MINNESOTA COMMUNITY CORRECTIONS ACT EVALUATION

Minnesota Department of Corrections

CRIME CONTROL PLANNING BOARD

TECHNICAL REPORT:

RETAINING OFFENDERS IN THE COMMUNITY

January, 1981

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF GRAPHS

A. Introduction

During the summer, 1979, the Minnesota Department of Corrections in cooperation with the Minnesota Crime Control Planning Board (CCPB) launched a comprehensive evaluation of the Minnesota Community Corrections Act (CCA). The evaluation represents a response to inquiries from Minnesotans and from other states on the effectiveness of this community corrections legislation.

The first phase of the evaluation entailed efforts to reconstruct the logic implicit in the CCA legislation. Research staff analyzed the legislation and conferred with key state and county personnel. The result of these efforts was a conceptual framework for the evaluation that identifies objectives, goals and outcomes of the Act.

Each of these objectives, goals and outcomes is analyzed and evaluated and the results reported in a series of eight technical reports. This report presents the evaluation of the third objective: to retain offenders in the community.

B. Issues

1. Assumptions of the CCA

The CCA contains provisions which provide counties with incentives to retain offenders in the community by imposing a per diem charge for juveniles and certain non-serious adult offenders who are committed to state institutions and by providing a subsidy to help create correctional alternatives and programs for all offenders. Retaining offenders is seen as a major objective of the CCA which contributes to the goals of the CCA by promoting public protection, economy and/or appropriateness of sanctions. Thus, if the logic of the conceptual framework is sound, results which indicate retention of offenders is a prerequisite to achieving other goals and outcomes of the CCA. A positive finding in each of the objectives, goals and outcomes for all CCA areas would lead to the conclusion that the CCA is effective correctional policy and that the assumptions of the CCA are valid. If positive findings are found in some CCA areas but not in others, the conclusion can be drawn that the CCA <u>can</u> be an effective correctional policy.

The same type of approach is used in this portion of the evaluation. The questions to be answered are:

1. <u>Can</u> the CCA increase the proportion of adult and juvenile offenders retained in the local community? (Has this happened in at least one county area?)

2. <u>Has</u> the CCA since its inception increased the proportion of adult and juvenile offenders retained in the local community? (In aggregate, has the proportion of offenders retained increased substantially?)

If the results indicate that counties can achieve the objective of retaining offenders, it can be inferred that the incentives offered by the CCA are sufficient to bring about the desired change. If results indicate that the objective has not been achieved, it can be inferred that the incentives offered by the CCA are not sufficient to bring about the desired change.

Further analysis must be done, however, if results indicate that the objective was achieved in some counties but not in others. If evaluation results are to be useful to

policy recommendations, the reasons why some counties retain offenders and others do not must be probed.

2. Research Issues

A critical issue in the evaluation of the impact of the incentives offered by the CCA in retaining offenders in the community is whether or not the same results would have occcurred without CCA legislation. Even if fewer offenders are retained, after CCA entry, if it can be demonstrated that without CCA the results would be even worse, then it can be concluded that the CCA was instrumental in retaining offenders. The basic aim of this portion of the evaluation is to estimate net effects of the CCA. In order to do this, however, it is necessary to eliminate or at least minimize contaminating influences. These confounding factors while present in most evaluations or impact assessments, seem particularly strong in a long term policy assessment. Certain general processes occur simultaneously and may compete with or obscure the effects being measured. Several of these factors[1] are particularly relevant to this evaluation. These processes are:

secular drift: a relatively long term trend that may strengthen or obscure the effects of a program. For example, a program designed to retain offenders in the community may appear to have no effects if it occurs at a time when community attitudes toward crime and criminals are becoming more punitive.

maturation: growth or time related changes not related to intervention (CCA). For example, a large increase in population in the most crime prone age-range could affect outcome measures if it occurs at the same time as the intervention.

data reliability: the data itself may be unreliable or manipulation of data may diminish reliability. In this case, the raw data used may have been inconsistently collected or the court records themselves be inaccurate. Population estimates may be sufficiently biased to obscure the real effects of the CCA.

In an experimental design these confounding effects can be eliminated, but evaluation of the CCA does not lend itself to such a design. A multiple time-series design appears to be more appropriate for the historical data available. The multiple time-series design is a relatively strong design for use with a series of data points. The weakness of this design in this evaluation lies in the lack of adequate control. Counties are either too different and, thus, not comparable or they enter at different times and may then be at different maturation levels or at a different stage of a secular trend. Different entry dates also have a positive aspect, however; they allow early participating counties to be used as comparison counties for other CCA counties. How this is done is explained more fully in the research design (Minnesota Community Corrections Act Evaluation: Research Design).

Another problem that may affect all portions of the CCA evaluation but particularly those portions using arrest, court dispositions or commitment data is the variableness of the data. It is evident that wide differences in crime rates and commitment rates exist among counties. "The existence of such a wide range of crime rates in Minnesota suggests that significant qualitative differences exist between the high and low crime areas in the social factors that contribute to crime and in the effects of the crime rate on the social environment."[2] If these differences in rates are more than quantitative, then the CCA program could not be expected to have the same effect in areas with widely varying rates. This variability reduces the immediate measureable impact of the program.

There are other issues that may impact on the outcome for individual counties, too. One of these is that of "pre-level"; that is, a county with a high proportion of convictions resulting in commitment before entry into CCA may find it easier to reduce this proportion than the county that has a relatively low proportion of commitments prior to entry into the CCA. Stability of effect may also have some bearing on whether or not a county shows a substantial reduction in proportion of commitments. There is some evidence that the early period after CCA entry shows a greater rate of decrease in commitments than later periods. Another phenomenon occurs which may affect the conclusions drawn. Other studies have shown that crime rates and commitments often show a good deal of variability[3] and while an attempt to control for this variability was made by using moving averages, as discussed in the methods section, it is likely that the late joining counties may be more affected by this phenomenon than those that began participation earlier. In early CCA areas the longer follow-up period tends to give less weight to atypical years than is the case in the more recent CCA areas.

A final issue relates to the research design. Donald Campbell[4] suggests that gradually introduced changes are usually impossible to detect by a time-series design. In the case of the CCA not only were counties phased into the Act over a period of years but the Act itself was simply a culmination of a period of years of active interest in and support of correctional programs. The state of Minnesota had much earlier adopted policies and legislation that impinged on the whole correctional process. Minnesota enacted legislation in the late 1960's which allowed appropriations of state monies and disbursement of federal monies to help counties provide a variety of correctional services to offenders. For example:

> . The Community Corrections Center Act was passed by the 1969 legislature which authorized cities or counties to establish and operate community corrections centers. In 1971 appropriations were provided to the Commissioner of Corrections enabling the DOC to disburse grants to such programs. In fiscal year 1975 the DOC provided over $350,000 for such centers.
>
> . A group homes subsidy program was established which provided for reimbursement to the counties for one-half the cost of operating group homes for adjudicated delinquents. In 1974 and 1975 a half million dollars was appropriated for county and state group homes.
>
> . The DOC began to provide funds for community residential programs and to sponsor grants for the operation of contractual residential programs.

Thus, the passage of the CCA may not produce sufficient impact to be measured in those counties where community corrections activities were already established.

C. Data Sources

There were three major data sets used in the analysis of the impact of CCA on the retention of offenders in the community. These were quarterly district court disposition data for CCA counties from July, 1972 through December, 1979; juvenile and adult commitments to state institutions from 1970 through 1979; and county population estimates from the Minnesota State Planning Agency.

The court disposition data was collected as part of a Systems Rate Study [5] which compares sentencing patterns in CCA areas with comparison counties. Data were collected from district court criminal registers. Only felony and gross misdemeanor

cases in which a disposition was made were coded. These data are available for all CCA areas on a quarterly basis. The data set includes name and date of birth of the offender, the county in which the disposition was made, the offense for which the offender was convicted, the date of the disposition, the type of sentence received, the length of the probation or incarceration period and the sentencing judge. The chargeable/non-chargeable variable was created by coding all statutes with maximum sentences of five years or less as chargeable and all statutes with a maximum sentence over five years as non-chargeable.

Another major source of data is the Department of Corrections computerized information system. Both adult and juvenile commitments to correctional institutions from 1970 through 1979 were obtained from this source. Although there were some discrepancies between DOC commitment data and the court disposition data, those discrepancies could largely be accounted for by revocations which were included in commitment figures but which were not included in the court disposition data. The final set of data used are the population estimates of the Minnesota State Planning Agency. In 1979 the State Planning Agency released revised 1975 estimates of population.[6] These revised estimates were based on symptomatic data series. "A symptomatic series is any data series which may serve as an indicator of population magnitude or change, such as school enrollment records, birth and death statistics, income tax files, automobile registrations and building permit records."[7] The difference between the original estimates[8] and the revised estimates were calculated for the 18-29 year age group and this difference used to modify the earlier 1980 estimates. Population-at-risk for the years between the 1970 census and the 1975 and 1980 revised estimates are simply interpolated. For juveniles, no adjustment is made because it is felt that the revised 1975 age group estimate is too broad (5-17 years) to be usable. Instead, the originally published[9] estimates of age groups (10-14) and (15-19) are used. The juvenile population-at-risk as used in this evaluation is the age group 13-17. These figures are calculated from the estimates above. This procedure assumes an equal distribution of ages throughout the age range.

D. Research Design

There are two basic designs employed in this section of the evaluation. These methods were chosen to achieve as much control as possible over non-CCA variables and confounding elements.

1. Multiple Time-Series Design

One of the strongest designs that can be used with the historical data available is a multiple time-series design. Observations are plotted for a series of periods before and after CCA entry. If a change occurs and is maintained after CCA entry, one can infer that the change is due to the CCA and not to a general trend that has been occurring or to a deviant year before or after entry.

Unless one has a comparison or control group, however, there remain several possibilities that could explain the change other than the CCA. One rival explanation is that some other event occurrring at the same time causes changes in the series rather than the CCA itself (history). Another possibility is that changes would have occurred anyway in normal development at the county level (maturation). Also, one might argue that it is characteristics of the counties that join CCA or characteristics in interaction with the CCA that causes changes that have been observed (selection and selection-maturation). If one can incorporate a control or comparison group, these

rival explanations can be controlled and the inferences on the effects of the CCA, therefore, would be stronger.

Two strategies are employed to incorporate comparison county data. First, for some issues on which data are available for all counties (e.g. commitment rates) each CCA county is compared to pooled non-CCA counties to control for the effects of non-CCA variables. An alternative would be match each CCA area to a similar non-CCA county(ies) to assess whether changes occurring in the CCA area are also occurring in the matched areas. A matching process, however, assumes that the variables that require control can be identified.

Because there is likely to be error in identifying these variables as well as imperfections in the matching, it was decided that pooled non-CCA data would provide a better reference point for judging what is happening state-wide without the CCA. Pooling the data does, of course, wash out the effects of extreme or deviant counties. In general, this effect is desirable.

Sixty counties have not joined the CCA as of 1979. Data on these sixty counties are pooled and plotted and serve as a reference point to judge trends occurring in a CCA area. The time series of CCA area A is compared to the time series of all non-CCA areas. If a change occurs after CCA entry in CCA area A but not in the non-CCA counties, one would infer that the CCA has caused the change. Similarly, for CCA area B one looks for changes after CCA entry. If this change does not occur at the same time in non-CCA counties, it can be inferred that the CCA has caused this change. These comparisons are done for each CCA area except Ramsey and Hennepin for which non-CCA counties are entirely non-comparable. Ramsey and Hennepin are compared to each other following the second strategy discussed below.

The pre-entry series of the recent entrant (Hennepin) serves as a control county for the early entrant (Ramsey). If Ramsey's time series changes with CCA entry but no comparable change occurs for Hennepin, then one can infer that CCA entry stimulated the change. Similarly, the post-entry observations of Ramsey serve as controls for assessing the impact of CCA entry on Hennepin.

A final point related to the use of the multiple time-series design concerns the use of statistical tests to infer whether changes occurring after CCA entry are "significant", i.e. likely to have occurred by chance. In general, there are too few observations before and after entry to support tests of significance. A visual inspection of the time series, however, remains a powerful tool to detect changes brought about by the CCA.

The multiple time-series design is used to plot observations (court dispositions and commitment rates) over a period of time before and after CCA entry. Each CCA area is plotted and compared with pooled pre-CCA and/or non-CCA expected proportions or rates. The series of graphs depicting this data can be found in the appendix.

a. Court Disposition Analysis

Court disposition data includes quarterly dispositions and commitments from July 1, 1972 through December 31, 1979 for charegeable and non-chargeable offenses for all counties participating in CCA. Pre-CCA figures are obtained by pooling data from all county areas and dropping out counties as they enter the Act. The result of this action is to provide sixteen pooled quarters of pre-CCA court activity for chargeable and non-chargeable offenses. The proportion of commitments for each type of offense is calculated and a moving average applied to minimize the seasonal variation. The slope

of this series of proportions is calculated and used as a comparison for each CCA county. If the slope were +.02 the proportion of commitments prior to CCA entry (base rate) for a particular county would be expected to increase by .02 for each unit of time if the county had not entered the CCA. The choice of the base rate to be used involves a certain amount of judgment in those cases in which the figures immediately prior to entry appear to be atypical. In such cases the court disposition projected outcomes are compared to the outcome obtained from the commitment rate projections. Where there is a real discrepancy a pre-rate more in line with the commitment data set is chosen.

This type of analysis is based on the assumption that counties would be expected to change the direction and volume of commitments in the same manner that pre-CCA proportions change. Thus, the data for each county is plotted in comparison with expected proportions. These plots provide a visual comparison of the difference between expected and actual proportions of commitments.

b. Commitment Rate Data

Commitment rates are treated in the same manner although these rates are calculated on an annual basis. Commitments are available for all 87 counties from 1970 through 1979. Thus, instead of using only pre-CCA figures it was possible to pool both non-CCA and pre-CCA county data to serve as a basis for determining the slope of expected commitments if CCA legislation had not been enacted. These data are plotted in the same way as court disposition data — comparing actual with expected rates post-CCA. Similar graphical representations are plotted for both juvenile and adult commitments. These graphs can be found in the appendix.

2. Forecasting Techniques

The multiple time-series design described above is used to plot observations (court dispositions and commitment rates) over a period of time before and after CCA entry. If a change occurs after CCA entry, we can infer that this change is due to the CCA, particularly if such changes do not occur at the same time in other counties. However, this type of analysis does not provide sufficient information for cost analysis or to compare the extent to which county areas achieved the objective of retaining offenders. An estimate of the number of offenders retained as a result of the CCA is needed. These figures are estimated using a variety of techniques.

