/ Probation	B. Fine/ Probation/ PORT	C. Prison/ Jail	D. Prison/ Jail/ PORT	E. Prison/ PORT
1965-69 (Pre-PORT)	Obs. No.	66	67	44	45	39
	% of row total	59%	60%	40%	41%	35%
	exp. no.[a]	53	66	45	58	30
	Cell Chi-square[b]	3.2	0.0	0.0	2.9	2.4
1970-73	Obs. No.	101	132	53	84	52
	% of row total	55%	71%	29%	45%	28%
	exp. no.[a]	88	110	74	97	51
	Cell Chi-square[b]	1.8	4.1*	6.1*	1.7	0.0
1974-76	Obs. No.	54	78	89	113	36
	% of row total	32%	47%	53%	68%	22%
	exp. no.[a]	80	100	67	87	46
	Cell Chi-square[b]	8.3*	4.8*	7.2*	7.6*	2.1

Overall	A.	B.	C.	D.	E.
Chi-square	115.4	95.4	42.1	25.5	69.4
df	6	4	4	2	4
p	<.001	<.001	<.001	<.001	<.001

a. Based on disposition groups
- Fine/probation, PORT, jail, prison
- Fine/probation/PORT, jail, prison
- Prison/jail, fine/probation, PORT
- Prison/jail/PORT, fine/probation
- Prison/PORT, fine/probation, jail

a. expected number if dispositional and time were not associated

b. Cell Chi-square reflects disparity between observed and expected numbers in each cell

Values over 4.00 represent statistically significant disparity between observed and expected numbers

District Court Disposition Summary

Interestingly, there are two noteworthy trends, a significant decline in the use of probation and a significant increase in the use of jail. PORT remains constant. The social control phenomenon should exhibit a decline in probation with a concomitant rise in the use in PORT. Table 7B allows one to further examine the social control issue. PORT cases are grouped with probation/fine and they are also grouped with prison. In other words, the PORT cases are being used to artificially load these dispositional groupings. If probation is declining because of PORT, then if we add PORT to probation then that grouping ought to steady out over time. Both groups exhibit a downward trend. Conversely, the jail combinations; jail/prison, prison/jail/PORT all exhibit an increasing trend.

The point to be emphasized from these tables is that in the Dodge-Fillmore-Olmsted area, the social control phenomenon of probation-residential tradeoffs discussed in the Social Control study is simply not supported. The only area of increase and perhaps increase in social control is in the use of the jail.

D. Analysis of Attorney Survey Data

The final analysis in this document is a concurrent study which was undertaken by one of the evaluation subcommittee members. This study attempted to answer the question, "what was the perception of the defense attorney at the time of district court sentencing of the most likely alternative to PORT?" A list of the PORT clients from only Olmsted County was provided as the study sample. Each defense attorney was questioned regarding his perception of the case at the time of sentencing.

Although the defense attorneys unbiased response was solicited, we have no means of defending such a statement. The survey was conducted by telephone with the question presented as stated. Ideally, an independent attorneys assessment of the information available to the defense attorney would present the view of a less involved party. This approach was obviously not feasible even in the presence of the potential bias the results are noteworthy. Table 8 provides a summary of the findings.

TABLE 8

Defense Attorney Survey Of Cases Resulting In Rochester PORT Dispositions

Defense Attorney's perception of most likely alternative to PORT	Number	% of respondents
Probation	5	12%
Jail	10	24%
Prison	26	64%
Total	41	

Explanation of non-respondents

Attorney could not be reached	5
Attorney could not recall	1

Summary of Attorney Survey Data

The results of the attorney survey offer additional support for the argument that residential probation connection vis a vis social control cannot be supported. In the minds of the defense attorney's, PORT was an alternative to prison in 64 percent of the cases. Carried even further, if one were to split the 24 percent jail in half, 12 percent to PORT and 12 percent to probation, 76 percent of the clients who went to PORT were seen as receiving an alternative to incarceration.

III. Discussion

The Social Control study was designed to examine the social control issue from the perspective of residential treatment programs in community corrections areas. The study concluded that residential programs increased social control, increased costs with no demonstrated superior effectiveness in reducing recidivism over more traditional probation. The results of the study were presented unequivocally, and the reaction to these findings generated many questions. Discussion of the Social Control study revealed that the social control concept was most likely operationally more complex than initially believed and that the study was too narrow in scope to address these complexities, for example, it totally ignored jail as a disposition. Also, the study appeared to have numerous methodological and analytical problems which made it difficult to accept the results. Given the practical implications of the results of the Social Control study, there were simply too many unanswered questions to permit endorsement of the findings. The Department of Corrections declined to reanalyze the data or revise the results, therefore, the Evaluation Committee undertook a reanalysis.

Based upon a reanalysis of the data used in the Social Control study with some corrections of the coding and improvement of the discriminant procedures, there is clearly only one result. The conclusions of the Social Control study are not supported.

A univariate analysis of the five variables used in the study on a sample by sample basis yielded very mixed results. The residential clients, when compared to probation and institution in Anoka, and the home county presented, no clear pattern of comparability or distinctiveness. Put another way, if the residential groups does not appear to be comparable to probation or distinct from institution group on a variable by variable basis, it is difficult to argue that they would be distinct or comparable using a discriminant analysis.

A reanalysis of the data utilizing the discriminant technique yielded results that

were inconsistent with those contained in the Social Control study. The new results indicated a greater degree of overlap in probation, and institution groups. A primary assumption of the Social Control study was the distinctiveness of institution and probation as opposite poles of the social control continuum. The results indicated that residential clients were only slightly more likely to be classified as probation clients over institution clients. The statistical advantage of the discriminant analysis results in separating residential clients into either probation or institution offers no discernable advantage over a random or chance separation. The weakness of initial analysis of the Social Control is demonstrated by the use of the Anoka (control county) to classify Olmsted, Ramsey, and Anoka data. Only 82 percent of the Anoka clients are correctly classified using Anoka data. The Anoka discriminant function correctly classifies only 63 percent of the Olmsted institution group and only 73 percent of the Ramsey probation group. Finally, the Anoka discriminant functions classifies approximately half of the residential clients in probation and half in institutions. This result squarely contradicts the conclusions of the Social Control study and provides rather convincing evidence on the basis of this reanalysis that residential treatment neither increases or decreases social control.

In order to examine the broader issue of social control, it is necessary to go beyond the limits of the Social Control study, and the reanalysis. Examination of the Impact Study data clearly reveals that for Ramsey and Olmsted Counties there has been a statistically significant increase in the use of jail/workhouse with a constant or declining use of probation and institution. Conversely Anoka County, (a non-Community Corrections Act County) demonstrated a constant trend in the use of probation and institution. If social control is an issue for Community Corrections Act Counties, attention ought to be directed towards the use of jail/workhouse.

One of the purposes of the Social Control study is to direct the attention of dispositional decision-makers (judges) towards the phenomenon of social control. Allegedly over time the district court judges were increasing social control through the unappropriate use of residential treatment in lieu of probation. Olmsted County was in an excellent position to address this question since it was the birthplace of one of the first PORT programs in the United States and was the first Community Corrections Act County in Minnesota. Analysis of the Olmsted District Court data over an 11 year period is revealing. The use of PORT (residential treatment) is constant, with a significant decrease in the use of probation and prison. There is a significant increase in the use of jail. Further analysis reveals that even if the PORT group is added to the probation group there is still a statistically significant decrease in the use of probation and a declining though not statistically significant decline in the use of prison. In terms of district court dispositions, in Olmsted County Jail (not PORT) accounts for any increase in social control.

The last phase of the reanalysis was to individually survey defense attorneys for PORT clients. This was seen as a supportive piece of research to study pre-disposition perceptions regarding judicial decision making. This data presented alone would be difficult to support because of the possibility of bias in one direction or another. However, this data was collected in advance of the reanalysis and there was no pre-disposition either for or against the results of the Social Control study. Sixty-four percent of the defense attorney's indicated that the most likely alternative was prison. This evidence suggests that for the majority of clients, in the opinion of the defense attorney social control is decreasing rather than increasing because of the availability of a residential facility.

Overall, it is clear that the findings in the Social Control study are not supported by the results of the reanalysis. An analysis of additional data provides rather convincing evidence that the residential programs are not an appropriate area of concern for social control. In fact, it appears that the most identifiable area of social control is the use of jail in the Community Corrections Counties.

IV. Recommendation

In order to facilitate an appropriate resolution of the social control issue in terms of the data presented in the Social Control study and this reanalysis, the following recommendations have been developed.

Review Policy

In those instances where the Department of Corrections undertakes a joint study with a community corrections subsidy area, the department should in advance of final publication of the results submit a draft of the study for review by coparticipants. Statistical and analytical objections to the study should be adequately addressed by the department prior to publication and dissemination of the results. Reanalysis of data is a difficult and consuming task, and the resources for the effort are normally not available to subsidy areas.

Social Control Conclusions

The data in the Social Control study appropriately analyzed does not support the conclusion that residential programs increase social control. This reanalysis should be disseminated to the criminal justice community.