Three basic types of forecasting techniques exist — qualitative techniques, time series analysis and projection and causal models. Qualitative techniques may be used when data are scarce or when judgmental factors or rating methods are appropriate. Time series analysis and projection are used when historical data is available and when trends and relationships are known and relatively stable. This technique is based on the assumption that existing patterns will continue into the future. Although the various methods of time series analysis prove relatively accurate in the short run, problems may arise when forecasts are made far into the future. Time series analysis cannot generally predict turning points or points at which a trend will change significantly.

The third major type of technique is causal modeling. These models are the most sophisticated type of forecasting and take into account relevant causal relationships and known dynamics of the system and related events. Causal models require a wide variety of historical data and are generally best for predicting turning points and for long term forecasts. This technique is generally costly and time consuming to develop

and its reliability depends on the strength of known relationships and assumptions. In the case of early CCA areas, the forecast period is relatively long and causal modeling may be more appropriate. However, for these counties sufficient historical data to construct a model is not available. For recent CCA areas there is sufficient historical data but in such cases time series analysis is equally accurate and certainly less costly.

The actual methods used are detailed in the sections that follow.

a. Forecasting Court Dispositions

The original plan had been to forecast expected commitments for individual counties testing various forecasting methods for fit by dividing data points into two parts and using the first series of points to forecast expected events in the second series. The forecast then would be compared with actual events and the method that best represented the data chosen to estimate the number of offenders retained. This method worked well enough on a few counties but results obtained for many counties appeared to be questionable because the data was not linear or because the number of observations was too small or unstable. By forecasting expected commitments from the individual county's previous history, too much weight may be given to a few deviant periods. It was decided, then, that a different forecasting method would be more appropriate.

Since sentencing patterns over the period covered do indicate the existence of a statewide trend, in spite of deviant periods or random differences, it is assumed that all counties will tend to follow this overall trend. Under this assumption an aggregate trend line seemed appropriate to project expected commitments after CCA entry. The methods used to calculate this trend line are described below.

The court disposition data set is divided into chargeable and non-chargeable offenses. For each quarter the proportion of offenders receiving a state commitment is calculated. A proportion is used to eliminate the impact of increased court activity and the accompanying increase in commitments. Because of the strong seasonal character of court dispositions, a four-period moving average is also calculated for all data points. This moving average tends to smooth out seasonal variation and also reduce the effect of random or atypical court activity.

A moving average is also calculated for all pre-CCA court disposition data. This results in sixteen quarters of usable data. From this pooled pre-CCA data a slope is calculated for both chargeable and non-chargeable dispositions. This slope is used to estimate expected commitments had the CCA not been enacted. In both cases Hennepin and Ramsey are excluded because it is felt that non-metro CCA counties are not comparable to Hennepin and Ramsey and that the large volume of cases in these metropolitan counties tends to distort any changes occurring in the smaller county areas. Hennepin and Ramsey are compared with each other using the differing entry dates as discussed above.

This method assumes that without enactment of CCA the general trend of commitments as a proportion of court dispositions would have continued into the future. Intuitively this makes sense because random variation in single counties tends to be smoothed and the overall trend becomes more apparent. Thus, this method was used for both chargeable and non-chargeable offenders. The possible outcomes and conclusions are presented below.

Possible Outcomes	Conclusions
Reduction in number of chargeable offenders committed to the state	Disincentives offered by CCA are sufficient to change sentencing patterns
No reduction in number of chargeable offenders committed to the state	Disincentives offered by CCA are not sufficient to change sentencing patterns
Reduction in number of non-chargeable offenders committed to the state	Increased community alternatives are sufficient to change sentencing patterns
No reduction in number of non-chargeable offenders committed to the state	Increased community alternatives are not sufficient to change sentencing patterns

b. Forecasting Commitment Rate

Because of differing time periods and the lack of adequately matched counties and because court dispositions do not take into account probation revocations, the court disposition data alone could not answer the questions posed by this evaluation. Thus, some other means of estimating the number of offenders retained in the community who would have been committed had the CCA not been enacted will serve to corroborate the findings. The data set used for this analysis is the number of adult commitments to the DOC.

The first step in the analysis was to develop a measure of commitment rate that would provide a more realistic estimate of the CCA's impact for those counties that were experiencing a rapid rate of growth in population-at-risk. The population-at-risk for adults includes all persons from the ages of 18 through 29. This age group encompasses approximately seventy-five percent of commitments to state institutions. While expanding the upper age limits to 39 would result in the inclusion of ninety-five percent of adult commitments, it would at the same time mask the year-to-year changes and make the rate analysis less sensitive to change.

Age estimates were based on recent estimates by the Minnesota State Planning Agency and used to revise previous estimates of expected county population in 1980. Projected population for other years is simply interpolated using three points in time: the 1970 census, the 1975 estimated population and the corrected 1980 projections.

To add credence to the analysis of court dispositions the same type of analysis was done using the commitment rates. A trend line was projected and the slope was applied to provide an estimate of expected changes in rate of commitment. These figures are compared with similar calculations using adult court disposition data. Differences are reconciled where possible. Where these two sets of figures are compatible, the confidence placed in the original trend is enhanced.

The same kind of rationale used for estimating the impact of CCA on adult state commitments applies to juvenile commitments. The CCA requires that counties participating in the Act pay a per diem charge for every juvenile committed to a state institution (except those participating in the DOC Serious Juvenile Offender Program). In the case of juveniles, an expected commitment rate is calculated in a similar manner to that used for calculating expected adult commitments. For juveniles, however, the results of such an analysis is less clear because of concurrent trends and

policy changes as a result of the Juvenile Justice and Delinquency Act of 1974. This Act requires that states receiving federal grants must comply with the provision "...that juveniles who are charged with or who have committed offenses that would not be criminal if committed by an adult, shall not be placed in juvenile detention or correctional facilities..." How this issue is handled is explained more fully in the findings.

E. Findings

1. Retaining Juveniles in the Community

a. Commitment Rate Analysis

The 1973 CCA legislation required that counties under the Act pay a daily charge for juveniles committed to a state institution. This provision was later changed to exclude a small number of juveniles committed for serious offenses and who were assigned to the Department of Corrections Serious Juvenile Offender Program.

Although state-wide juvenile population has been decreasing since 1975 resulting in a drop in state commitments, there were at the same time other factors in addition to the CCA that may have played a part in this reduction. One of these was the nation-wide movement to deinstitutionalize juvenile status offenders. In 1974 the Juvenile Justice and Delinquency Prevention Act was enacted by Congress. This Act provides direction for the handling of status offenders and appropriates money to states for that purpose. Compliance with the provisions of the Act was required within two years after submission of a plan for handling status offenders. This plan was submitted by the Governor's Commission on Crime Prevention and Control in 1975 with a compliance date of 1977. In 1976 the Minnesota Legislature enacted legislation relating to the detention of juvenile status offenders. While compliance with the provisions of the Act was not effective until late 1977, the DOC administration did take steps to limit the commitment and detention of status offenders in state institutions prior to that time. Thus, the number of juvenile status offenders in DOC institutions decreased from ninety-six in 1975 to fifteen in 1978. The proportion of status offenders committed to state institutions decreased from around thirty-three percent in 1970 to virtually none in 1979. Not all of this reduction was reflected in commitments.

Graph 1 shows the commitment rate for all non-CCA - pre-CCA counties and the post-entry commitment rate for all CCA counties. There appears to be only slight evidence that the status offender legislation reduced the rate of commitment for either groups of counties. Non-CCA counties have experienced a mean increase in the rate of juvenile commitments since 1974; CCA counties excluding Hennepin and Ramsey have experienced a decrease in the rate of juvenile commitments. Graph 2 presents this data from a different perspective. The commitment rate is plotted for pooled "early participants", those county areas that entered CCA in 1974; "middle participants": those county areas that entered CCA in 1976 or 1977; and "recent participants": those county areas that entered the CCA in 1978. Although not so clear for early participants, this graph clearly shows that a drop in commitment rate did occur beginning in 1974 for all counties as a result of status offender legislation. While this legislation appears to have had an impact on juvenile commitments, the effect is separated from that of the CCA by using the slope of non-CCA counties to project rate changes expected in CCA county areas. If status offender legislation had the same impact in non-CCA counties then the net effect of the difference between expected and actual commitment rates will reflect the impact of CCA participation.

Graphs 3 through 13 show the commitment rate by county area. The actual commitment rate is plotted using a three period moving average and the expected commitments based on pooled non-CCA experience are plotted after the county entered the Act. The difference between the actual and expected provides a visual portrayal of the degree of decrease in commitments due to the CCA. Because these figures are rates and not raw numbers a wide variance between actual and expected in a small county may result in only a few juveniles being retained and a small variance in a large county would result in a large number of juveniles being retained. To make this distinction more clear, Table 1 gives the rank order of county areas by the percent of expected commitments that were retained in the community and the average per year for each county area.

The percent of expected juvenile commitments retained ranged from seventy-six percent in Dodge-Fillmore-Olmsted Counties to an increase in commitments in Hennepin and Blue Earth Counties. If average pre-CCA and post-CCA commitment rates are examined (Table 2), the same type of distribution is observed. That is, Hennepin and Blue Earth Counties show an increase in commitment rate while other CCA county areas show a decrease. Pre-CCA and non-CCA county areas also experienced an increase in post-CCA commitment rates.

b. Impact on Juvenile Institution Population

In order to assess the impact of reduced commitments on institutional population, it was necessary to determine how many juveniles were retained in each year following CCA enactment. Table 3 shows the number of juveniles retained each year and the resulting institutional population reduction.

Despite an overall commitment reduction of almost thirty percent in CCA counties, the impact on state correctional institutions seems less dramatic; less than a one percent (3) reduction in 1974 to a nineteen percent (35) reduction in 1978. During the six year period since the first county entered the CCA, the average reduction in juvenile institution population attributable to the CCA is five percent.

2. Retaining Adults in the Community

a. Introduction

Two different data sets are used to determine the number of adults retained as a result of CCA. These two data sets are the Department of Corrections annual commitment data and the quarterly court disposition data. There are several reasons, as outlined in the Research Design section, for using both sets of data but the major one is to provide some corroboration of the findings. Where the outcome is similar, confidence in the results in enhanced. In those instances where the outcomes are very dissimilar, judgmental decisions are made to reconcile the data.

This portion of the evaluation is divided into two sections. One is devoted to results based on commitment rates; the second is devoted to results based on court disposition data. A comparison of expected commitments using both data sets can be found in Table 4.

The methodology used is spelled out in the Research Design; here only results are reported.

TABLE 1: Expected and Actual Juvenile Commitments by County Areas and Percent Retained

County Area	Expected Commitments	Actual Commitments	Number Retained	Percent Retained	Average Per Year
Dodge-Fillmore-Olmsted	55	13	42	76.4	8
Washington	21	7	14	66.7	9
Region 6 West	17	6	11	64.7	5
Crow Wing-Morrison	67	32	35	52.2	7
Red Lake-Polk-Norman	16	8	8	50.0	2
Arrowhead Regional Corrections	183	117	66	36.1	19
Ramsey	299	199	100	33.4	18
Anoka	21	15	6	28.6	2
Todd-Wadena	5	4	1	20.0	-
Hennepin	226	234	(8)	(3.5)	(4)
Blue Earth	16	18	(2)	(12.5)	(1)
Total	926	653	273	29.5	65

TABLE 2: Mean Juvenile Commitment Rates per 1,000 Juveniles (age 13-17)

	Mean Juvenile Commitment Rate	
County Area	Pre-CCA	Post-CCA
Dodge-Fillmore-Olmsted	.89	.17
Ramsey	1.39	.74
Crow Wing-Morrison	1.80	.77
Red Lake-Polk-Norman	.95	.41
Todd-Wadena	.29	.27
Arrowhead Regional Corrections	1.67	1.04
Anoka	.62	.17
Region 6 West	1.12	.40
Blue Earth	1.05	1.71
Hennepin	1.27	1.37
Washington	1.41	.29
Pre-CCA - Non-CCA	1.31	1.38

TABLE 3: Juvenile Commitments Retained and Reduction in Institutional Population*

Year	Actual Commitments	Expected Commitments	Number Retained	Reduction in Institution Population
1974	58	68	10	3
1975	29	70	41	14
1976	102	127	25	8
1977	99	132	33	11
1978	158	263	105	35
1979	207	266	59	20
Total	653	926	273	

*Based on Estimated Four Month Length of Stay.

TABLE 4: Actual and Expected Adult Commitments after CCA Entry

	Total Expected		Actual Commitments		Number Retained			
	DOC Commitments	Court Dispositions	DOC Commitments	Court Dispositions	DOC Commitments	Total Court Dispositions	Chargeable	Non-Chargeable
Dodge-Fillmore-Olmsted	47	54	64	41	(17)	13	10	3
Ramsey	992	997	769	757	223	240	171	69
Crow Wing-Morrison	116	142	100	82	16	60	64	(4)
Red Lake-Polk-Norman	55	52	25	20	30	32	19	13
Todd-Wadena	7	13	12	11	(5)	2	(3)	5
Arrowhead Regional Corrections	289	214	256	205	33	9	(2)	11
Anoka	181	195	205	207	(24)	(12)	(15)	3
Region 6 West	14	9	15	8	(1)	1	(3)	4
Blue Earth	14	26	12	17	2	9	7	2
Hennepin	652	499	729	588	(77)	(89)	(21)	(68)
Washington	43	41	38	40	5	1	4	(3)
	2,410	2,242	2,225	1,946	185	266	231	35

b. Commitment Rate Analysis

Table 5 shows the rank order of county areas by the percent of the expected adult commitments retained in the community.

The percent of adults retained in the community ranged from fifty-four percent of expected commitments in the Polk-Red Lake-Norman county area to eleven percent in the Arrowhead Regional Corrections area. There were five county areas in which the commitments were greater than expected. Overall the percentage of offenders retained is less than eight percent. For the Dodge-Fillmore-Olmsted county area and the Todd-Wadena area the number of actual commitments was substantially higher than expected. Because the court disposition data (Table 4) indicates more offenders retained in the community for Dodge-Fillmore-Olmsted, the discrepancy between the two data sets may be due to a high rate of violation or failure in the community. This issue is discussed in the public protection technical report. Table 6 presents the mean adult commitment rates pre-CCA and post-CCA for each of the county areas as well as the rate for pre-CCA/non-CCA counties. The post-CCA commitment rate increased for five out of the eleven CCA participating areas. The rate also increased for the pooled non-CCA/pre-CCA county areas. There is a great deal of variation in commitment rates. Urban counties generally have a higher rate than rural counties. The exception is Crow Wing-Morrison counties which had a higher rate pre-CCA than did any of the other county areas. The reasons for such variation are unclear, but generally the commitment rate is not related to the crime rate in the county areas but rather to other factors. These may include social factors, availability of resources, number of cases on the court calendar and the attitude of the judge or probation officer.

The graphs in the appendix allow visual inspection of the difference between actual and expected commitment rates for all county areas. The dotted line represents expected commitments post-CCA entry. Graph 14 plots commitment rates for early participating counties, middle participants and recent participating counties. Only the early participants show no distinct drop after CCA entry. Graph 15 through 25 plot commitment rate data for each CCA county.

c. Court Disposition Analyses

As described above, forecasting was done using court disposition data for both chargeable and non-chargeable offenses. The difference between expected and actual commitments was then calculated for each county area. This data is presented in Table 7. The total retained during the entire period of CCA participation is 266. This represents a twelve percent reduction in the number of commitments expected based on court dispositions. In five county areas the proportion of chargeables retained actually decreased; these were Todd-Wadena, Arrowhead Regional Corrections, Anoka, Region 6 West and Hennepin. The proportion of non-chargeables retained in the community decreased in three county areas: Crow Wing-Morrison, Hennepin and Washington.

Court dispositions of chargeable offenses are plotted for all county areas. Because of the very small volume of cases in some counties, non-chargeable offense data is plotted only for the larger counties. The proportion of dispositions resulting in commitment is plotted for each quarter against a trend line composed of sixteen quarters of actual pre-CCA data and the extrapolated trend. Graph 26 compares pooled pre-CCA and extrapolated trends with actual post-CCA dispositions for chargeable offenses. Graph 27 portrays the same pooled data for non-chargeable offenses. Graphs 28 and 29 make similar comparisons between Hennepin and Ramsey Counties.

TABLE 5: Expected and Actual Adult Commitments by County Areas and Percent Retained*

County Area	Expected Commitments	Actual Commitments	Number Retained	Percent Retained
Red Lake-Polk-Norman	55	25	30	54.5
Ramsey	992	769	223	22.5
Blue Earth	14	12	2	14.3
Crow Wing-Morrison	116	100	16	13.8
Washington	43	38	5	11.6
Arrowhead Regional Corrections	289	256	33	11.4
Region 6 West	14	15	(1)	(7.1)
Hennepin	652	729	(77)	(11.8)
Anoka	181	205	(24)	(13.3)
Dodge-Fillmore-Olmsted	47	64	(17)	(36.2)
Todd-Wadena	7	12	(5)	(11.6)
Total	2,410	2,225	185	7.7

*Based on Commitment Rate Data

TABLE 6: Mean Adult Commitment Rates per 1,000 Adults (age 18-29)

County Areas	Mean Adult Commitment Rate Pre-CCA	Post-CCA
Dodge-Fillmore-Olmsted	.38	.46
Ramsey	1.56	1.15
Crow Wing-Morrison	1.60	1.31
Red Lake-Polk-Norman	1.17	.69
Todd-Wadena	.33	.51
Arrowhead Regional Corrections	1.25	1.11
Anoka	.89	1.08
Region 6 West	.35	.65
Blue Earth	.58	.41
Hennepin	1.55	1.64
Washington	.89	.78
Pre-CCA - Non-CCA	.73	.85

TABLE 7: Actual and Expected Adult Commitments and Number of Offenders Retained*

County Area	Total Expected	Actual Commitments	Number Retained		
			Total	Chargeable	Non-Chargeable
Dodge-Fillmore-Olmsted	54	41	13	10	3
Ramsey	997	757	240	171	69
Crow Wing-Morrison	142	82	60	64	(4)
Red Lake-Polk-Norman	52	20	32	19	13
Todd-Wadena	13	11	2	(3)	5
Arrowhead Regional Corrections	214	205	9	(2)	11
Anoka	195	207	(12)	(15)	3
Region 6 West	9	8	1	(3)	4
Blue Earth	26	17	9	7	2
Hennepin	499	588	(89)	(21)	(68)
Washington	41	40	1	4	(3)
Total	2,242	1,976	266	231	35

*Based on Court Disposition Data

Graphs 30 through 41 plot court disposition data for thirty quarters beginning July, 1972. The dotted line represents the expected proportion of commitments.

Table 8 provides another perspective. The annual number retained is calculated for each county area during each year of participation and the number retained summed by year. The last column shows the expected institution population reduction as a result of retentions.

The findings presented above compare pre-post rates of commitments or average number of retentions by county area but do not relate these findings to time. The graphs do provide a visual portrayal of changes over time but each county area is plotted against expected commitments based on pooled trend data rather than comparison counties. The strategy used to incorporate comparison county data makes use of differing entry dates. Comparison counties, while not ideal matches, provide a means to judge whether changes found in a CCA county appear to be occurring in another set of counties.

Tables 9 and 10 incorporate comparison county data for both chargeable and non-chargeable offenses. Time blocks are set up so that each comparison is for an identical time period. For example, the first comparison county areas on Table 9 are Crow Wing-Morrison and data from Washington, Region 6 West and Blue Earth county areas. The first time block is the period before Crow Wing-Morrison entered the Act. This same period of time applies to the comparison county areas. The second time block covers the period from the entry of Crow Wing-Morrison to the entry of the comparison county. The third block of time represents a period after CCA entry for both groups of counties. The second set of comparisons is for Dodge-Fillmore-Olmsted and individual recent participating county areas. It is evident that not all the change occurring is a result of the CCA. For recent participants, the pre-CCA data is divided into two time periods. In each case the trend in proportion of commitments is downward. Table 10 makes the same comparisons for non-chargeable offenses. In this case it is clear that the CCA has had an impact but other factors occurring in 1978 and 1979 appear to cause an increase in proportion of non-chargeables being committed.

F. Conclusions

The conclusions drawn from this evaluation relate to the original questions posed in the discussion of issues. Can the CCA increase the proportion of offenders (juveniles) retained in the community? Has the CCA increased the proportion of offenders (juveniles) retained in the community?

The answer to the first question as it relates to juveniles is clearly positive. Five counties experienced a reduction of fifty percent or more in expected number of juveniles committed. Overall the reduction in commitments is almost thirty percent. Only Blue Earth and Hennepin Counties failed to reduce commitments and actually showed an increase of four percent over expected commitments. However, since the majority of counties did demonstrate a reduction, it can be concluded that as a whole the incentives (and disincentives) offered by the CCA were sufficient to encourage counties to retain juvenile offenders in the community.

These same questions can be answered for adult offenders. Again the answer to the first question is clearly positive. Nine counties did reduce the proportion of offenders committed. The answer to the second question is less clear. An average of forty-five adult offenders are retained annually which represents a four percent reduction in

TABLE 8: Adult Offenders Retained and Reduction in Institutional Population*

Year	Actual Commitments	Expected	Number Retained	Reduction in Population
1974	168	187.8	19.8	20
1975	152	190.0	38.0	48
1976	250	313.1	63.1	82
1977	280	327.4	47.4	79
1978	685	691.8	6.8	31
1979	690	701.2	11.2	15

*Based on Estimated Eighteen Month Length of Stay.

TABLE 9: Comparison of Proportion of Chargeables Committed by Time Period and County Areas

Crow Wing-Morrison	29.8	X	12.9		7.6
Blue Earth	19.3		9.7	X	5.8
Crow Wing-Morrison	29.8	X	11.6		8.3
Washington	36.6		12.9	X	8.9
Crow Wing-Morrison	29.8	X	12.4		9.9
Region 6 West	9.6		5.8	X	9.3
Dodge-Fillmore-Olmsted	6.9	X	5.0		4.7
Blue Earth	20.0		10.1	X	5.8
Dodge-Fillmore-Olmsted	6.9	X	5.8		4.9
Washington	38.4		13.7	X	8.9
Dodge-Fillmore-Olmsted	6.9	X	5.2		4.2
Region 6 West	6.3		5.8	X	9.3

X = CCA Entry

TABLE 10: Comparison of Proportion of Non-Chargeables Committed by Time Period and County Areas

Crow Wing-Morrison	37.5	X	34.7		48.9
Blue Earth	50.0		45.8	X	41.7
Crow Wing-Morrison	37.5	X	40.0		44.4
Washington	27.3		45.5	X	58.5
Crow Wing-Morrison	37.5	X	32.5		49.0
Region 6 West	50.0		50.0	X	20.0
Dodge-Fillmore-Olmsted	23.8	X	16.0		26.7
Blue Earth	55.5		42.3	X	41.7
Dodge-Fillmore-Olmsted	23.8	X	20.3		22.5
Washington	25.0		45.6	X	58.5
Dodge-Fillmore-Olmsted	23.8	X	16.0		26.7
Region 6 West	50.0		50.0	X	20.0

X = CCA Entry

total commitments to adult correctional institutions. This represents an average annual reduction in institution population of approximately sixty-seven offenders. These figures are based on court disposition data and thus do not include revocations. If actual commitment data were used the reduction in commitments would be around three percent which would result in an average institutional population reduction of approximately fifty-one offenders. Six county areas increased the proportion of chargeable offenders retained and seven county areas increased the proportion of non-chargeable offenders retained. Because the majority of the county areas did increase the proportion of offenders retained, it must be concluded that the CCA incentives (disincentives) are sufficient to change sentencing patterns in the majority of CCA county areas. It must be remembered, however, that the actual numbers retained are relatively small. Whether or not the number of offenders retained is sufficiently great for some counties to achieve other goals will be discussed in the overview of this report.

It had been hypothesized that the per diem charge for committing non-serious offenders would be sufficient disincentive to induce counties to retain these offenders in the community. In some county areas this was clearly the case; in other county areas no difference is noted. The Act does not require that county areas retain offenders but rather that CCA monies be used for correctional programs of some kind. Sending an offender to a state institution and paying the daily charge is clearly a viable option for some county areas.

Further, it had been hypothesized that the subsidy granted under the CCA would be sufficient incentive for counties to develop alternatives to incarceration for non-chargeable offenders and thus, retain more of these offenders in the community. This did not occur to any great extent in any county with the exception of several small county areas, Region 6 West, Red Lake-Polk-Norman and Todd-Wadena. These county areas had a fifty percent or more reduction in the proportion of non-chargeables committed. Overall, the apparent impact of the CCA was to decrease the proportion of both chargeable and non-chargeable offenders committed which in turn reduced the wide disparity in sentencing practices among participating counties.

The table below summarizes the findings.

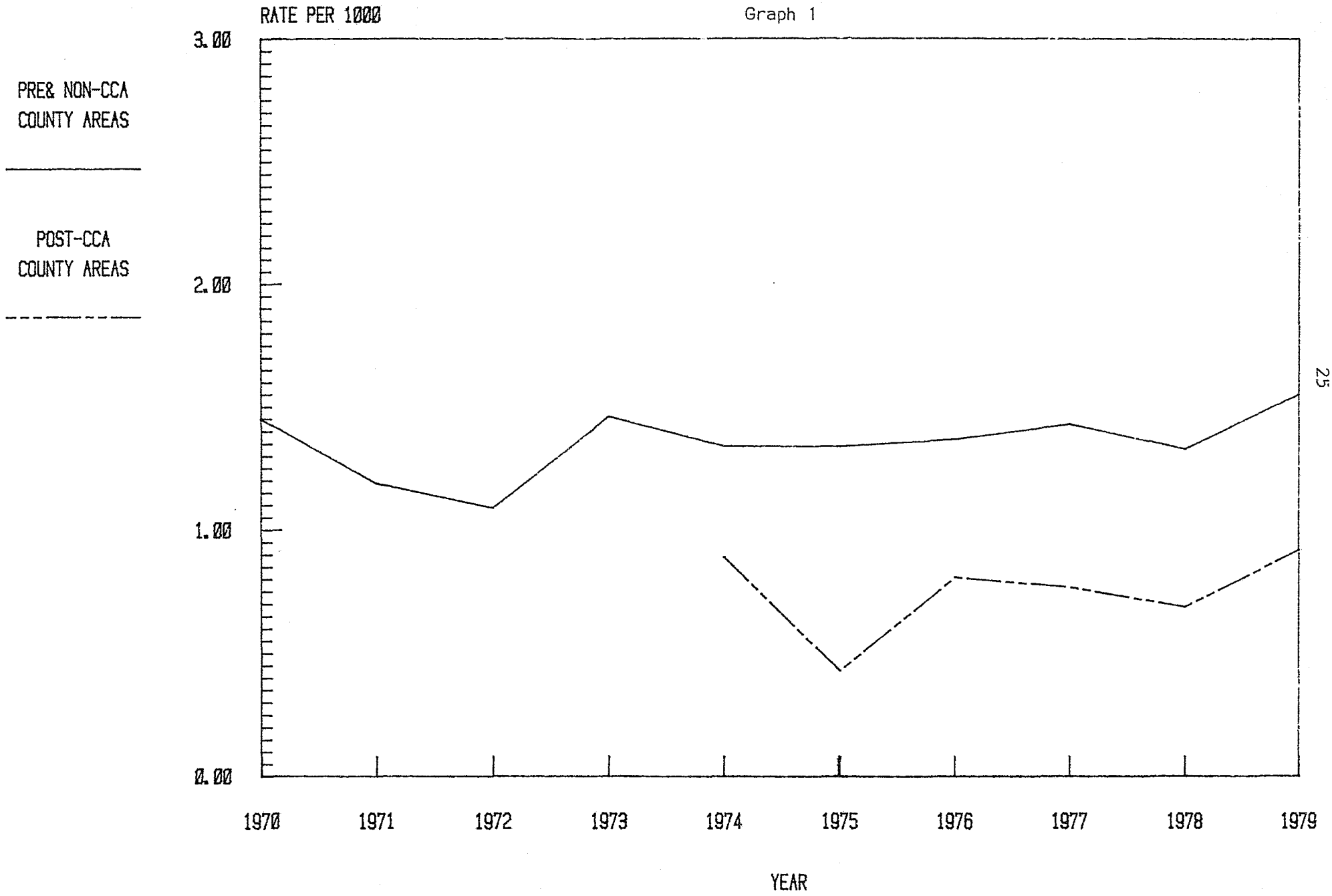
TABLE 11: County Areas in Which the Proportion of Offenders Retained Increased as a Result of CCA

CCA Area	Juveniles	Adults	
		Chargeable	Non-Chargeable
Dodge-Fillmore-Olmsted	X	X	
Ramsey	X	X	X
Crow Wing-Morrison	X	X	
Red Lake-Polk-Norman	X	X	X
Todd-Wadena	X		X
Arrowhead Regional Corrections	X		X
Anoka	X		X
Region 6 West	X		X
Blue Earth		X	X
Hennepin			
Washington	X	X	