Social Control Issue

The social control issue in terms of community corrections is an important issue.

APPENDICES

APPENDIX A

Evaluation Committee letter to Department of Corrections
October 27, 1978

County of Olmsted

COURTHOUSE
Rochester, Minnesota 55901
507/285-8115

Office of
County Administrator

October 27, 1977

Mr. Jerry Strathman
Director, Research and Information System
Department of Corrections
Suite 430 Metro Square Building
7th and Robert Streets
St. Paul, MN 55101

Dear Mr. Strathman:

Recently we had the opportunity to review the "PORT Probation Comparison Study" which was prepared by your office on behalf of the Department. This study addresses a major issue in Community Corrections - social control. It also raises a number of major program and policy questions for the Community Corrections Advisory Board especially regarding the role of residential treatment programs in our subsidy area. As a co-participant in this study, we are particularly interested in its conclusions, and heartily support the efforts of the Department in conducting this type of research.

As you are probably aware, this study has recently been the topic of considerable review and discussion on the part of the PORT Board and the Community Corrections Evaluation Committee. One of your staff, Ms. Kay Knapp, has been kind enough to present the findings to the PORT Board and most of the members of both boards and staff have received copies. In addition, this study has been reviewed by our Evaluation staff and the Evaluation Subcommittee of the Advisory Board. The exposure that this study has received locally has resulted in a careful review of the research and a good deal of interest on the part of the board in utilizing the findings. The potential for these findings to be used by the Advisory Board is rather high. However, the review process has raised a number of substantive questions regarding the research which go beyond the normal imperfections of this type social research and, in fact, appear have a direct bearing on the strength of the conclusions. It is our hope that you will address the following questions and discuss your responses with us at your earliest opportunity.

A. Group Distinctiveness

As we understand the use of linear discriminant analysis, an underlying assumption is equality of covariances. If the covariance matrices are not equal (as appears to be true in this case) the optimal rule is a quadratic discriminant function rather than the linear discriminant function. It may be that appropriate transformations of the data (log, square root, etc.) might eliminate the problem of skewness and stabilize the covariance matrices so that a linear function could

be used. Also, since the Institution, PORT and Probation group sizes were unequal, using proportional priors rather than equal prior probabilities would improve the discrimination among groups.[1] Last, it is possible that the PORT group is more like the Jail group than the Institution group. If the Jail group falls somewhere between the PORT and Probation groups (on the basis of the variables listed in Table 1 of the report), PORT residents could more likely be classified as probationers. However, the PORT residents actually might have gone to jail and experienced increased social control if PORT were not available.

If you have the time we would like to suggest the following additional analyses. All proposals assume that the data have been transformed and proportional priors are used.

(1) If data are available build a discriminant function on the Institution, Jail and Probation groups. Use this function to classify the PORT residents.

(2) If data on the jail group are not available, build a discriminant function on the Institution and Probation populations and classify the PORT group. Of course leaving out the jail group could cause difficulties as discussed above.

(3) Do a multivariate T-test of Institution versus PORT and then PORT versus the Probation to see which difference is larger. Again, leaving out Jail population would complicate this analysis. If possible it would be useful to also include a PORT versus Jail comparison.

B. Dispositions Without Residential Alternatives

It may be that the patterns of arrest and sentencing are very different in Anoka County than in Olmsted County. The similarity of these two counties has not been demonstrated.

If the analysis proposed under group distinctiveness is not sufficient, then we would suggest the following:

(1) What variables did well in the discriminant analysis for the Anoka County group? What variables did well in the Anoka discriminant analysis? How do these compare?

(2) Compare the overall population means for the Olmsted County group to the overall sample means for the Anoka group to begin to assess the comparability of the two groups.

(3) After making the appropriate transformations on the data and rerunning the discriminant analysis, check to see how accurately the Anoka function discriminates for its own group of people and how accurately the Anoka function discriminates for the Olmsted County institutional group and for the Olmsted County probation group. (This might be useful even without transforming the data to gain more understanding of the published classification function.)

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[1] Lachenburch, Peter A., Discriminant Analysis, Hafner Press, 1975.

C. Criminal Activity With Increased Social Control

It appears from Table 2C that the PORT - Probation type group and the comparison group differ on many of the variables. Again this analysis is based on the reliability of the PORT discriminant function and the comparability between Olmsted County and Anoka County.

We would like to suggest the following:

(1) Compare PORT criminal activities in the group determined to be most like the probationers to the criminal activities of Olmsted County probationers. This would eliminate any problems with comparability. Of course, you would still have the small sample size problem.

D. Economic Benefits

Our final concern regards the economic costs and benefits. Focusing simply on per diem costs for PORT, a one dollar per day reduction in the per diem as a result of tuition paid by PORT residents would bring the cost benefit ratio for social control even closer to one. Again too, the validity of these conclusions is based on the assumption that the original discriminant analysis is reliable.

The preceding concerns have been developed in order to hopefully improve on an innovative and professional research effort which has been difficult and a complex study to conduct. We have no preconcerned notions regarding the impact of our questions on the findings. In fact, it may be likely that the results may even be stronger in support of the social control phenomenon. However, in our estimation these are substantive questions and should be addressed prior to the recommendation by the Evaluation Committee or the adoption of these findings by the Advisory Board. We look forward to discussing these concerns with you in the near future.

Sincerely,

Lawrence Collins
Chairperson, Evaluation Subcommittee

William J. Swanstrom
Program Evaluator

Barbara Tilley
Member Evaluation Subcommittee

cc: Isabel Huizenga
David A. Rooney
Jay Lindgren
Thomas Sullivan

APPENDIX B

Department of Corrections letter to Evaluation Committee
November 9, 1977

STATE OF MINNESOTA
DEPARTMENT OF CORRECTIONS
612-296-6133
SUITE 430 METRO SQUARE BLDG. • 7th & ROBERT STREETS • ST. PAUL, MINN. 55101

November 9, 1977

Mr. Lawrence Collins, Chairperson
Evaluation Subcommittee
c/o David A. Rooney
Community Corrections Administrator
Olmsted County Court House
Rochester, Minnesota 55901

Dear Mr. Collins:

The receipt of your letter of October 27, 1977 regarding our research on the "social control issue" has led us to once again review the research methods and methodologies used in the report entitled, The Effect of the Availability of Community Residential Alternatives to State Incarceration on Sentencing Practices: The Social Control Issue (June, 1977). This letter summarizes the results of this reexamination following the general issue outline suggested in your letter.

A. Group Distinctiveness

Covariance Matrices

One of several assumptions underlying the theory of discriminant analysis is the equality of group covariance matrices. In practical applications covariance matrices are seldom equal. One technique that can be employed in dealing with unequal covariance matrices is using individual group covariance matrices for classification rather than the usual pooled within-groups covariance matrix. While some differences exist in the study's group covariance matrices, a pooled estimate was used. Discriminant analysis is extremely robust and strict adherence to the assumption of equal covariance is not imperative. As a practical matter, the result of unequal covariance matrices in the classification process is that cases are more likely to be placed into the group with the greatest over-all dispersion. The institution groups are more disperse than the other dispositional groups and, therefore, cases are somewhat more likely to be assigned to the institution group than they would be if the covariance matrices were equal.

Proportional Priors

Discriminant analysis provides for an individual case to be assigned group membership on the basis of classification scores derived from the discriminating variables for that particular case. One of the options available in classifying individual cases into groups is to provide a set of given or prior probabilities in the assignment process. Setting prior probabilities involves intervening in the classification process and determining that the probabilities based on the classification scores will be adjusted according to some predetermined systemic bias. The most common prior probabilities used are based on either

sample or known population sizes. If, for example, cases are being classified into two groups one of which has 75 members and the other having 25 members, prior probabilities of .75 and .25 can be specified. This results in adjusting the probabilities derived from the discriminating variables to increase the probabilities that cases will be classified into the larger group. In a sense, the cases are only partially "earning" classification into the larger group on the basis of individual characteristics. There is a definite systemic "push" element operating as well.

There are times when this kind of adjustment is useful such as when theory suggests that there is a definite size constraint in the system (e.g., number of medical school openings) and it is desirable to reflect that fact in classifying members. However, when theory suggests that group size is determined not by a systemic factor but rather results from the empirical existence of certain kinds of individuals, equal probabilities are often more appropriate. Individuals are then classified on the basis of classification scores derived from individual characteristics and in essence "earn" their way into a group.

It was felt that sentencing patterns reflect, or ought to reflect, the second theoretical perspective and, therefore, equal probabilities were used. To do otherwise would suggest that probation groups are larger than institutional groups not only because there are more offenders with the appropriate characteristics but also because judges determine that the probation group will be larger and consider that in the dispositional process. That would seem to be a difficult position to defend.

As a practical matter, specifying prior probabilities on the basis of population size would increase the probabilities of classifying residents in the probation group.

Jail vs. PORT

It seems quite likely that PORT has come to be used as an alternative to jail. The trend found that the decreasing use of PORT as an alternative to state incarceration coincided with the development of jail programming and subsequent increased use of the jail. Direct support for this idea is found in the dispositions giving offenders the option of jail or PORT (see footnote 5 in the study). This provides further evidence that PORT is decreasingly being used as an alternative to state incarceration.