DEPARTMENT OF CORRECTIONS

JUVENILE COMMITMENTS

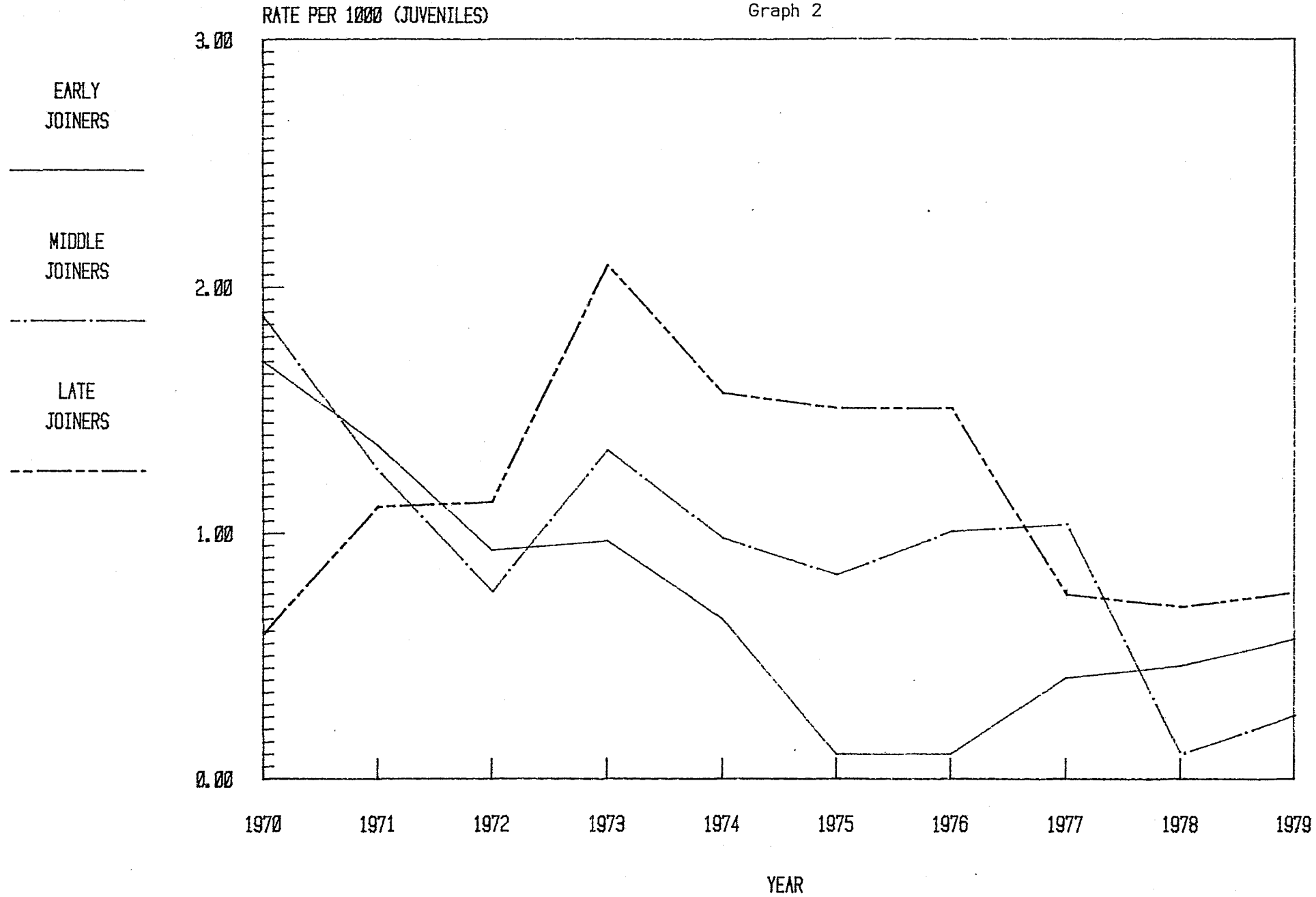
Graph 1



DEPARTMENT OF CORRECTIONS

COMMITMENT RATE COMPARISONS - CCA CO'S.

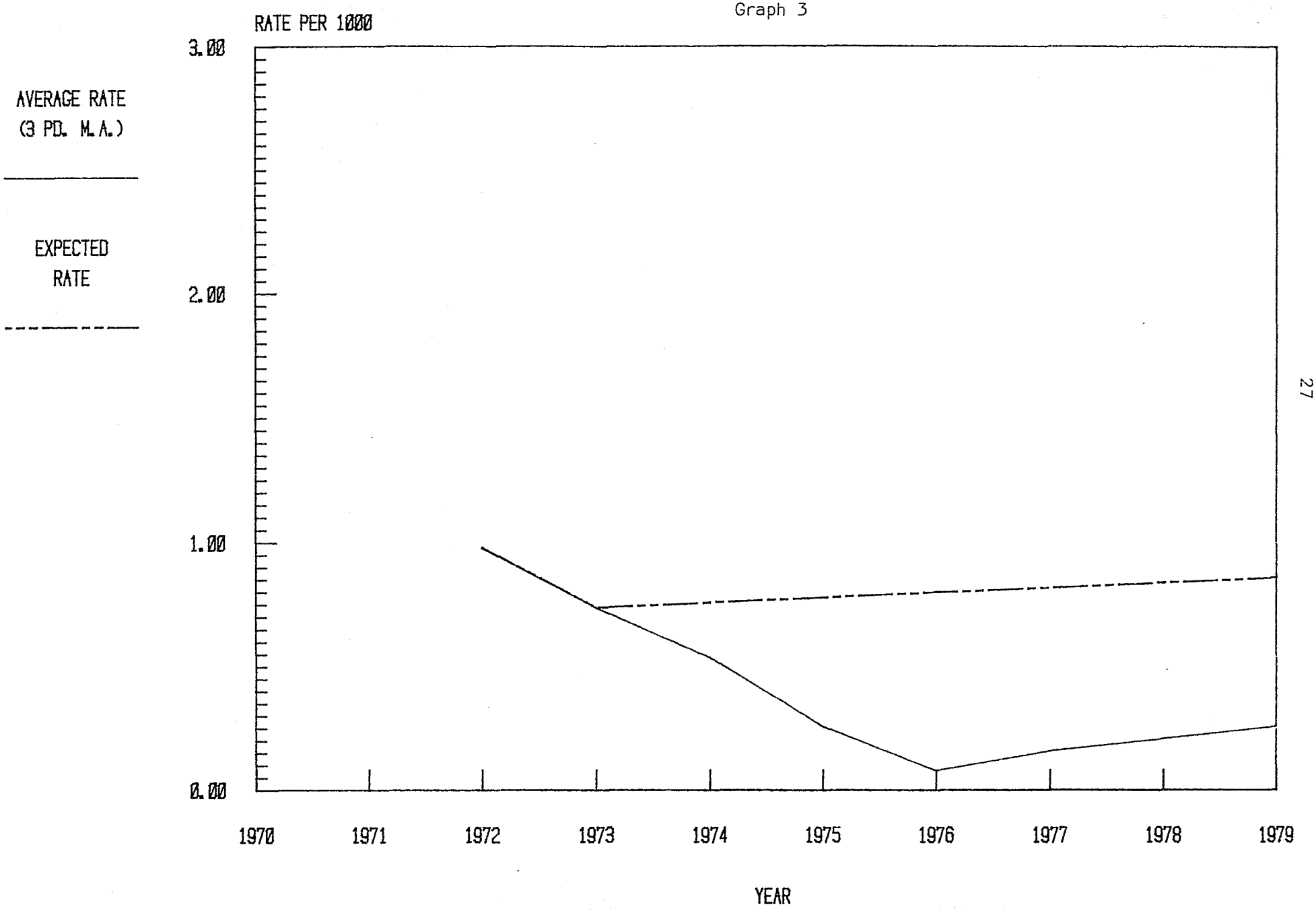
Graph 2



DEPARTMENT OF CORRECTIONS

JUVENILE COMMITMENTS - D-F-O COUNTIES

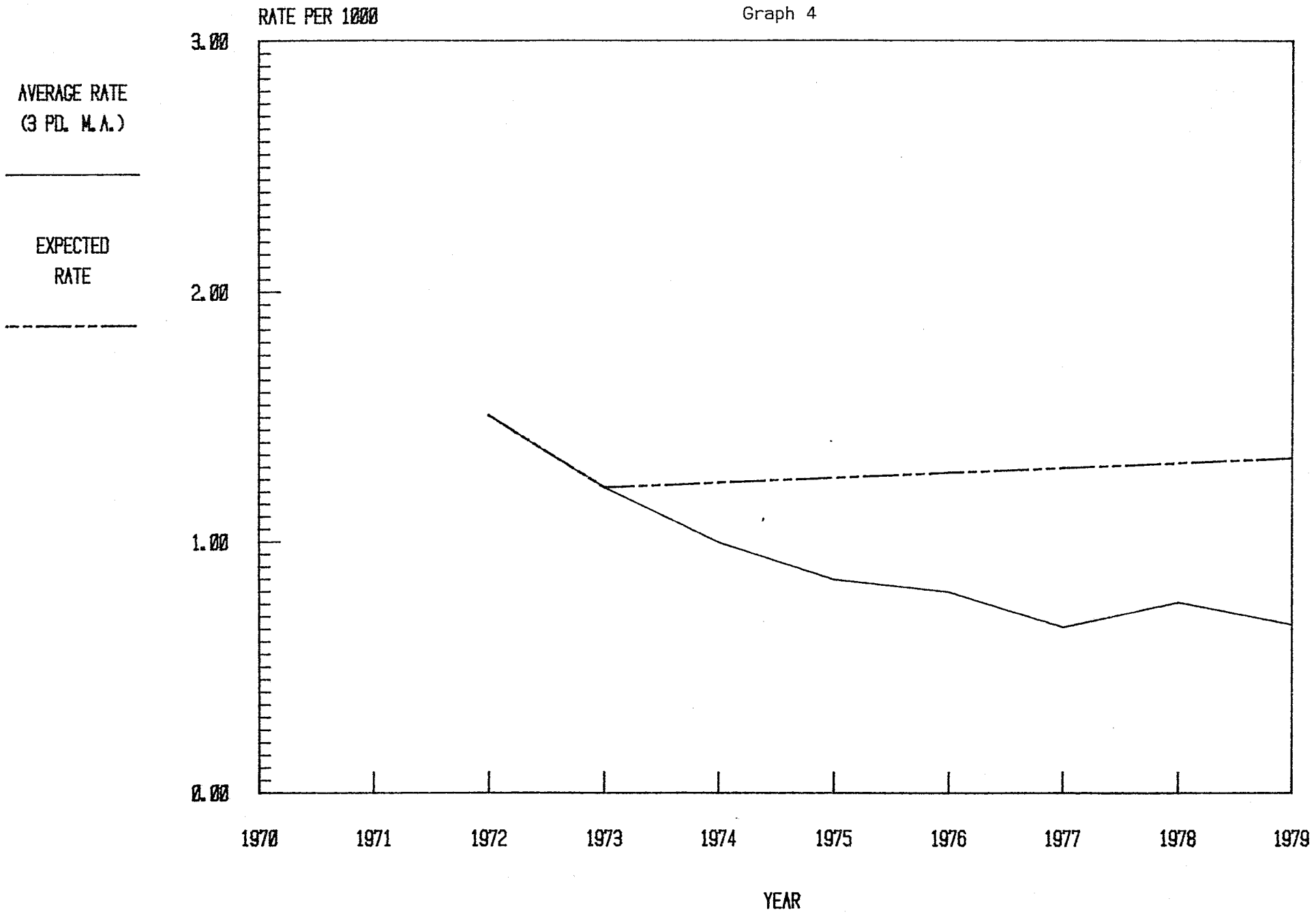
Graph 3



DEPARTMENT OF CORRECTIONS

JUVENILE COMMITMENTS - RAMSEY COUNTY

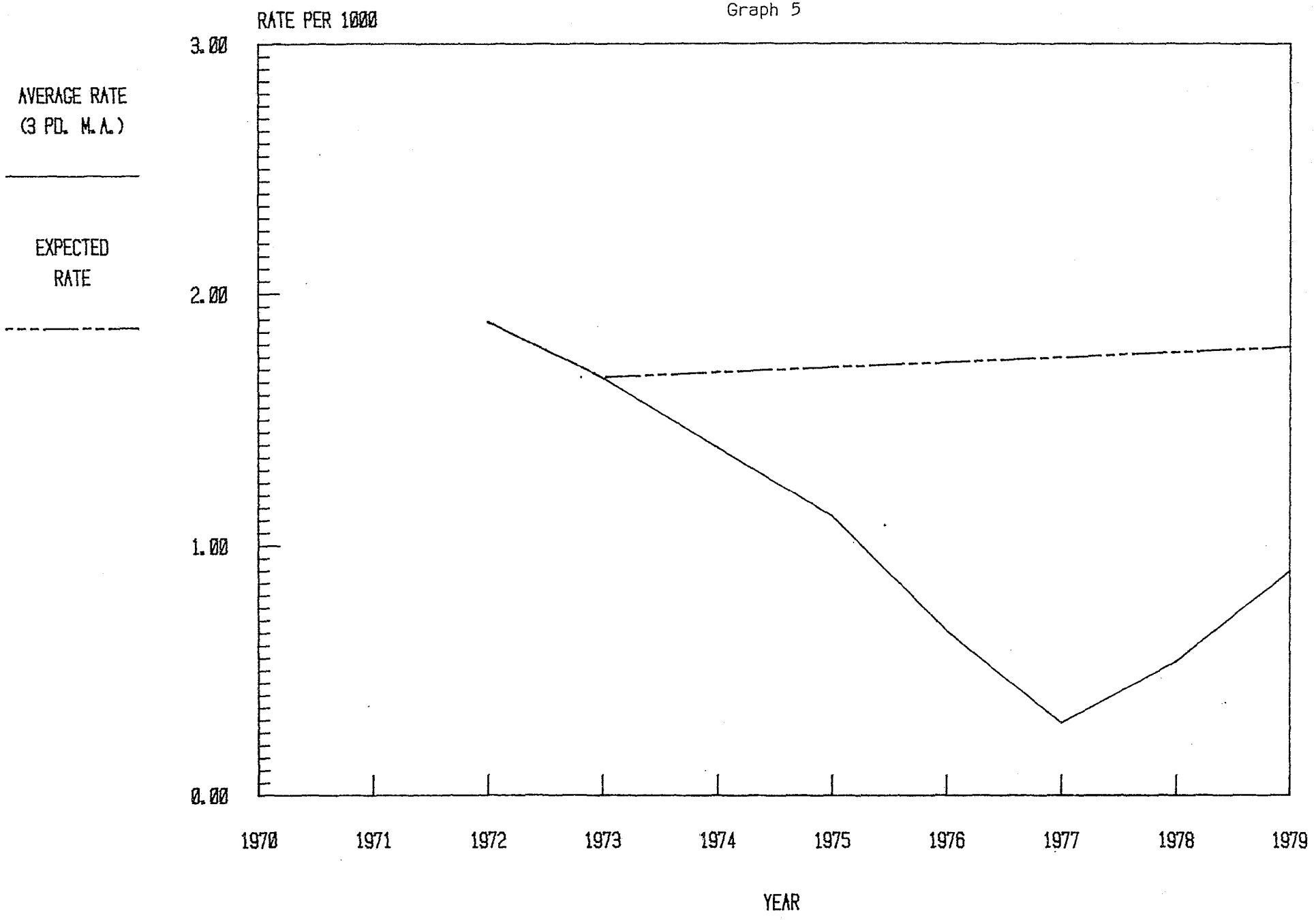
Graph 4



DEPARTMENT OF CORRECTIONS

JUVENILE COMMITMENTS - C-W/MORRISON CO'S

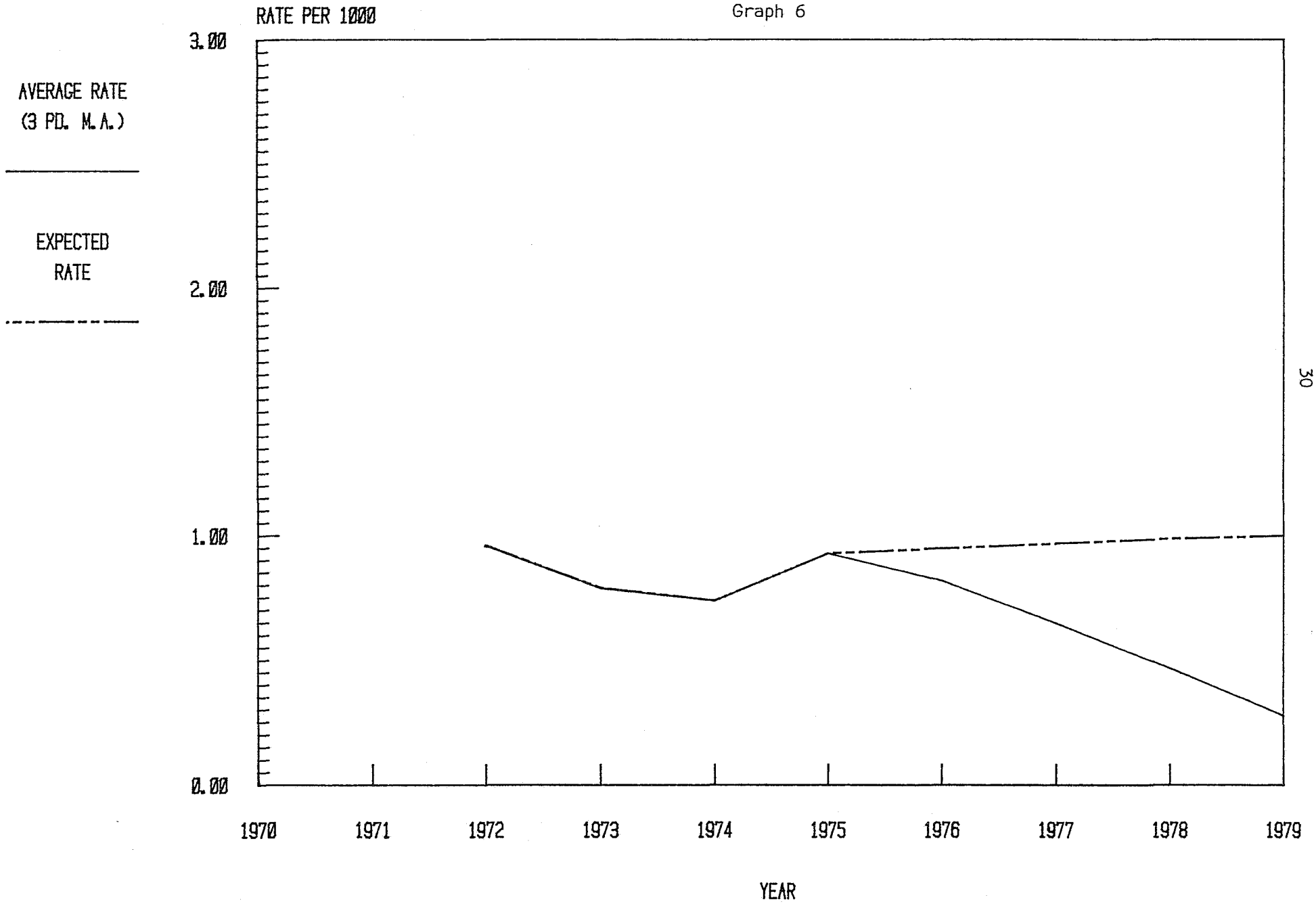
Graph 5



DEPARTMENT OF CORRECTIONS

JUVENILE COMMITMENTS - P-RL-N CO'S.

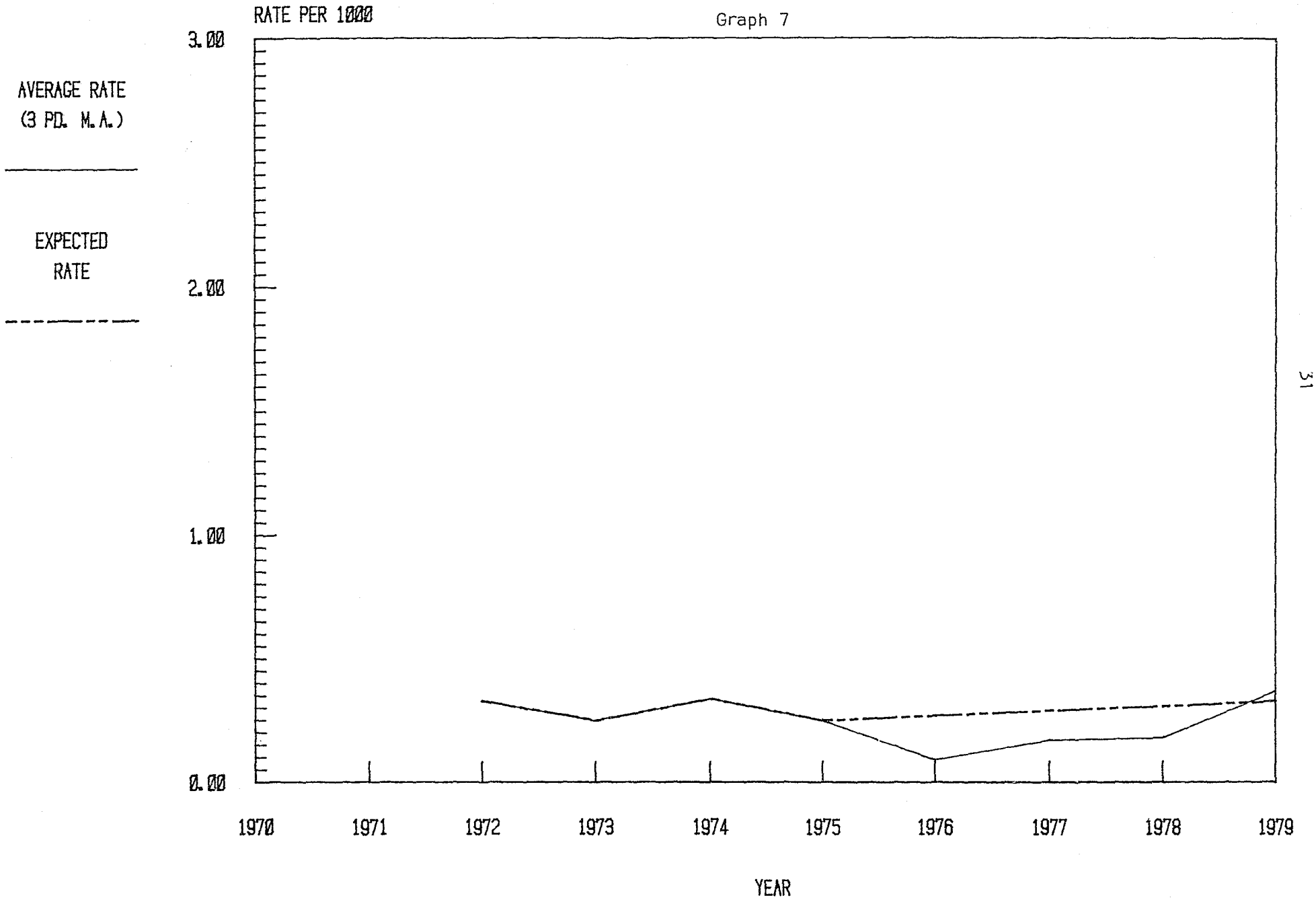
Graph 6



DEPARTMENT OF CORRECTIONS

JUVENILE COMMITMENTS - TODD/WADENA CO'S.