There is a great need for systematic study of the jail phenomenon in Community Corrections programming. If PORT and jail groups are indeed similar, it would follow that the jail population is also similar to the probationers in a system with two sentencing options.

Mr. Lawrence Collins, Chairperson
Evaluation Subcommittee
c/o David A. Rooney
Community Corrections Administrator

November 9, 1977

Whether more social control is exerted by jail or PORT is an interesting but difficult question. A definitive answer is probably not possible, but factors such as length of stay, work release options, and subjective evaluations of offenders might shed some light on the issue.

Additional Suggestions

1. Unfortunately, data on jailed offenders are not available.

2. Using the institution and probation groups in Olmsted County to classify PORT residents was considered and rejected. The reason the Anoka groups were used instead of the Olmsted groups was to ensure a sentencing pattern that contained PORT-type residents. Olmsted County did not have sufficient numbers of PORT-type residents in the probation and institution groups to provide an empirical referant for the reliable placement of PORT residents. A more extensive discussion of the rationale is contained on page 18 of the report.

3. A multivariate T-test would determine whether the PORT groups are statistically different from the probation and institution groups. A T-test does not determine the extent of differences, however. Although this type of analysis could be conducted, it does not directly relate to the issue of the kind of alternative PORT is providing.

B. Dispositions without Residential Alternatives

As noted in the report there are inevitable differences between correctional systems. For the purposes of this study, it is not necessary that patterns of arrest in the two systems be similar, but it is necessary that sentencing patterns be similar. The Anoka dispositional groups are more variable than the Olmsted dispositional groups because the continuum of offenders is placed in two rather than three major groups in Olmsted County (which became four groups when the jail began to be used extensively). Substantial similarity, however, was found in the patterns of variables between the respective dispositional groups in the two counties.

Additional Suggestions

1. It is unclear what is meant by discriminant analysis for the Anoka County group as compared to the Anoka discriminant analysis. Discriminant analysis was performed using the Anoka probation and Anoka institution groups from which one discriminant function was derived. The variables which contribute most to the functions are severity level of the crime, age at first offense, and number of prior offenses. The same variables contribute most to the solution in the Olmsted area with the additional variable of age being important.

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2. While it would seem that the more meaningful comparisons for the purpose of the study are between dispositional groups, comparable broader aggregations can be calculated with the following information. There were 279 dispositions in the Anoka County probation population and 153 dispositions in the Anoka institution population.

   Means reflecting the total Anoka population can be calculated by appropriately weighting the Anoka sample means.

3. The discrimination of the Anoka groups is as follows:

Dispositional Groups in Anoka County, July, 1972 through June, 1976

Actual Dispositions	Predicted Dispositions		
	Probation	Institution	Total
Probation	92.0% n=92	8.0% n=8	100% 100
Institution	20% 16	80% 64	100% 80

The Olmsted institution and probation groups were not classified into the Anoka probation and institution groups. Doing so does not follow from the design or the questions being asked.

C. Criminal Activity with Increased Social Control

Some differences between the aggregated PORT-Probation type and the comparison groups do exist, but the differences are very small and the pattern of variables on the individual level are very similar. It is unclear what is meant by the PORT discriminant function.

1. The same empirical referent problem mentioned in regard to using the Olmsted probation and institution groups to classify PORT residents surfaces in regard to investigating criminal activity. There are not enough comparable offenders in the Olmsted probation sample to pursue that kind of investigation.

D. Economic Analysis

The economic analysis of the report is directed toward assessing the approximate costs and benefits of increasing and decreasing social control. To accomplish this, hypothetical alternatives were constructed (e.g., estimates of institutional time that would have been served). Given the nature of the constructions,

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somewhat arbitrary but hopefully relatistic per diems were established to estimate the costs of increasing social control and the benefits of decreasing social control. The economic analysis is obviously not a cost analysis of a particular program. That would require a specific and detailed accounting of expenditures during the time period covered. Program based cost/benefit inferences do not follow from the kind of analysis conducted in the report.

As is apparent from the preceding discussion, we continue to believe that the research methods and methodologies employed in this study are in all cases appropriate and properly applied. While it is almost always possible for researchers to have honest differences of opinion regarding the proper application of statistical techniques and the interpretation of statistical analyses, we believe that our usages are in all cases consistent with current "good practice". Therefore, we continue to believe that the report is technically sound as published.

As an aside, it is very satisfying to have a committee such as yours examine our work in such an obviously careful and thoughtful manner. Such feedback not only contributes to maintaining high standards for research in Minnesota, it also suggests that research is increasingly being seriously considered in the public policy making process.

I trust that this response is adequate for your needs. However, should your committee have additional questions, please contact us and we will be happy to respond. Also, should your committee wish to examine the data upon which this report is based, we will be glad to provide it to you for independent examination and analysis.

Sincerely,

Gerald J. Strathman, Director
Research and Information Systems

cc: Thomas Sullivan

GJS/ss/ps

APPENDIX C

Means, medians, and standard deviations on disposition related variables probation, PORT and institution cases in Dodge-Fillmore-Olmsted, Ramsey and Anoka Counites

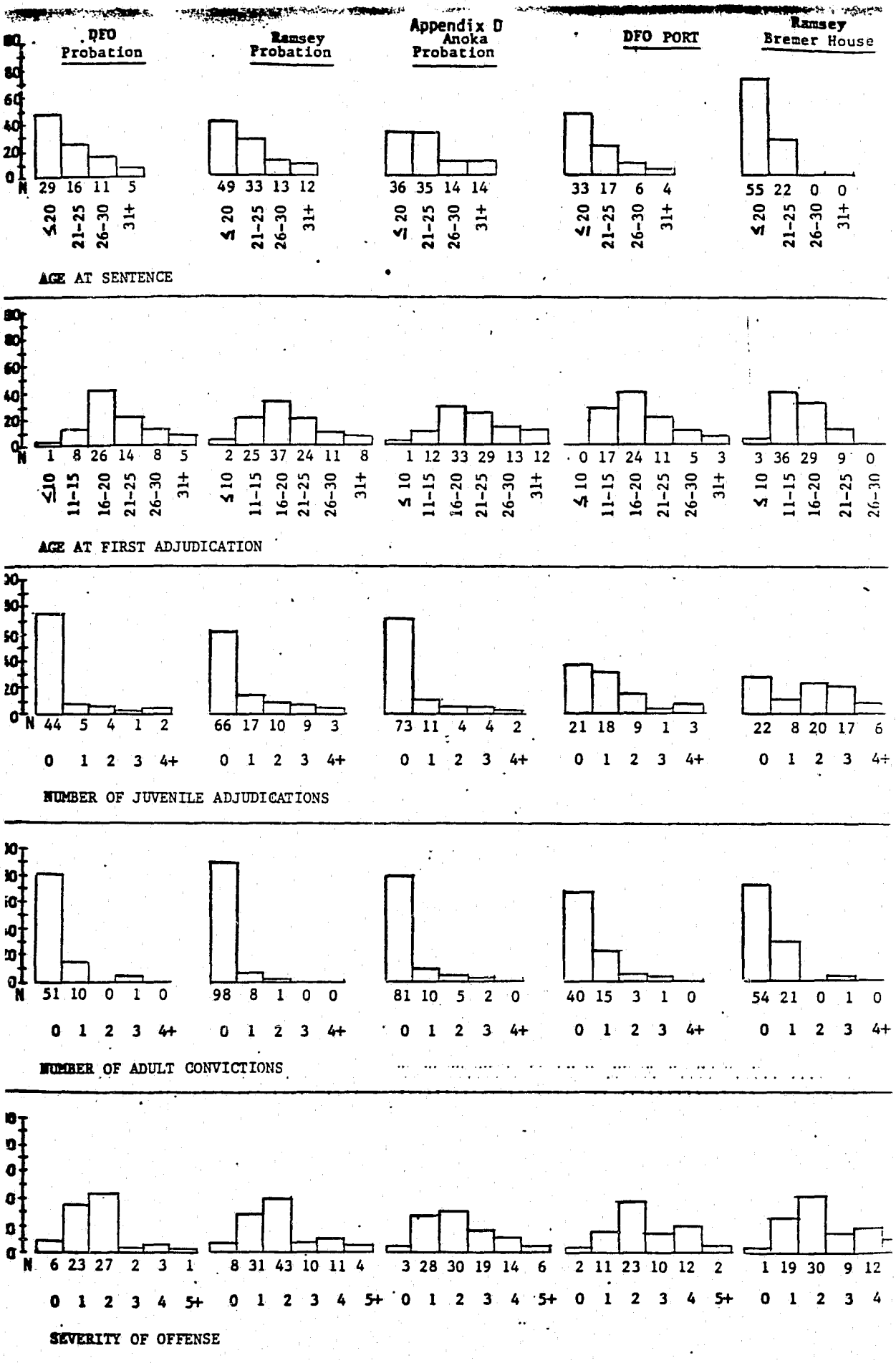
-- Penciled result taken from S cial Contro Stud

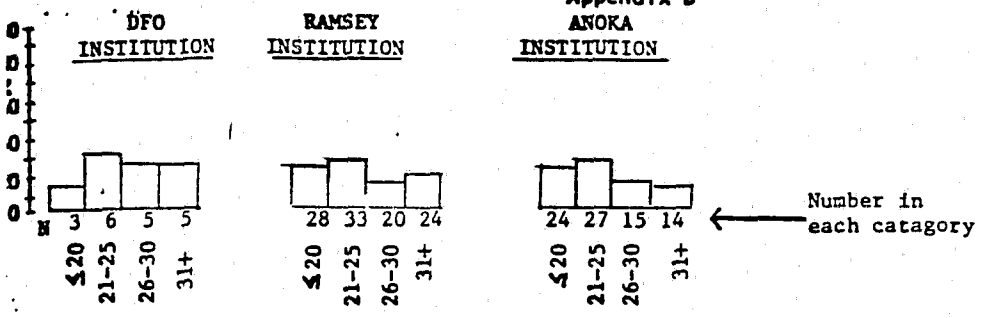
		Probation						Institution					
		Dodge/ Fillmore/ Olmsted		Ramsey		Anoka		D/F/O PORT		Ramsey Bremer House		Anoka	
# cases in study		62		107		100		60		77		80	
Age at sentence	N	61	61	107	107	99	99	60	61	77	77	80	80
	Median[1]	21		21		22		20		19		23	
	Mean	23.7	23.9	23.3	23.34	24.3	24.32	22.0	21.96	19.8	19.84	25.1	25.14
	S.D.[2]	7.8	7.55	6.4	6.30	7.2	7.16	4.5	4.55	1.9	1.94	7.3	7.32
Age at first adjudication or conviction[3]	N	61	55	107	104	99	90	60	48	77	73	80	76
	Median	20		19		21		18		15		16	
	Mean	22.2	21.65	20.8	20.73	22.7	22.39	19.5	18.00	16.1	15.80	17.2	17.05
	S.D.	8.5	7.26	7.5	7.31	7.8	7.69	5.7	4.30	3.6	3.45	6.1	6.01
Number of juvenile adjudications	N	56	56	105	105	94	94	52	53	73	73	78	78
	% with zero	79%		63%		78%		40%		30%		33%	
	Median	0		0		0		1		2		1	
	Mean	0.4	.57	0.7	.72	0.4	.43	1.1	1.06	1.8	1.75	1.9	1.92
	S.D.	1.0	1.37	1.1	1.13	1.0	.95	1.4	1.25	1.5	1.47	2.3	2.26
Number of prior adult adjudications	N	62	62	107	107	98	98	59	56	76	76	80	80
	% with zero	82%		92%		83%		68%		71%		44%	
	Median	0		0		0		0		0		1	
	Mean	0.2	.33	0.1	.09	0.3	.27	0.4	.42	0.3	.32	1.6	1.64
	S.D.	0.5	.98	0.3	.25	0.7	.65	0.7	.65	0.5	.54	2.0	1.99
Severity of current conviction	N	62	62	107	107	100	100	60	61	77	77	80	80
	Median	2		2		2		2		2		3	
	Mean	1.6	1.63	2.0	1.97	2.3	2.34	2.4	2.44	2.4	2.39	3.4	3.41
	S.D.	1.1	1.02	1.2	1.19	1.4	1.34	1.3	1.27	1.3	1.19	1.8	1.85

		Institution			
		Ramsey		Dodge/ Fillmore/ Olmsted	
# cases in study		105		19	
Age at sentence	N	105	105	19	23
	Median[1]	24		26	
	Mean	26.4	26.38	29.1	27.9
	S.D.[2]	7.9	7.61	10.8	10.
Age at first adjudication or conviction[3]	N	105	98	19	22
	Median	16		18	
	Mean	18.2	16.98	23.2	22.1
	S.D.	8.1	6.13	13.0	12.
Number of juvenile adjudications	N	98	98	19	23
	% with zero	27%		47%	
	Median	2		1	
	Mean	2.4	2.38	1.6	1.5
	S.D.	2.2	2.26	2.3	2.2
Number of prior adult adjudications	N	103	103	19	23
	% with zero	39%		53%	
	Median	1		0	
	Mean	1.3	1.33	1.7	1.66
	S.D.	1.4	1.43	2.6	2.3
Severity of current conviction	N	105	105	19	23
	Median	4		3	
	Mean	3.7	3.69	3.3	3.5
	S.D.	1.8	1.92	1.1	2.

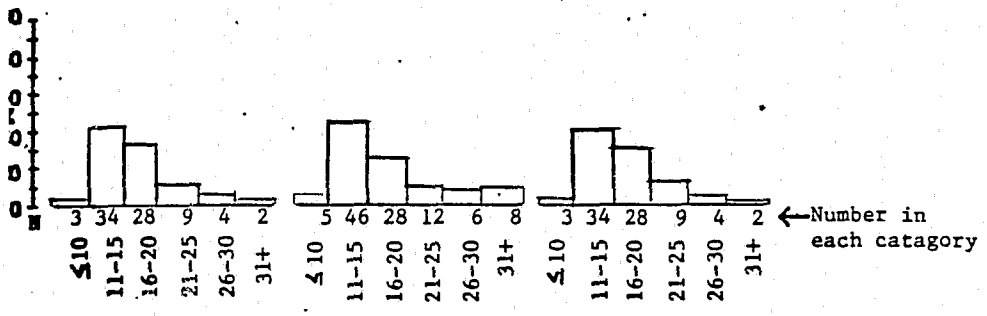
[1]Median is the value for which 50% of observations are above and 50% are below
[2]S.D. denotes the standard deviation
[3]Age at first adjudication or conviction was defined as the age at first adjudication or conviction if there was one else age at current sentence

Appendix D

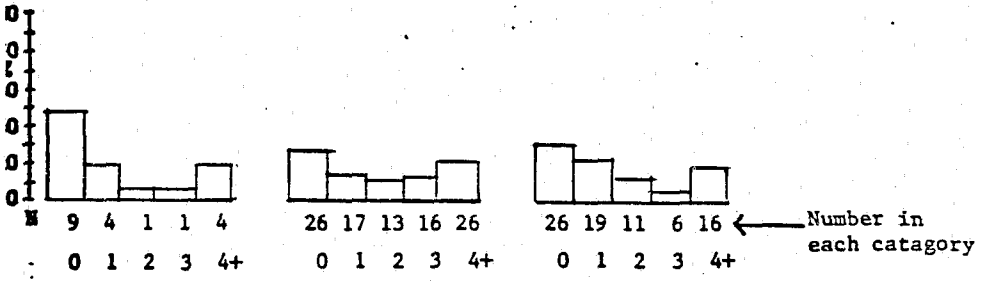

DFO Probation
Ramsey Probation
Anoka Probation
DFO PORT
Ramsey Bremer House
N
29 16 11 5
≤20 21-25 26-30 31+
49 33 13 12
≤20 21-25 26-30 31+
36 35 14 14
≤20 21-25 26-30 31+
33 17 6 4
≤20 21-25 26-30 31+
55 22 0 0
≤20 21-25 26-30 31+
AGE AT SENTENCE
1 8 26 14 8 5
≤10 11-15 16-20 21-25 26-30 31+
2 25 37 24 11 8
≤10 11-15 16-20 21-25 26-30 31+
1 12 33 29 13 12
≤10 11-15 16-20 21-25 26-30 31+
0 17 24 11 5 3
≤10 11-15 16-20 21-25 26-30 31+
3 36 29 9 0
≤10 11-15 16-20 21-25 26-30
AGE AT FIRST ADJUDICATION
N 44 5 4 1 2
66 17 10 9 3
73 11 4 4 2
21 18 9 1 3
22 8 20 17 6
0 1 2 3 4+
NUMBER OF JUVENILE ADJUDICATIONS
N 51 10 0 1 0
98 8 1 0 0
81 10 5 2 0
40 15 3 1 0
54 21 0 1 0
0 1 2 3 4+
NUMBER OF ADULT CONVICTIONS
N 6 23 27 2 3 1
8 31 43 10 11 4
3 28 30 19 14 6
2 11 23 10 12 2
1 19 30 9 12
0 1 2 3 4 5+
SEVERITY OF OFFENSE