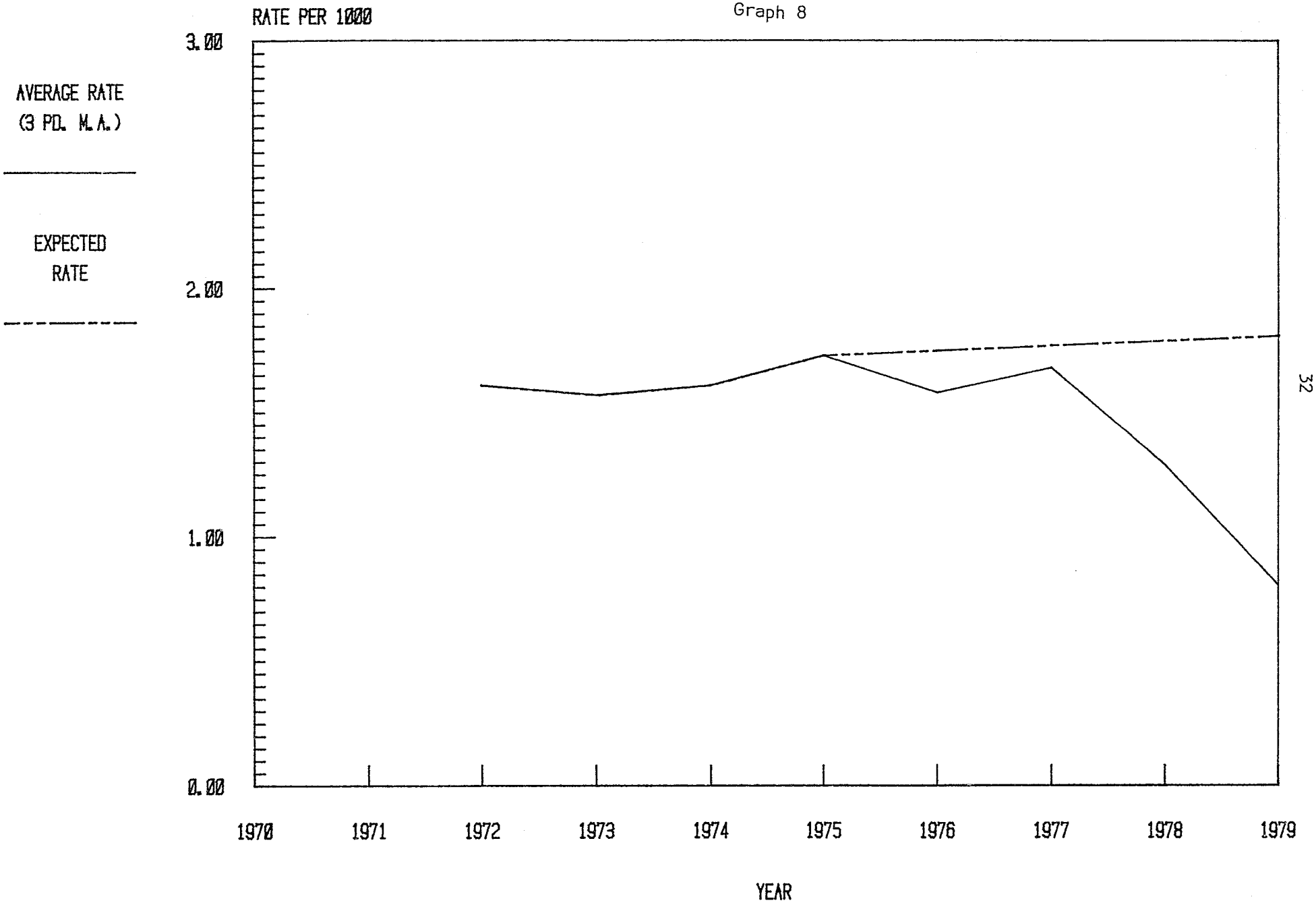
Graph 7



DEPARTMENT OF CORRECTIONS

JUVENILE COMMITMENTS - REGION 3

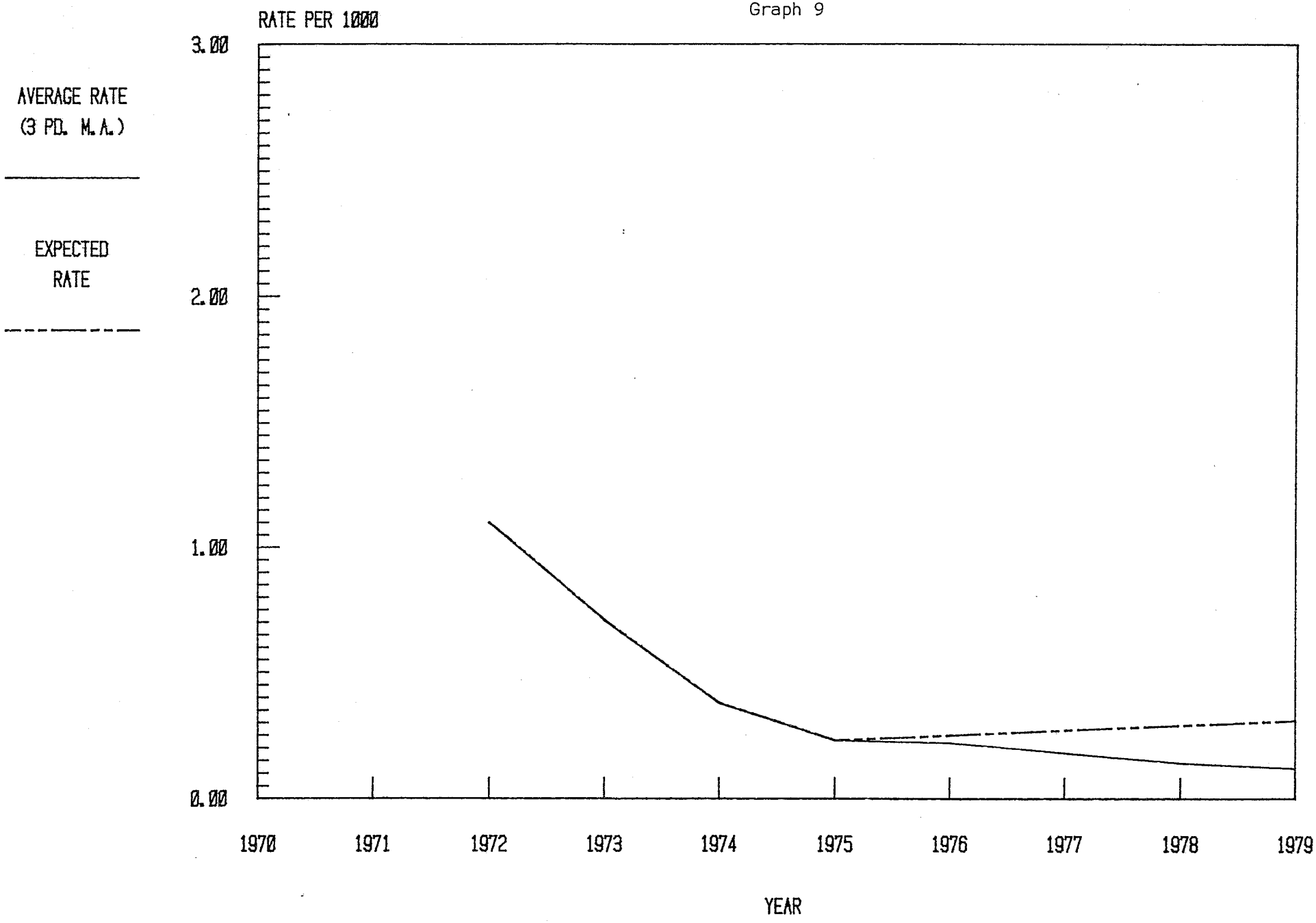
Graph 8



DEPARTMENT OF CORRECTIONS

JUVENILE COMMITMENTS - ANOKA COUNTY

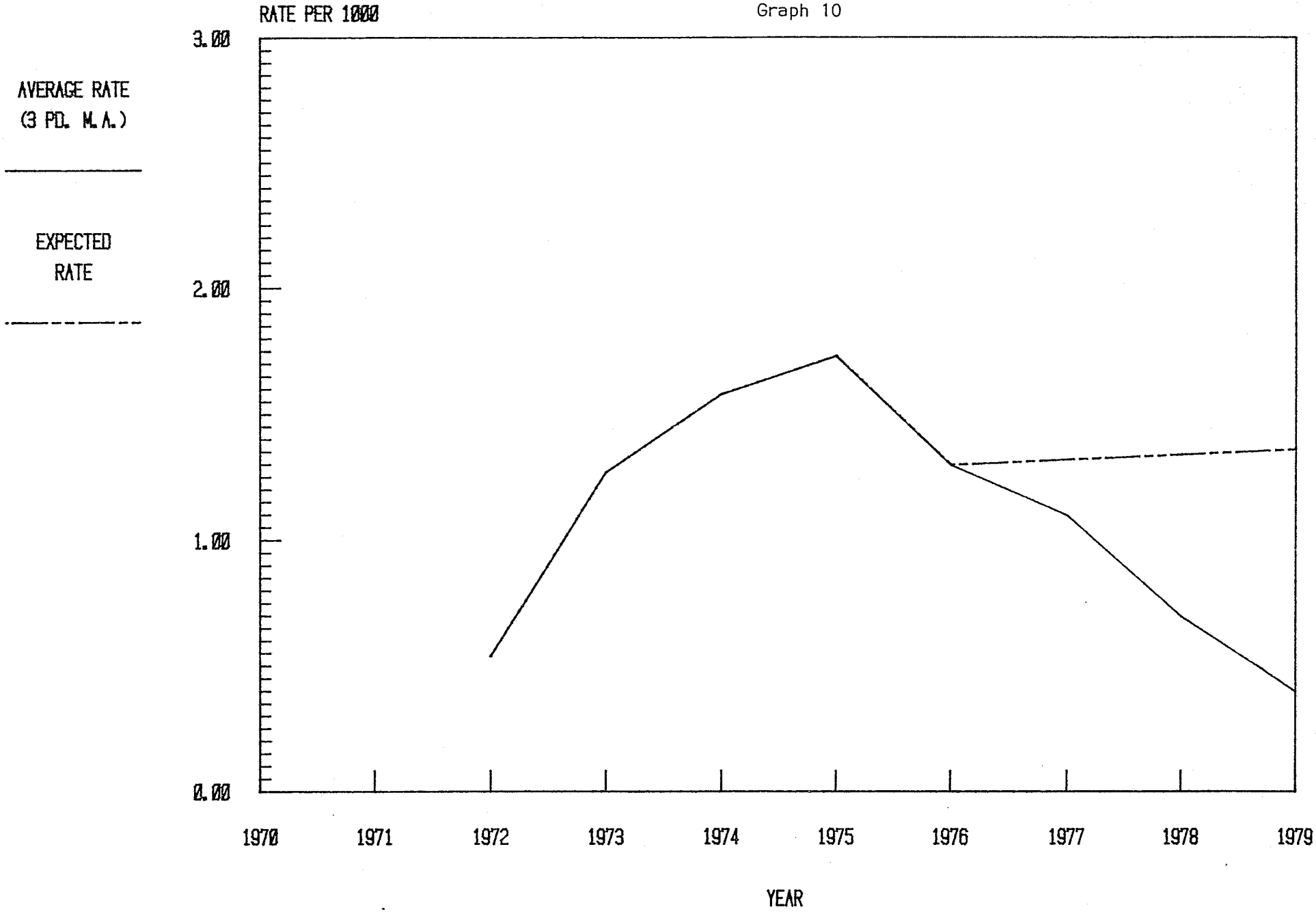
Graph 9



DEPARTMENT OF CORRECTIONS

JUVENILE COMMITMENTS - REGION 6W

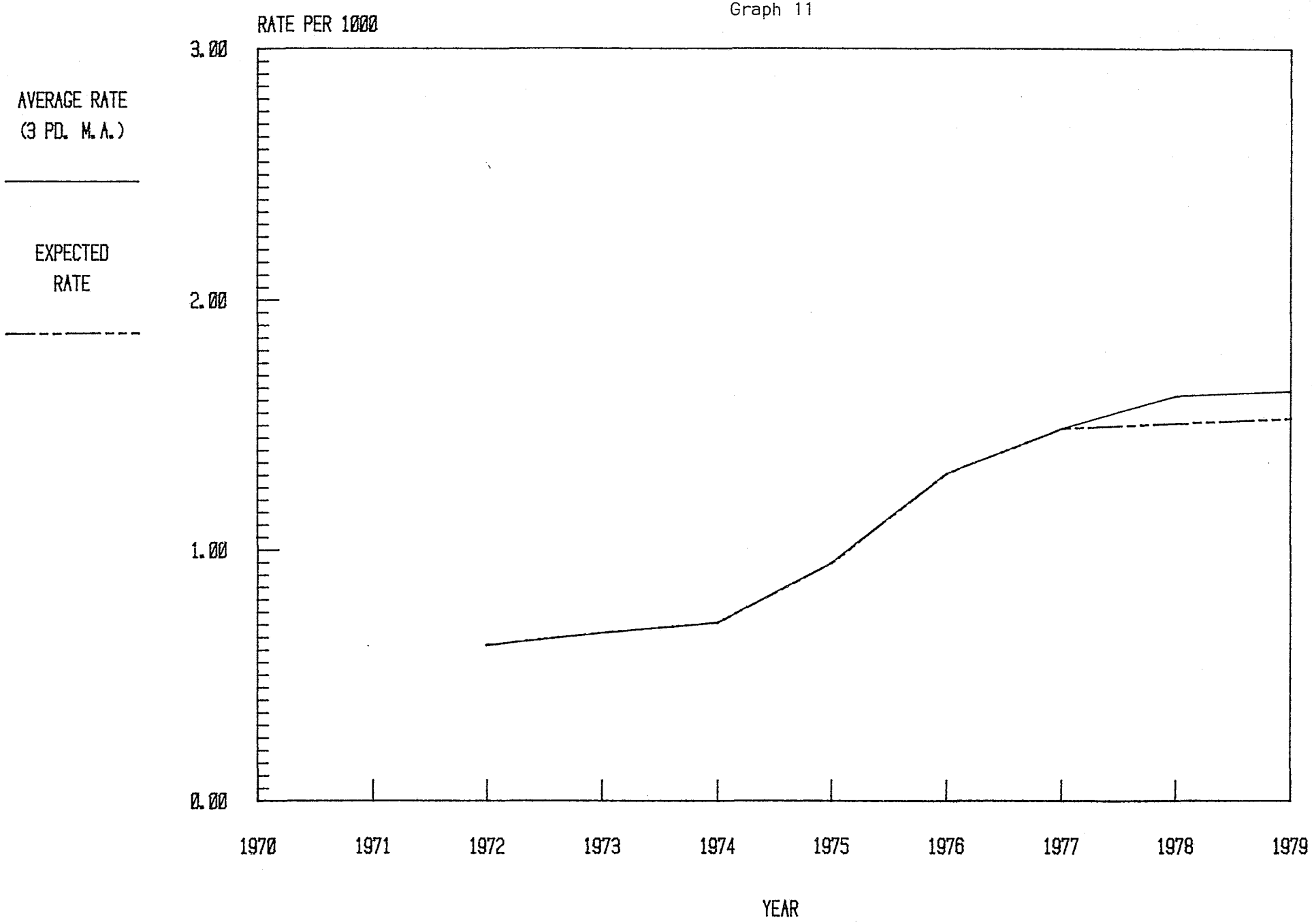
Graph 10



DEPARTMENT OF CORRECTIONS