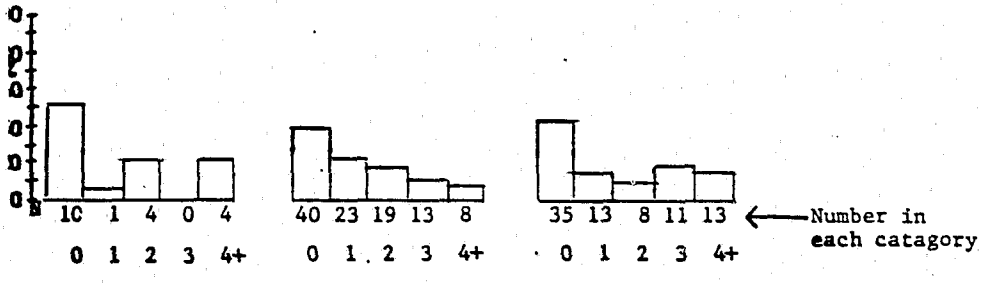
AGE AT SENTENCE



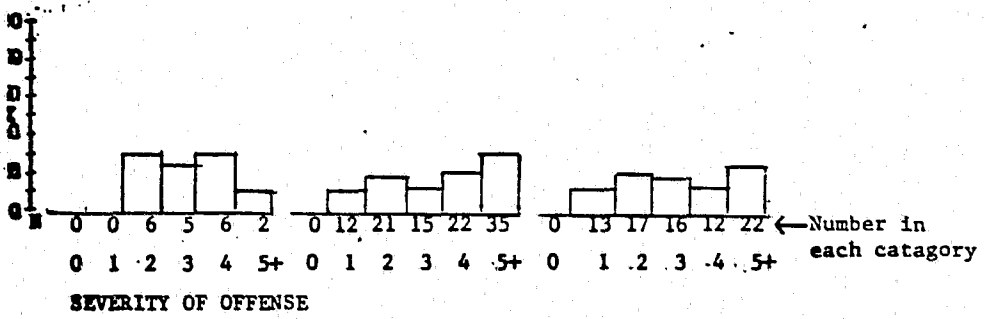
AGE AT FIRST ADJUDICATION



NUMBER OF JUVENILE ADJUDICATIONS



NUMBER OF ADULT CONVICTIONS



SEVERITY OF OFFENSE

APPENDIX E

ivariate associations between dispositions and selected variables for PORT versus Dodge-Fillmore-Olmsted and Anoka Counties

arison			Age at Sentence[1]	Age at first adj. or conv.[2]	Number of juvenile adj.[3]	Number of adult conv.[4]	Severity of current conviction[5]
			Selected Variables				
dge/	1) DFO Inst., vs.	x^2	13.7	19.2	24.4	39.1	33.3
illmore/	DFO Prob. vs.	p	.033	.001	<.001	<.001	<.001
lmsted	DFO PORT	df	6	4	6	4	6
	2) DFO Inst., vs PORT	x^2	12.6	5.4	6.2	15.0	6.8
		p	.006	NS	NS	<.001	NS
		df	3	2	3	2	3
	3) DFO Prob. vs PORT	x^2	1.9	3.9	17.4	4.0	17.3
		p	NS	NS	.001	NS	.001
		df	3	2	3	2	3
noka:	1) Anoka Inst., vs Anoka Prob. vs DFO PORT	x^2	16.5	33.7	49.4	47.3	16.5
		p	.012	<.001	<.001	<.001	.01
		df	6	4	6	4	6
	2) Anoka Inst. vs DFO PORT	x^2	10.5	5.4	8.4	19.5	7.9
		p	.015	NS	.04	<.001	.048
		df	3	2	3	2	3
	3) Anoka Prob. vs DFO PORT	x^2	5.9	9.3	22.6	6.4	2.3
		p	NS	.009	<.001	.04	NS
		df	3	2	3	2	3

egorical grouping of data used for the univariate analysis

1. Age at sentence categories used: less than or equal to 20 years, 21-25, 26-30, 31 years or older.
2. Age at first adjudication or conviction categories used: less than or equal to 15 years, 16-20, 21 years or older.
3. Number of juvenile adjudications: 0, 1, 2, 3 or more
4. Number of adult convictions: 0, 1, 2 or more
5. Severity of current conviction: 0 or 1, 2, 3, 4 or higher

NS = non-significant ($p > .05$)

Appendix F

Univariate associations between dispositions and selected variables for Bremer versus Ramsey and Anoka Counties

Comparison			Age at sentence[1]	Age at first adj. or conv.	Number of juvenile ad.	Number of adult conv.	Severity of current conviction
Ramsey:	1) Inst. vs Prob. vs Bremer	x^2	52.7	25.5	48.2	97.4	52.3
		p	<.001	<.001	<.001	<.001	<.001
		df	6	4	6	4	6
	2) Inst. vs Bremer	x^2	51.9	5.7	7.1	36.0	21.6
		p	<.001	NS	NS	<.001	<.001
		df	3	2	3	2	3
	3) Bremer vs Prob.	x^2	23.3	19.2	27.2	13.7	4.0
		p	<.001	<.001	<.001	<.001	NS
		df	3	2	3	2	3
Anoka:	1) Inst. vs Bremer vs Prob.	x^2	44.0	21.9	61.4	62.4	18.8
		p	<.001	<.001	<.001	<.001	.004
		df	6	4	6	4	6
	2) Inst. vs Bremer	x^2	41.6	1.1	7.3	35.0	10.0
		p	<.001	NS	NS	<.001	.019
		df	3	2	3	2	3
	3) Prob. vs Bremer	x^2	32.7	43.1	46.6	11.2	3.11
		p	<.001	<.001	<.001	.004	NS
		df	3	2	3	2	3

Categorical groupings of data used for the univariate analysis

1. Age at sentence categories used: less than or equal to 20 years, 21-25, 26-30, 31 years or older.
2. Age at first adjudication or conviction categories used: less than or equal to 15 years, 16-20, 21 years or older.
3. Number of juvenile adjudications: 0, 1, 2, 3 or more
4. Number of adult convictions: 0, 1, 2 or more
5. Severity of current conviction: 0 or 1, 2, 3, 4 or higher

NS = non-significant ($P > .05$)

APPENDIX G

Listing of Data Used in the Reanalysis

LISTING OF DATA

SENTAGE=AGE AT SENTENCING
AGEFADJ=AGE AT FIRST ADJUDICATION OR CONVICTION
NOJADJ=NUMBER OF JUVENILE ADJUDICATIONS
NOAADJ=NUMBER OF PRIOR ADULT CONVICTIONS
SVRTY1=SEVERITY OF CURRENT OFFENSE

NAME=ANO_INST

OBS	CASE	SENTAGE	AGEFADJ	NOJADJ	NOAADJ	SVRTY
47	226	18	18	2	0	5
48	227	22	16	3	2	3
49	228	19	19		0	6
50	229	29	11	9	4	2
51	230	17	12	4	0	4
52	231	30	15	0	6	1
53	232	42	17	1	3	2
54	233	19	14	5	0	1
55	234	22	22	3	1	4
56	235	24	11	1	1	2
57	236	22	18	0	1	2
58	237	19	19	0	1	3
59	238	23	9	2	3	2
60	239	30	30	0	0	6
61	240	21	21	0	1	5
62	241	45	21	0	6	4
63	242	19	13	5	1	1
64	243	24	15	1	4	4
65	244	34	15	1	5	1
66	245	26	14	1	2	4
67	246	42	17	2	4	3
68	247	20	18	0	1	9
69	248	26	15	1	3	7
70	249	19	19	0	0	5
71	250	47	47	0	0	6
72	251	25	12	4	5	4
73	252	24	12	6	3	3
74	253	22	16	1	0	5
75	254	19	19	0	0	2
76	255	23	14	2	1	2
77	256	24	17	2	2	4
78	257	41	41	0	0	2
79	258	23	12	4	4	2
80	259	20	17	1	3	2

LISTING OF DATA

SENTAGE=AGE AT SENTENCING
AGEFADJ=AGE AT FIRST ADJUDICATION OR CONVICTION
NOJADJ=NUMBER OF JUVENILE ADJUDICATIONS
NOAADJ=NUMBER OF PRIOR ADULT CONVICTIONS
SVRTY1=SEVERITY OF CURRENT OFFENSE

NAME=ANO_INST

OBS	CASE	SENTAGE	AGEFADJ	NOJADJ	NOAADJ	SVRTY1
1	14	18	13	1	0	1
2	15	18	9	5	0	1
3	16	22	15	3	0	3
4	17	36	15	1	3	6
5	18	38	14	3	0	6
6	19	17	14	10	0	2
7	20	32	30	0	1	3
8	21	21	15	4	1	4
9	22	25	14	1	3	4
10	23	32	16	1	3	6
11	24	23	16	1	2	2
12	25	34	13	3	7	1
13	26	20	20	0	0	1
14	27	16	16	0	0	5
15	28	16	16	0	0	5
16	29	24	17	1	2	6
17	30	21	16	1	0	2
18	31	23	23		0	2
19	32	29	16	1	1	4
20	33	18	17	1	0	3
21	34	24	12	6	0	1
22	35	19	14	2	0	3
23	36	20	13	1	0	3
24	37	20	14	1	0	6
25	38	26	21	0	1	6
26	39	33	21	0	6	1
27	40	17	16	2	0	7
28	41	35	21	0	7	6
29	42	22	15	6	3	2
30	43	29	10	6	5	2
31	44	19	15	2	0	5
32	45	26	14	6	3	4
33	49	21	13	2	2	3
34	50	18	18	0	0	3
35	53	29	19	0	3	5
36	54	25	25	0	0	3
37	64	45	13	3	6	1
38	74	22	22	0	0	6
39	76	29	29	0	0	4
40	122	20	14	2	1	3
41	220	29	16	1	0	3
42	221	22	19	0	2	3
43	222	22	18	0	2	1
44	223	18	15	2	0	1
45	224	27	27	0	0	3
46	225	19	13	4	0	2

LISTING OF DATA

SENTAGE=AGE AT SENTENCING
AGEFADJ=AGE AT FIRST ADJUDICATION OR CONVICTION
NOJADJ=NUMBER OF JUVENILE ADJUDICATIONS
NOAADJ=NUMBER OF PRIOR ADULT CONVICTIONS
SVRTY1=SEVERITY OF CURRENT OFFENSE

NAME=ANO_PPOH

OBS	CASE	SENTAGE	AGEFADJ	NOJADJ	NOAADJ	SVRTY1
81	351	25	25	0	0	2
82	352	26	26		2	1
83	353	22	22	0	0	1
84	354	33	33	0	0	7
85	355	20	15	1	0	1
86	356	29	29	0	0	2
87	357	24	16	1	1	2
88	358	20	13	3	2	1
89	359	26	26	0	0	4
90	360	25	25	0	0	5
91	361	18	18	0	0	2
92	362	28	28	0	0	4
93	363	37	37		1	5
94	364	22	15	2	0	2
95	365	21	21	0	0	4
96	366	22	22	0	0	2
	367	30	30	0	0	1
98	368	29	16	1	0	4
99	369	20	20	0	0	4
00	370	27	27	0	0	5
101	371	24	16	2	2	3
102	372	21	21	0	0	4
103	373	22	22	0	0	1
104	374	19	13	4	0	3
105	375			0	0	2
106	376	64	64	0	0	4
107	377	23	23	0	0	1
108	378	33	33	0	0	1
109	379	21	21	0	0	1
110	380	28	28	0	0	4
111	381	23	13	3	3	2
112	382	27	27	0	0	3
113	383	25	24	0	1	2
114	384	20	19	0	1	4
115	385	23	22	0	1	3
116	386	19	19	0	0	4
117	387	19	15	2	0	2
118	388	18	13	3	0	2
119	389	18	14	3	0	2
120	390	23	23	0	0	3
121	391	40	40	0	0	1
122	392	26	26	0	0	3
123	393	21	21	0	0	3
124	394	18	18	1	0	1
125	395	26	26	0	0	2
126	396	42	42		2	2

SENTAGE=AGE AT SENTENCING
AGEFADJ=AGE AT FIRST ADJUDICATION OR CONVICTION
NOJADJ=NUMBER OF JUVENILE ADJUDICATIONS
NOAADJ=NUMBER OF PRIOR ADULT CONVICTIONS
SVRTY1=SEVERITY OF CURRENT OFFENSE

NAME=ANO_PROB

OBS	CASE	SENTAGE	AGEFADJ	NOJADJ	NOAADJ	SVRTY1
127	397	31	31		0	1
128	398	21	21	0	0	3
129	399	21	21	0	0	1
130	400	23	23	0	0	1
131	401	19	19	0	0	3
132	402	21	21	0	0	3
133	403	22	22	0	0	2
134	404	19	19	0	0	2
135	405	19	19	1	0	2
136	406	23	23	0	0	3
137	407	19	19	0	0	1
138	408	24	24	0	0	2
139	409	22	22	0	0	0
140	410	19	19	0	0	1
141	411	18	14	1	0	2
142	412	18	18	0	0	1
143	413	25	25	0	0	0
144	414	24	24	0	0	1
145	415	22	22	0	0	2
146	416	41	41	0	0	2
147	417	20	20	0	0	2
148	418	32	32	0	0	3
149	419	26	26	0	0	1
150	420	28	28	0	0	3
151	421	20	20	0	0	2
152	422	24	24	0	0	2
153	423	19	15	1	0	2
154	424	23	13	2	1	2
155	425	22	22	0	0	2
156	426	18	18	0	0	2
157	427	35	35	0	0	1
158	428	18	18	0	0	3
159	429	23	22	0	1	1
160	430	20	20			0
161	431	19	19	0	0	3
162	432	18	18			1
163	433	24	24	0	1	1
164	434	43	43	0	0	4
165	435	38	38	0	0	6
166	436	40	21	0	1	4
167	437	20	20	0	0	5
168	438	20	16	1	0	3
169	439	20	20	0	0	1
170	440	23	19	0	1	3
171	441	18	18	0	0	4
172	442	19	19	0	0	4

171	441	18	18	0	0	4

LISTING OF DATA

SENTAGE=AGE AT SENTENCING
AGEFADJ=AGE AT FIRST ADJUDICATION OR CONVICTION
NOJADJ=NUMBER OF JUVENILE ADJUDICATIONS
NOAADJ=NUMBER OF PRIOR ADULT CONVICTIONS
SVRTY1=SEVERITY OF CURRENT OFFENSE

NAME=ANO_PROB

OBS	CASE	SENTAGE	AGEFADJ	NOJADJ	NOAADJ	SVRTY1
173	443	33	13	5	3	2
174	444	19	19	0	0	3
175	445	23	16	1	2	1
176	446	19	19	1	0	2
177	447	20	20	0	0	1
178	448	19	19	0	0	1
179	449	27	27	0	0	3
180	450	19	16	1	0	1

SENTAGE=AGE AT SENTENCING
AGEFADJ=AGE AT FIRST ADJUDICATION OR CONVICTION
NOJADJ=NUMBER OF JUVENILE ADJUDICATIONS
NOAADJ=NUMBER OF PRIOR ADULT CONVICTIONS
SVRTY1=SEVERITY OF CURRENT OFFENSE

NAME=OLM_INST

OBS	CASE	SENTAGE	AGEFADJ	NOJADJ	NOAADJ	SVRTY1
181	1	22	15	1	1	2
182	2	18	13	6	0	2
183	4	27	16	4	2	4
184	5	32	32	0	0	6
185	6	29	22	0	4	4
186	7	21	12	4	0	3
187	8	28	20	0	8	3
188	9	27	14	1	0	2
189	10	20	20	1	0	3
190	11	24	24	0	0	3
191	12	59	59	0	0	5
192	126	22	15	2	2	2
193	201	24	18	0	2	2
194	202	46	46	0	0	4
195	203	23	17	1	8	2
196	204	43	43	0	0	4
197	205	26	26	0	0	4
198	206	20	14	8	2	3
199	208	42	14	3	4	4

LISTING OF DATA 10:57 MONDAY, SEPTEMBER

SENTAGE=AGE AT SENTENCING
AGEFADJ=AGE AT FIRST ADJUDICATION OR CONVICTION
NOJADJ=NUMBER OF JUVENILE ADJUDICATIONS
NOAADJ=NUMBER OF PRIOR ADULT CONVICTIONS
SVRTY1=SEVERITY OF CURRENT OFFENSE

NAME=OLM_PORT

CASE	SENTAGE	AGEFADJ	NOJADJ	NOAADJ	SVRTY1
650	20	16	1	0	3
651	21	21	0	0	2
652	18	16	2	1	1
653	18	18	0	0	2
654	37	37	0	0	3
655	20	14	1	0	4
656	20	19	0	1	3
657	24	23	0	1	1
658	27	27			2
659	20	20	0	0	4
660	19	17	2	0	3
661	18	18	0	0	0
662	20	15	1	0	2
663	19	17	1	0	6
664	20	15	1	0	3
665	28	27	0	1	2
666	19	14	1	0	2
667	23	22	0	1	0
668	31	30	0	1	1
669	18	18	0	0	4
670	20	20	1	0	4
671	23	23	0	0	4
801	23	15	2	0	4
802	18	14	1	0	2
803	20	19	0	1	1
804	20	16	1	0	1
805	29	14	2	0	1
806	24	24	0	3	1
807	21	16	1	0	3
808	21	14	4	1	2
809	17	15	8	0	2
810	19	15	1	0	2
811	19	15	2	0	2
812	21	17	1	0	2
813	37	37		1	4
814	27	27		2	4
816	18	17	1	0	1
817	28	28		2	2
818	18	18	2	0	2
819	27	11	3	1	2
820	20	15	1	1	1
821	19	19		0	4
822	19	17	2	0	2
823	20	20	0	1	3
824	19	17	1	0	2
825	20	12	4	1	4

SENTAGE=AGE AT SENTENCING
AGEFADJ=AGE AT FIRST ADJUDICATION OR CONVICTION
NOJADJ=NUMBER OF JUVENILE ADJUDICATIONS
NOAADJ=NUMBER OF PRIOR ADULT CONVICTIONS
SVRTY1=SEVERITY OF CURRENT OFFENSE

NAME=ULM_PORT

OBS	CASE	SENTAGE	AGEFADJ	NOJADJ	NOAADJ	SVRTY1
246	826	35	35	0	1	1
247	828	18	16	1	0	2
248	829	22	22	0	0	6
249	830	21	21		0	3
250	831	20	20		1	2
251	832	22	15	2	0	2
252	833	22	15	1	0	1
253	834	19	19	0	0	2
254	835	23	23	0	0	4
255	836	24	24	0	0	3
256	837	22	22	0	0	2
257	838	19	19	1	0	3
258	839	20	14	2	0	4
259	841	24	24		2	2