JUVENILE COMMITMENTS - BLUE EARTH COUNTY

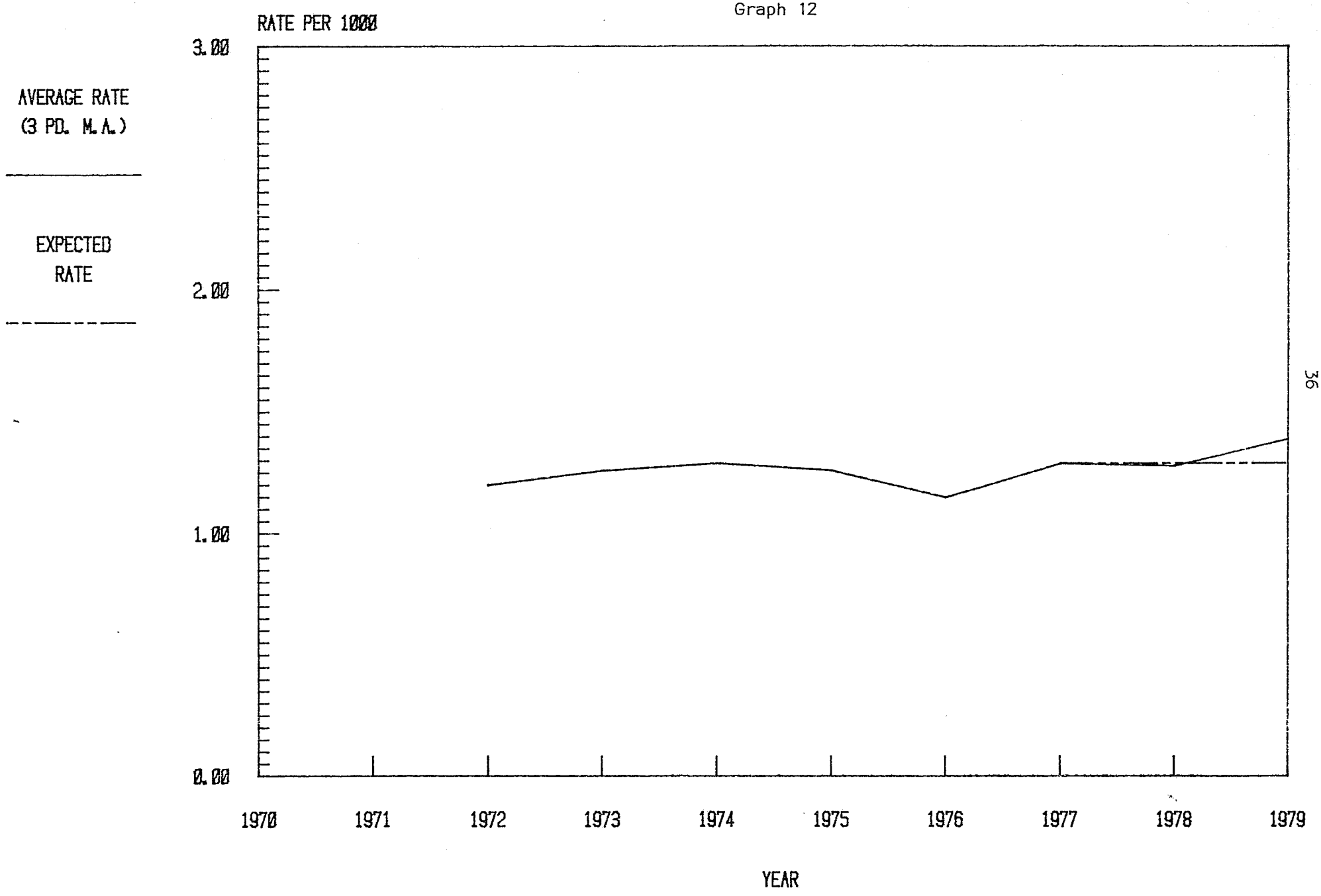
Graph 11



DEPARTMENT OF CORRECTIONS

JUVENILE COMMITMENTS - HENNEPIN COUNTY

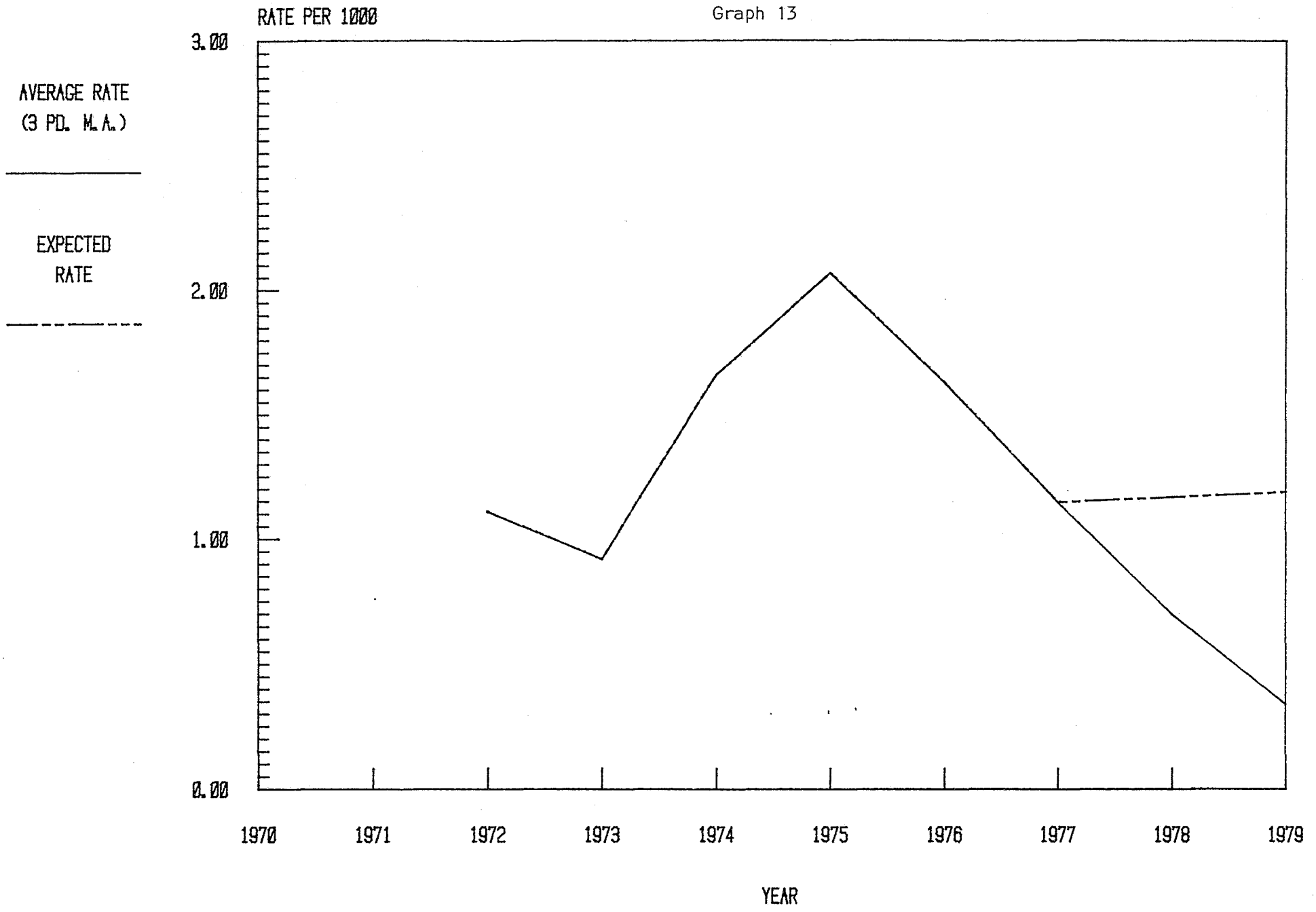
Graph 12



DEPARTMENT OF CORRECTIONS

JUVENILE COMMITMENTS - WASHINGTON COUNTY

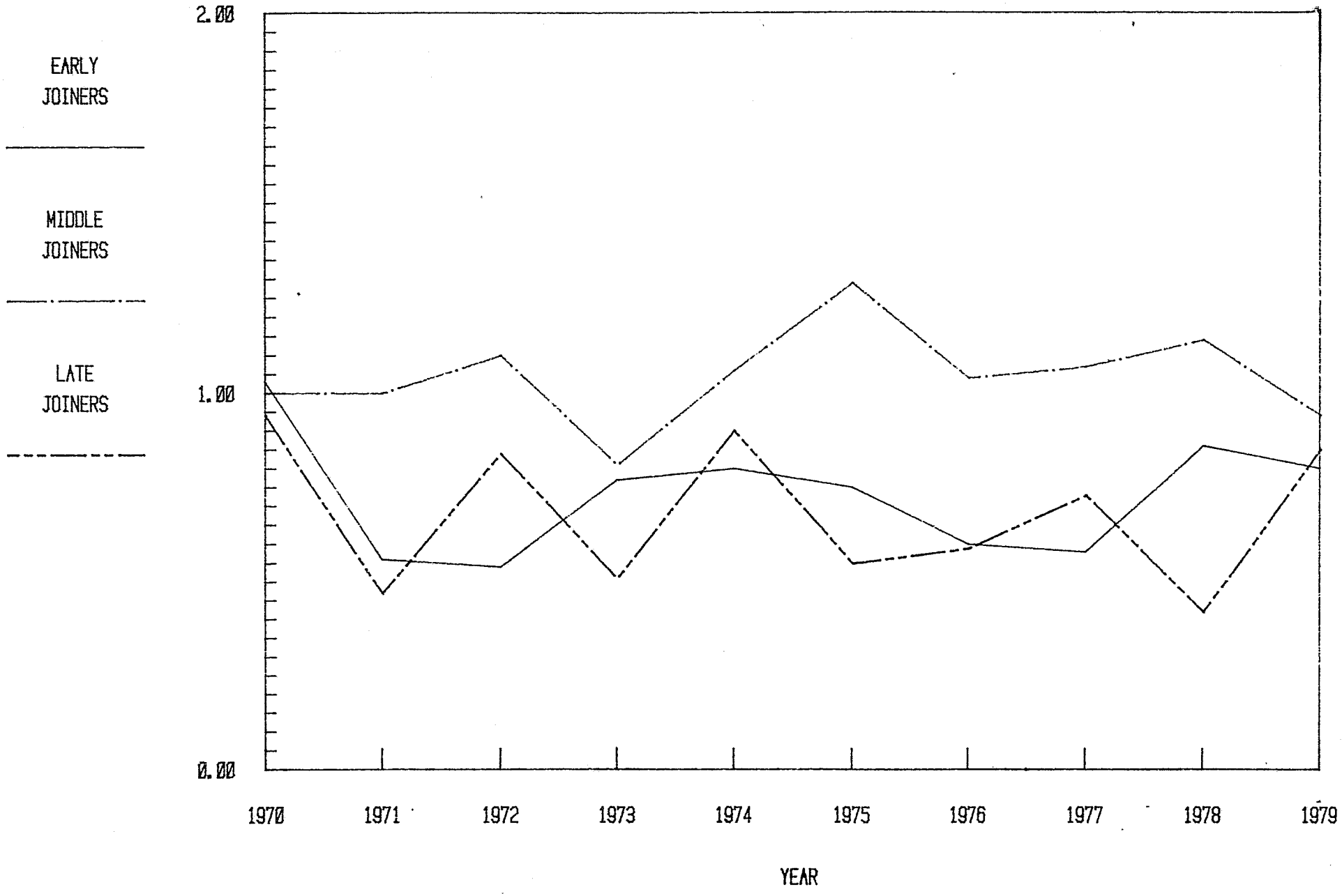
Graph 13



DEPARTMENT OF CORRECTIONS

COMMITMENT RATE COMPARISONS - CCA CO'S.