SENTAGE=AGE AT SENTENCING
AGEFADJ=AGE AT FIRST ADJUDICATION OR CONVICTION
NOJADJ=NUMBER OF JUVENILE ADJUDICATIONS
NOAADJ=NUMBER OF PRIOR ADULT CONVICTIONS
SVRTY1=SEVERITY OF CURRENT OFFENSE

NAME=OLM_PROB

OBS	CASE	SENTAGE	AGEFADJ	NOJADJ	NOAADJ	SVRTY1
260	301	19	19	0	0	2
261	302	32	32	0	0	2
262	303	40	40		1	2
263	304	30	15	1	1	2
264	305	18	18	0	0	1
265	306	20	20	0	0	1
266	307	18	18	0	0	1
267	308	20	20	0	0	2
268	309	30	30	0	0	2
269	310	19	19		1	3
270	311	23	22	0	1	3
271	312	22	22	0	0	1
272	313	26	26	0	0	1
273	314	26	26	0	0	1
274	315	18	17	1	0	2
275	316	18	18	0	0	2
276	317	22	22	0	0	4
277	318	19	16	1	0	2
278	319	19	19	0	0	1
279	320	21	14	4	0	1
280	321	19	16	3	0	2
281	322	30	30	0	0	1
282	323	29	14	2	3	2
283	324	42	42		1	2
284	325	19	19	0	0	1
285	326	19	19	0	0	1
286	327	19	19	0	0	6
287	328	20	20	0	0	1
288	329	21	21	0	0	1
289	330	19	19	0	0	2
290	331	21	21	0	0	2
291	332	19	19	0	0	2
292	333	21	21	0	0	2
293	334	18	15	4	0	2
294	335				0	1
295	336	28	28	0	0	2
296	337	18	18	1	0	2
297	338	19	19	0	0	2
298	339	24	24	0	0	2
299	340	25	25		1	2
300	341	20	14	2	1	2
301	601	22	22	0	0	1
302	602	18	18	0	0	1
303	603	22	22	0	0	1
304	604	55	55	0	0	0
305	605	25	25	0	0	0

LISTING OF DATA 10:57 MON

SENTAGE=AGE AT SENTENCING
AGEFADJ=AGE AT FIRST ADJUDICATION OR CONVICTION
NOJADJ=NUMBER OF JUVENILE ADJUDICATIONS
NOAADJ=NUMBER OF PRIOR ADULT CONVICTIONS
SVRTY1=SEVERITY OF CURRENT OFFENSE

NAME=OLM_PROB

OBS	CASE	SENTAGE	AGEFADJ	NOJADJ	NOAADJ	SVRTY1
306	606	27	27	0	0	0
307	607	20	20	0	0	1
308	608	29	29		1	2
309	609	27	27	0	0	4
310	610	20	13	2	0	1
311	611	19	19	0	0	1
312	612	20	11	2	0	1
313	613	29	19	0	1	4
314	614	22	22	0	0	2
315	615	23	23	0	0	0
316	616	23	13	1	1	0
317	618	18	18	0	0	1
318	619	19	19	0	0	2
319	620	19	19	0	0	2
320	621	56	56	0	0	0
321	622	22	22	0	0	1

SENTAGE=AGE AT SENTENCING
AGEFADJ=AGE AT FIRST ADJUDICATION OR CONVICTION
NOJADJ=NUMBER OF JUVENILE ADJUDICATIONS
NOAADJ=NUMBER OF PRIOR ADULT CONVICTIONS
SVRTY1=SEVERITY OF CURRENT OFFENSE

NAME=RAM_BREM

OBS	CASE	SENTAGE	AGEFADJ	NOJADJ	NOAADJ	SVRTY1
322	1	19	16	1	1	2
323	2	18	13	3	1	3
324	3	18	16	2	0	5
325	4	24	14	3	1	2
326	5	19	18	0	1	1
327	6	18	15	2	0	5
328	7	21	15	1	1	4
329	8	18	18	0	0	3
330	9	22	12	2	1	1
331	10	19	13	3	0	3
332	11	18	16	1	0	5
333	12	21	19	0	1	2
334	13	19	18	0	1	2
335	14	19	14	3	0	4
336	15	24	24	0	0	3
337	16	18	11	3	0	2
338	17	18	18	0	0	2
339	18	23	23	0	0	5
340	19	19	14	2	0	4
341	20	18	14	3	0	2
342	21	18	14	3	0	4
343	22	20	20		0	2
344	23	19	19			2
345	24	18	14	3	1	3
346	25	20	18	0	1	2
347	26	21	18	0	1	0
348	27	19	19	0	0	2
349	28	22	22	0	0	5
350	29	19	16	2	0	1
351	30	18	8	4	0	5
352	31	19	19	0	0	4
353	702	19	14	6	0	1
354	703	18	16	2	1	1
355	704	18	9	3	0	2
356	705	19	19	0	1	2
357	707	19	14	3	0	2
358	708	20	14	2	0	1
359	709	23	23	0	0	4
360	710	19	8	2	1	1
361	711	20	17	3	0	1
362	712	20	16	2	1	3
363	713	21	15	2	0	2
364	714	18	14	3	0	1
365	715	19	19	0	0	4
366	716	19	12	5	0	4
367	717	19	14	1	0	3

LISTING OF DATA 10:57 MONDAY

SENTAGE=AGE AT SENTENCING
AGEFADJ=AGE AT FIRST ADJUDICATION OR CONVICTION
NOJADJ=NUMBER OF JUVENILE ADJUDICATIONS
NOAADJ=NUMBER OF PRIOR ADULT CONVICTIONS
SVRTY1=SEVERITY OF CURRENT OFFENSE

NAME=RAM_BREM

OBS	CASE	SENTAGE	AGEFADJ	NOJADJ	NOAADJ	SVRTY1
368	718	23	15	2	1	3
369	719	23	23		1	2
370	720	19	15	2	0	1
371	721	18	14	3	0	2
372	722	19	13	1	0	2
373	723	20	14	2	0	2
374	724	18	15	1	0	1
375	725	19	19	0	0	4
376	726	20	18	0	1	2
377	727	21	20	0	1	2
378	730	18	14	2	0	3
379	731	18	16	1	0	4
380	733	18	12	3	0	2
381	735	19	16	2	0	2
382	736	20	14	4	0	4
383	737	22	22	0	0	1
384	738	18	12	3	0	2
385	739	25	16	1	0	2
386	740	23	15	2	0	1
387	742	17	12	4	0	2
388	743	21	15	3	0	1
389	744	20	20	0	0	4
390	746	22	22	0	0	1
391	982	24	24	0	0	2
392	983	23	23		3	1
393	984	23	16	2	1	1
394	985	20	13	2	0	2
395	990	24	13	3	1	2
396	991	18	13	6	0	1
397	992	19	17	2	0	2
398	993	19	15	2	0	1

LISTING OF DATA

SENTAGE=AGE AT SENTENCING
AGEFADJ=AGE AT FIRST ADJUDICATION OR CONVICTION
NOJADJ=NUMBER OF JUVENILE ADJUDICATIONS
NOAADJ=NUMBER OF PRIOR ADULT CONVICTIONS
SVRTY1=SEVERITY OF CURRENT OFFENSE

NAME=KAM_INST

OBS	CASE	SENTAGE	AGEFADJ	NOJADJ	NOAADJ	SVRTY1
399	46	21	14	2	0	3
400	47	23	13	7	0	1
401	48	30	14	2	0	3
402	51	18	14	6	0	4
403	52	19	16	1	1	6
404	55	23	15	1	0	4
405	56	22	12	3	2	6
406	57	23	23		2	4
407	58	42	13	2	3	3
408	59	18	16	4	0	4
409	60	44	44	0	0	2
410	61	30	16	2	2	6
411	62	43	12	1	4	3
412	63	33	17	2	1	2
413	65	24	22	0	2	1
414	66	19	13	6	1	6
415	67	29	17	1	2	6
416	68	33	16	1	2	3
417	69	24	17	1	1	2
418	70	47	47			4
419	71	28	24	0	1	3
420	72	27	23	0	2	2
421	73	21	18	0	1	2
422	75	19	14	8	0	4
423	77	20	14	4	3	1
424	78	20	15	1	0	4
425	79	18	16	1	0	2
426	80	20	13	4	1	2
427	81	23	21	0	1	2
428	82	28	11	3	3	2
429	83	21	11	8	3	4
430	84	28	28		0	2
431	85	51	15	1	2	4
432	86	41	41	0	0	1
433	87	24	24	0	0	7
434	88	34	17	1	2	2
435	89	24	14	3	1	4
436	90	23	23	0	0	4
437	91	40	34	0	1	1
438	92	26	26	0	0	6
439	93	32	17	1	0	3
440	94	22	14	5	2	8
441	95	26	11	4	2	3
442	96	38	10	1	3	4
443	97	21	15	1	2	3
444	98	17	16	4	0	4

SENTAGE=AGE AT SENTENCING
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NOJADJ=NUMBER OF JUVENILE ADJUDICATIONS
NOAADJ=NUMBER OF PRIOR ADULT CONVICTIONS
SVRTY1=SEVERITY OF CURRENT OFFENSE

NAME=RAM_INST

OBS	CASE	SENTAGE	AGEFADJ	NOJADJ	NOAADJ	SVRTY1
445	99	30	11	5	6	1
446	100	21	13	3	0	4
447	101	22	15	5	1	2
448	102	29	14	3	3	1
449	103	19	17	2	0	2
450	104	39	10	5	4	3
451	105	24	15	3	1	1
452	106	18	13	6	0	6
453	107	27	27	0	0	6
454	108	33	25	0	2	6
455	109	47	47			3
456	110	25	10	4	1	6
457	111	22	12	4	3	2
458	112	19	16	2	0	3
459	113	43	37	0	3	6
460	114	22	10	9	3	2
461	115	20	15	3	0	3
462	116	33	15	4	0	6
463	117	20	15	3	1	6
464	118	27	27	0	0	6
465	119	34	17	3	4	1
466	120	25	13	3	2	6
467	121	35	16	2	3	2
468	123	33	22	0	4	1
469	124	42	14	2	6	3
470	261	20	12	3	0	5
471	262	19	16	2	2	4
472	263	18	13	7	0	2
473	264	26	13	3	2	5
474	265	37	37		5	2
475	266	19	10	6	1	4
476	267	20	20	0	0	7
477	268	25	22	0	1	1
478	269	22	15	1	0	4
479	270	21	21		0	4
480	271	29	16	1	1	5
481	272	19	19	0	0	4
482	273	21	14	5	0	5
483	274	27	27	0	0	6
484	275	25	13	3	1	5
485	276	25	16	1	3	2
486	277	21	15	1	3	1
487	278	22	14	6	2	5
488	279	44	44		0	7
489	280	21	16	0	1	5
490	281	19	16	2	0	4

LISTING OF DATA 10:57 M

SENTAGE=AGE AT SENTENCING
AGEFADJ=AGE AT FIRST ADJUDICATION OR CONVICTION
NOJADJ=NUMBER OF JUVENILE ADJUDICATIONS
NOAADJ=NUMBER OF PRIOR ADULT CONVICTIONS
SVRTY1=SEVERITY OF CURRENT OFFENSE

NAME=RAM_INST

OBS	CASE	SENTAGE	AGEFADJ	NOJADJ	NOAADJ	SVRTY1
491	282	34	15	3	0	4
492	283	27	19	0	4	2
493	284	21	16	2	2	5
494	285	19	13	5	0	5
495	286	19	16	4	0	5
496	287	26	25	0	1	3
497	288	24	14	3	3	5
498	289	20	18	0	2	5
499	290	20	14	3	0	5
500	291	19	12	7	1	2
501	292	18	18	0	0	4
502	293	30	27	0	1	5
503	294	22	11	2	1	5

SENTAGE=AGE AT SENTENCING
AGEFADJ=AGE AT FIRST ADJUDICATION OR CONVICTION
NOJADJ=NUMBER OF JUVENILE ADJUDICATIONS
NOAADJ=NUMBER OF PRIOR ADULT CONVICTIONS
SVRTY1=SEVERITY OF CURRENT OFFENSE

NAME=RAM_PROB

OBS	CASE	SENTAGE	AGEFADJ	NOJADJ	NOAADJ	SVRTY1
504	501	32	27	0	1	4
505	502	19	19	0	0	3
506	503	19	14	2	1	3
507	504	32	14	3	0	2
508	505	24	15	1	0	1
509	506	19	15	3	0	3
510	507	27	27	0	0	4
511	508	45	45	0	0	3
512	509	18	18	0	0	3
513	510	25	18	0	1	3
514	511	28	28	0	0	4
515	512	16	13	2	0	3
516	513	20	20	0	0	2
517	514	24	15	1	2	2
518	515	27	15	2	1	1
519	516	22	22	0	0	2
520	517	19	19	0	0	2
521	518	18	16	1	0	2
522	519	30	30	0	0	2
523	520	29	29	0	0	2
524	521	29	28	0	1	4
525	522	19	19	0	0	2
526	523	25	25		1	2
527	524	19	14	3	0	2
528	525	19	19	0	0	4
529	526	21	17	1	0	1
530	527	22	22	0	0	5
531	528	24	24	0	0	2
532	529	34	17	1	0	2
533	530	18	17	1	0	2
534	531	20	20	0	0	2
535	532	23	23	0	0	2
536	533	23	23	0	0	1
537	534	20	20	0	0	3
538	535	21	21	0	0	4
539	536	18	13	1	0	4
540	537	36	36	0	0	2
541	538	19	19	0	0	2
542	539	18	18	0	0	1
543	540	22	22	0	0	1
544	541	19	14	1	0	1
545	542	32	17	1	0	1
546	543	22	22	0	0	2
547	544	20	18	0	1	2
548	545	18	18	0	0	2
549	546	25	25		1	2

LISTING OF DATA 10:57 MONDAY

SENTAGE=AGE AT SENTENCING
AGEFADJ=AGE AT FIRST ADJUDICATION OR CONVICTION
NOJADJ=NUMBER OF JUVENILE ADJUDICATIONS
NOAADJ=NUMBER OF PRIOR ADULT CONVICTIONS
SVRTY1=SEVERITY OF CURRENT OFFENSE

NAME=RAM_PROB

OBS	CASE	SENTAGE	AGEFADJ	NOJADJ	NOAADJ	SVRTY1
550	547	28	28	0	0	2
551	548	19	19	0	0	2
552	549	18	15	3	0	2
553	550	21	21	0	0	1
554	551	18	16	1	0	1
555	552	19	19	0	0	1
556	553	21	15	1	0	2
557	554	19	16	1	0	2
558	555	18	8	2	0	2
559	556	28	28	0	0	1
560	557	18	18	0	0	2
561	558	20	20	0	0	3
562	559	18	13	4	0	1
563	560	28	14	4	0	2
564	561	18	18	0	0	1
565	562	18	13	1	0	1
566	563	24	24	0	0	1
567	564	22	22	0	0	2
568	565	18	17	1	0	1
569	566	18	13	3	0	1
570	601	19	19	0	0	2
571	602	18	12	2	0	1
572	603	24	24	0	0	2
573	604	54	54	0	0	5
574	605	40	40	0	0	3
575	606	18	15	3	0	2
576	607	39	39	0	0	5
577	608	27	27	0	0	0
578	609	20	13	2	0	0
579	610	19	17	1	0	1
580	611	19	19	0	0	2
581	612	20	15	2	0	1
582	613	21	21	0	0	0
583	614	19	19	0	0	1
584	615	23	10	2	0	1
585	616	25	25	0	0	0
586	617	25	25	0	0	1
587	618	23	23	0	0	1
588	619	24	17	1	0	0
589	620	24	24	0	0	1
590	621	28	28	0	0	4
591	622	21	11	3	0	1
592	623	18	13	3	0	4
593	624	22	22	0	0	2

SENTAGE=AGE AT SENTENCING
AGEFADJ=AGE AT FIRST ADJUDICATION OR CONVICTION
NOJADJ=NUMBER OF JUVENILE ADJUDICATIONS
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SVRTY1=SEVERITY OF CURRENT OFFENSE

NAME=RAM_PROB

OBS	CASE	SENTAGE	AGEFADJ	NOJADJ	NOAADJ	SVRTY1
596	627	19	19	0	0	1
597	628	20	20	0	0	2
598	629	22	22	0	0	0
599	630	25	12	4	0	1
600	631	21	21	0	0	2
601	632	28	28	0	0	1
602	633	20	20	0	0	2
603	634	19	19	1	0	0
604	635	21	15	2	0	5
605	636	18	15	2	0	2
606	637	32	32	0	0	4
607	638	38	38	0	0	2
608	639	39	39	0	0	0
609	640	24	24	0	0	4
610	641	25	25	0	0	2

County of Olmsted

COURTHOUSE
Rochester, Minnesota 55901
507/285-8115

Office of
County Administrator

October 30, 1978

Mr. Gerald Strathman
Director of Research and Information Systems
Department of Corrections
Suite 430 Metro Square Building
7th and Robert Streets
St. Paul, MN 55101

Dear Jerry:

Attached is a copy of a draft of our reanalysis of the Social Control Study data. As you are probably aware, the Evaluation Committee of the Advisory Board has taken the social control issue seriously and has systematically conducted what I feel is a very competent reanalysis and reassessment. The results are interesting in two respects. First they squarely contradict the findings of the Social Control study and secondly they redirect attention regarding social control to the jails where apparently it appropriately belongs.

I would like to emphasize that you are being sent a "draft" and it is our hope that after you have technically reviewed our work, that we can meet to resolve any remaining concerns. We would then like to determine with you the best means to publicize these findings to better clarify the original study.

Sincerely,

David A. Rooney
Community Corrections Administrator

DAR:tle
cc: Evaluation Subcommittee
Bill Swanstrom

END