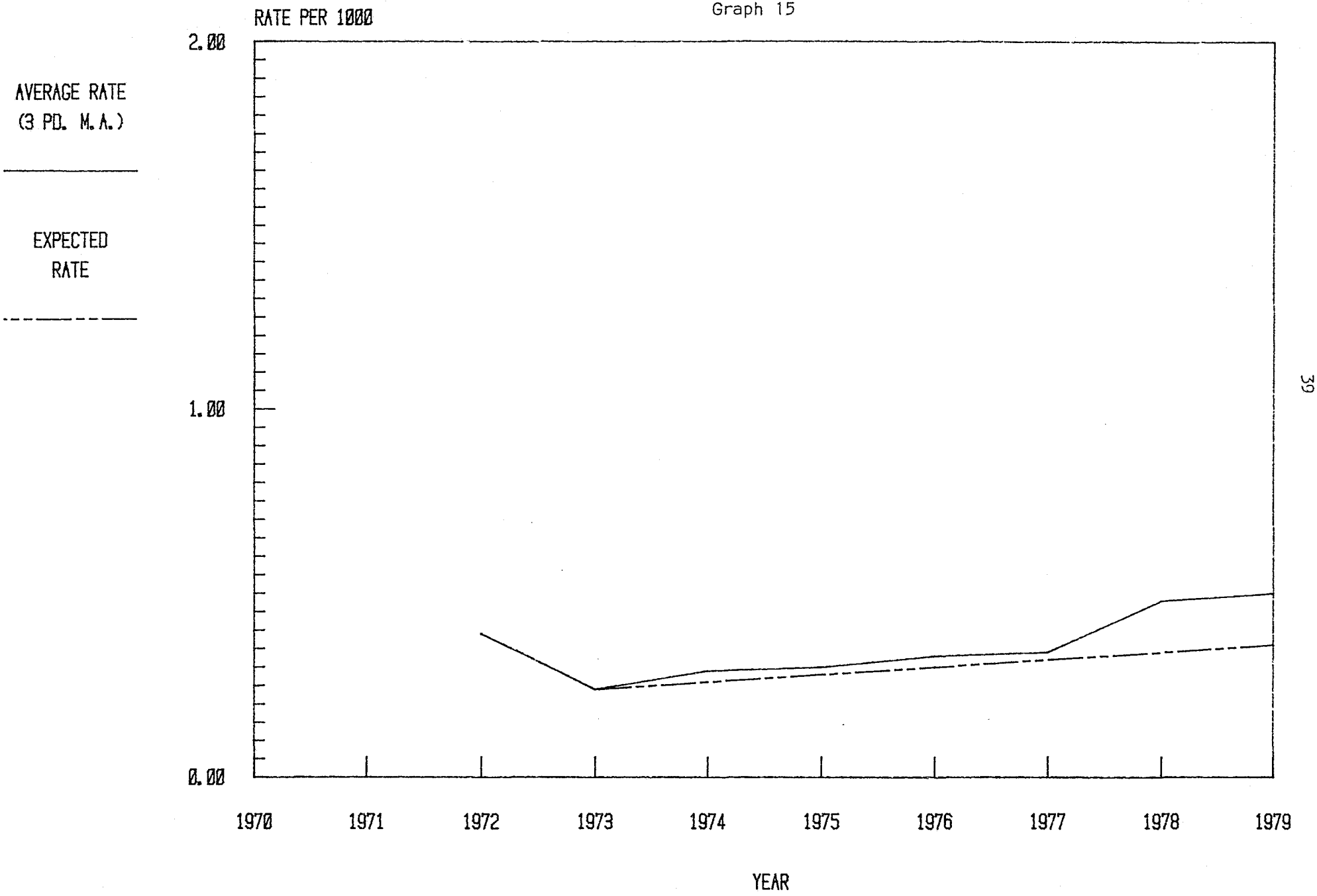
Graph 14



DEPARTMENT OF CORRECTIONS

ADULT COMMITMENTS - D.F.O. COUNTIES

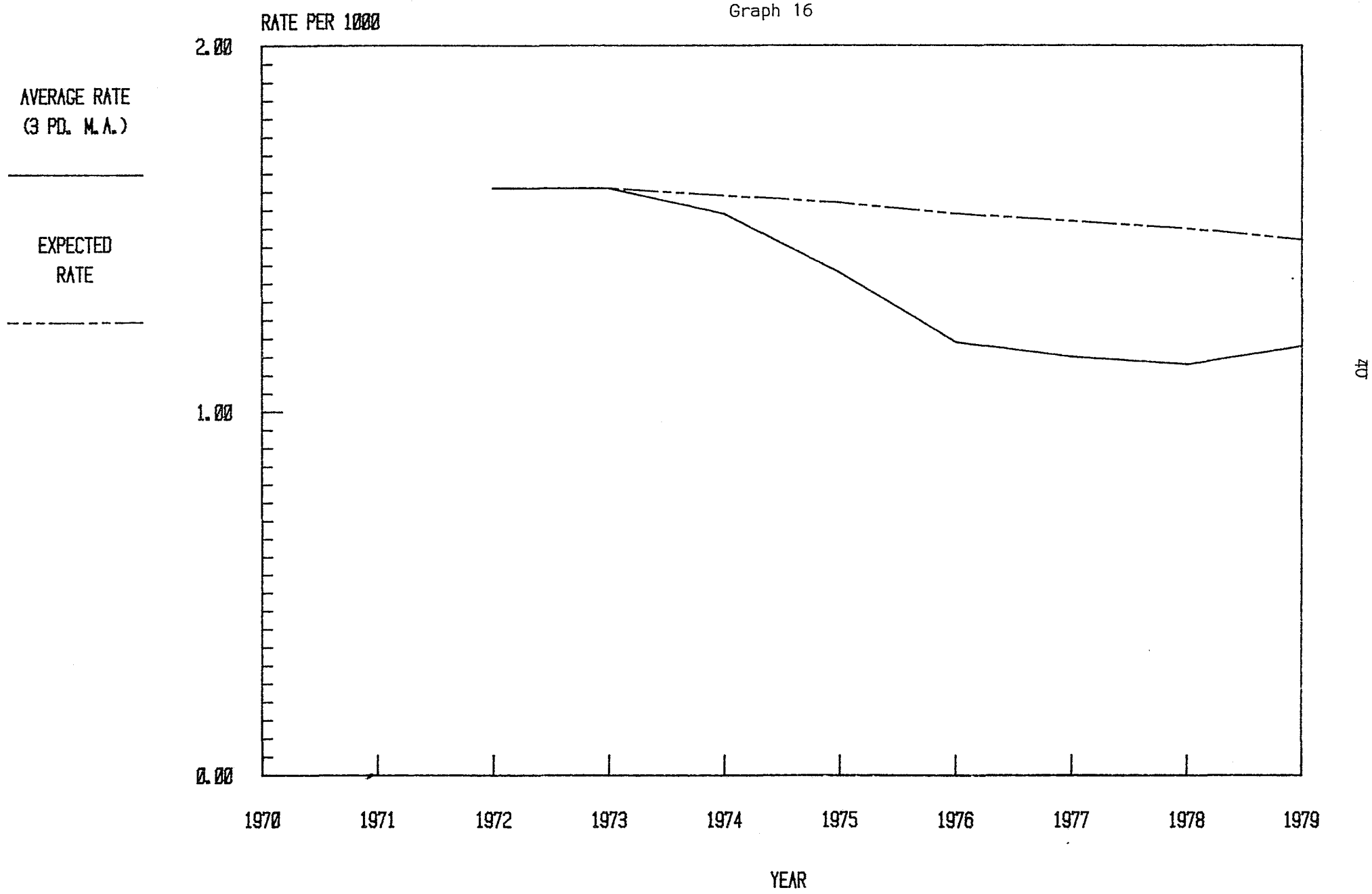
Graph 15



DEPARTMENT OF CORRECTIONS

ADULT COMMITMENTS - RAMSEY COUNTY

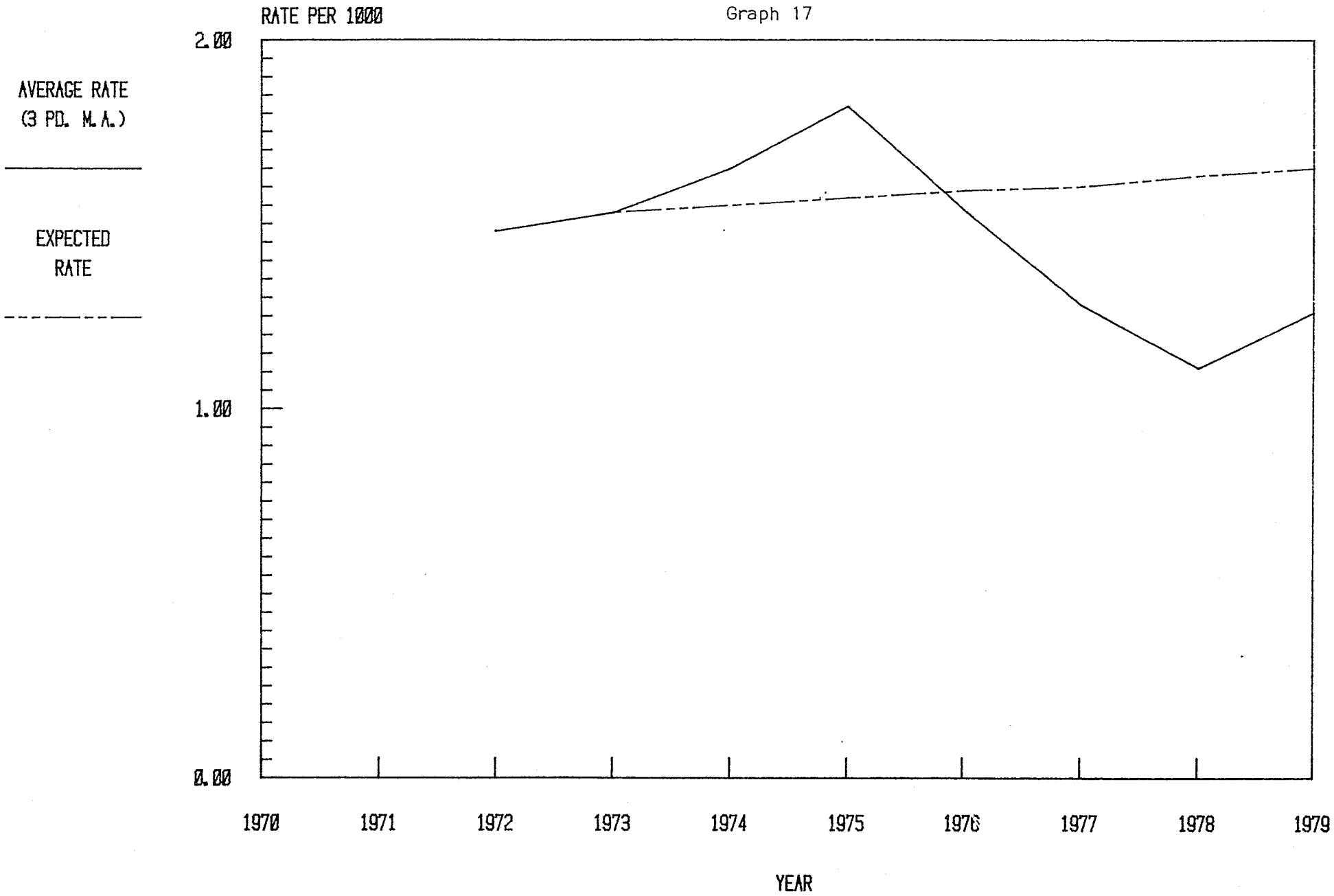
Graph 16



DEPARTMENT OF CORRECTIONS

ADULT COMMITMENTS - CROW WING/MORRISON

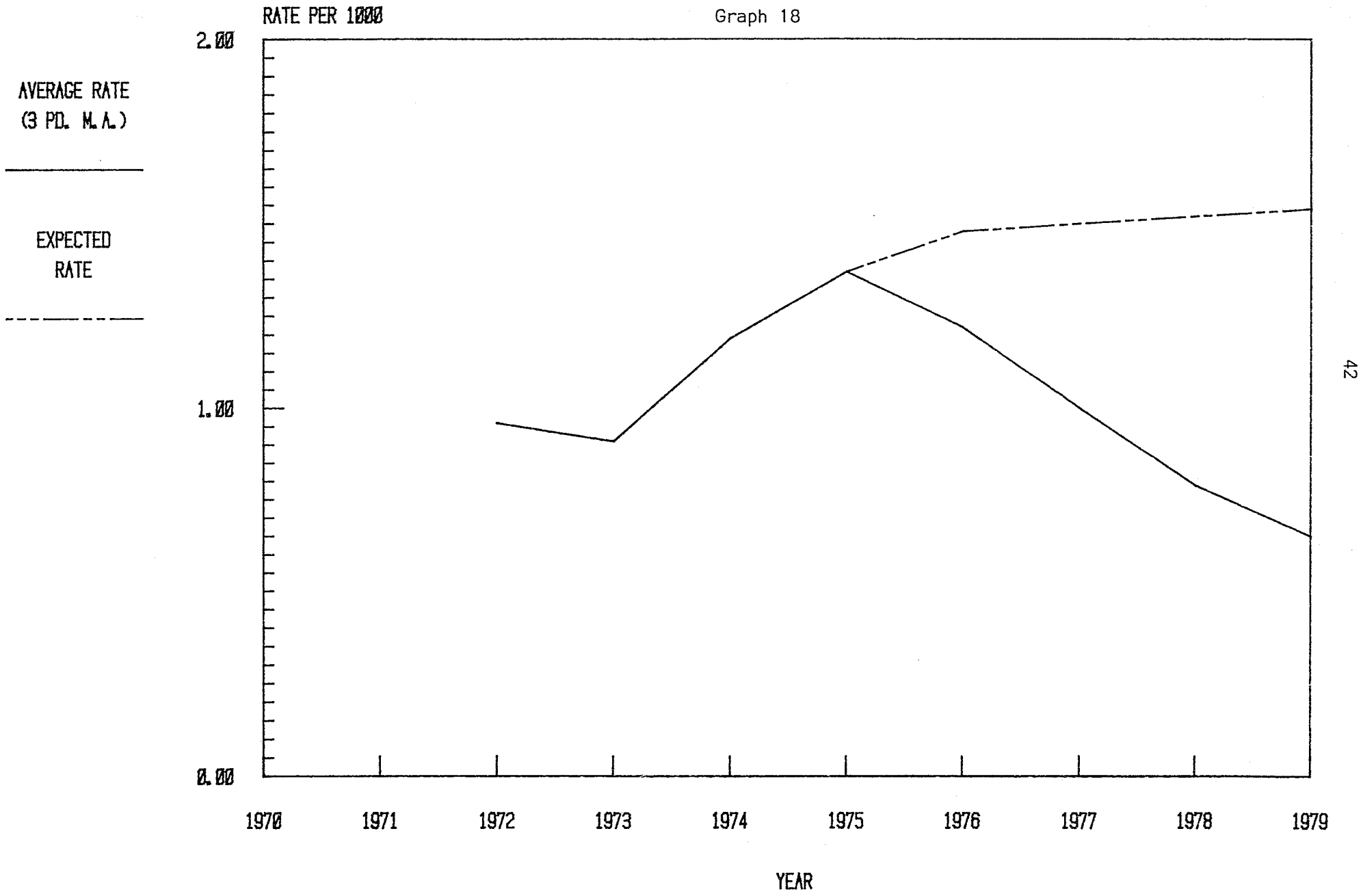
Graph 17



DEPARTMENT OF CORRECTIONS

ADULT COMMITMENTS - POLK/RED LAKE/NORMAN

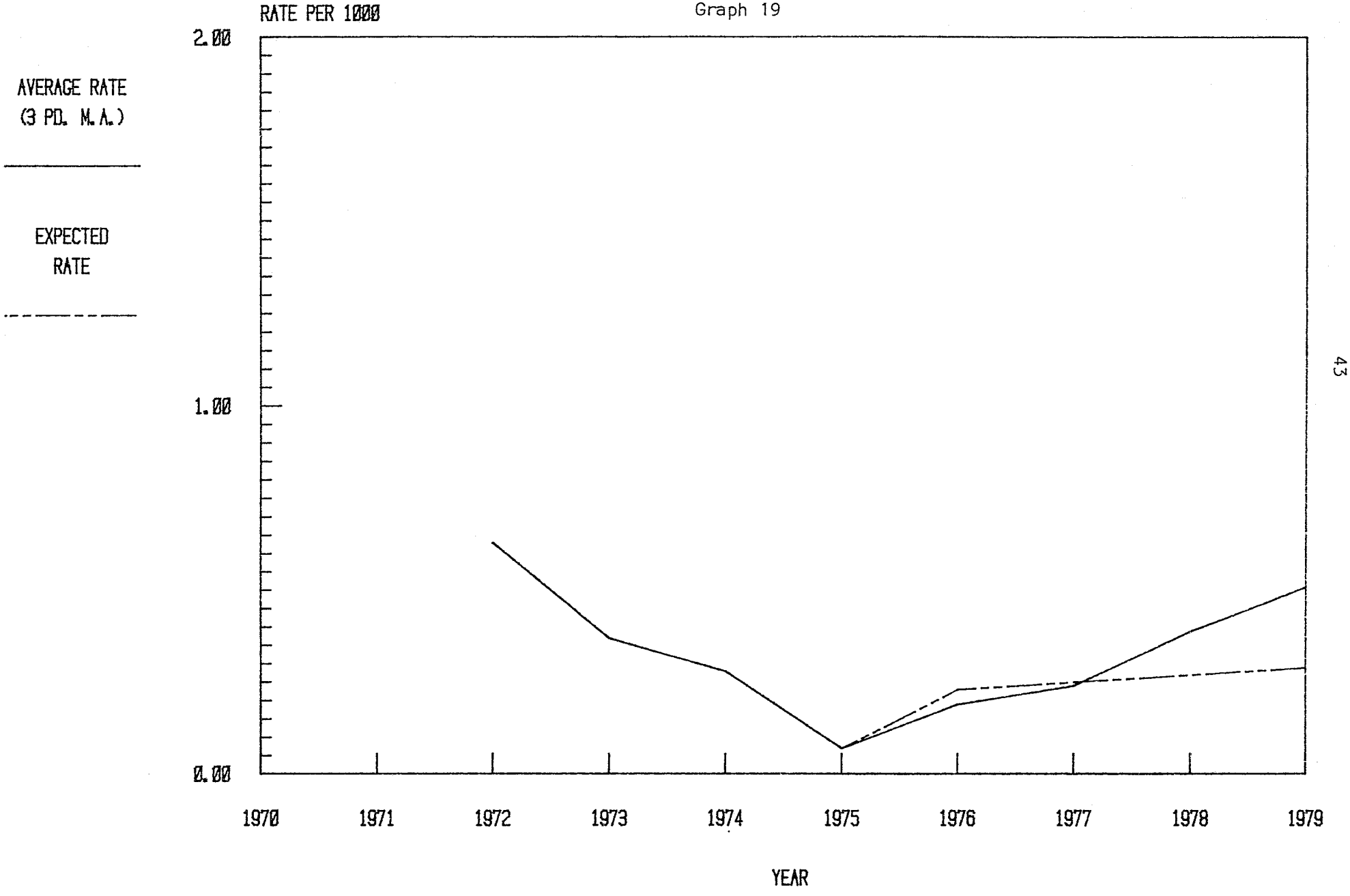
Graph 18



DEPARTMENT OF CORRECTIONS

ADULT COMMITMENTS - TODD/WADENA COUNTIES

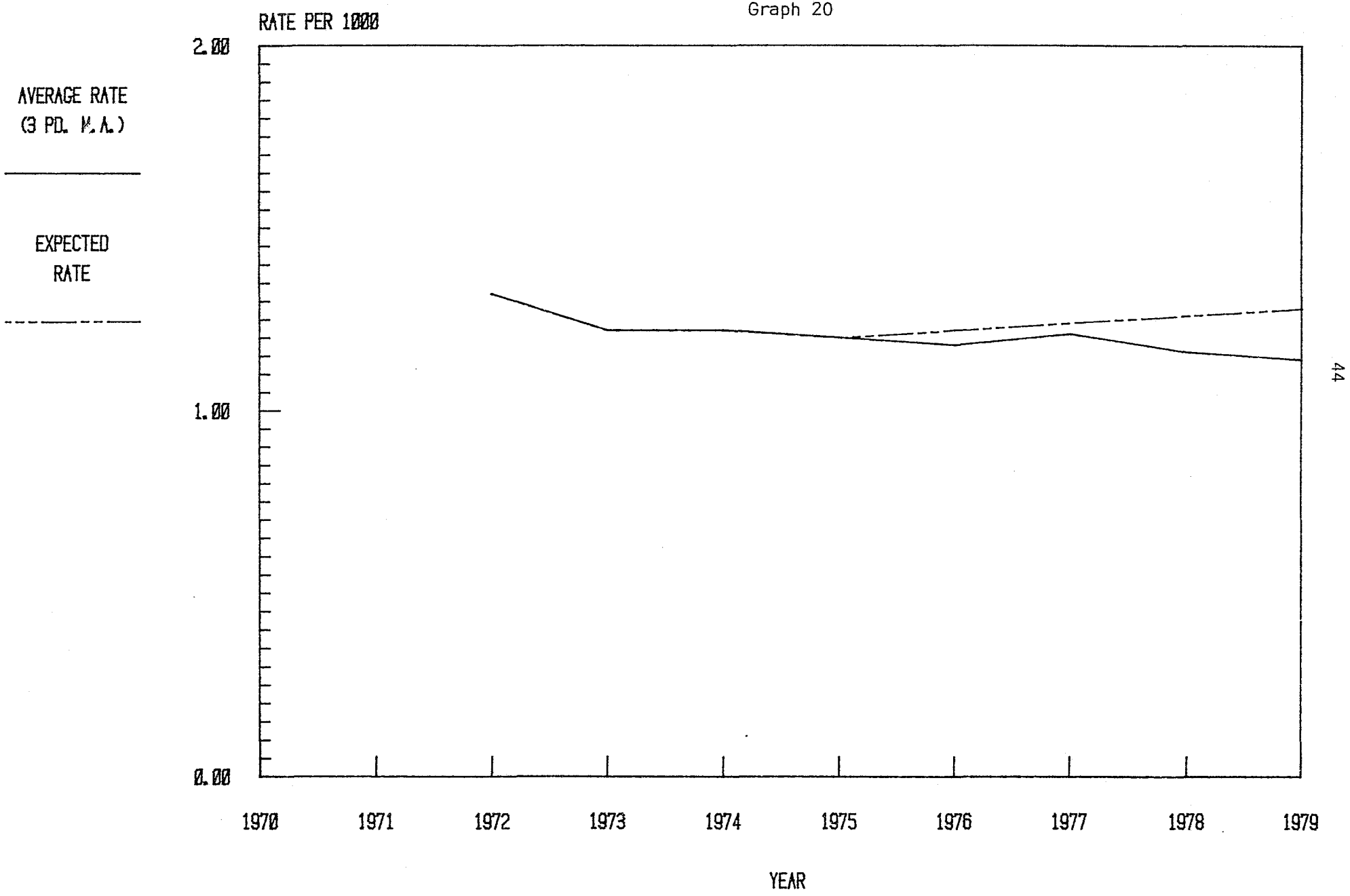
Graph 19



DEPARTMENT OF CORRECTIONS

ADULT COMMITMENTS - REGION 3

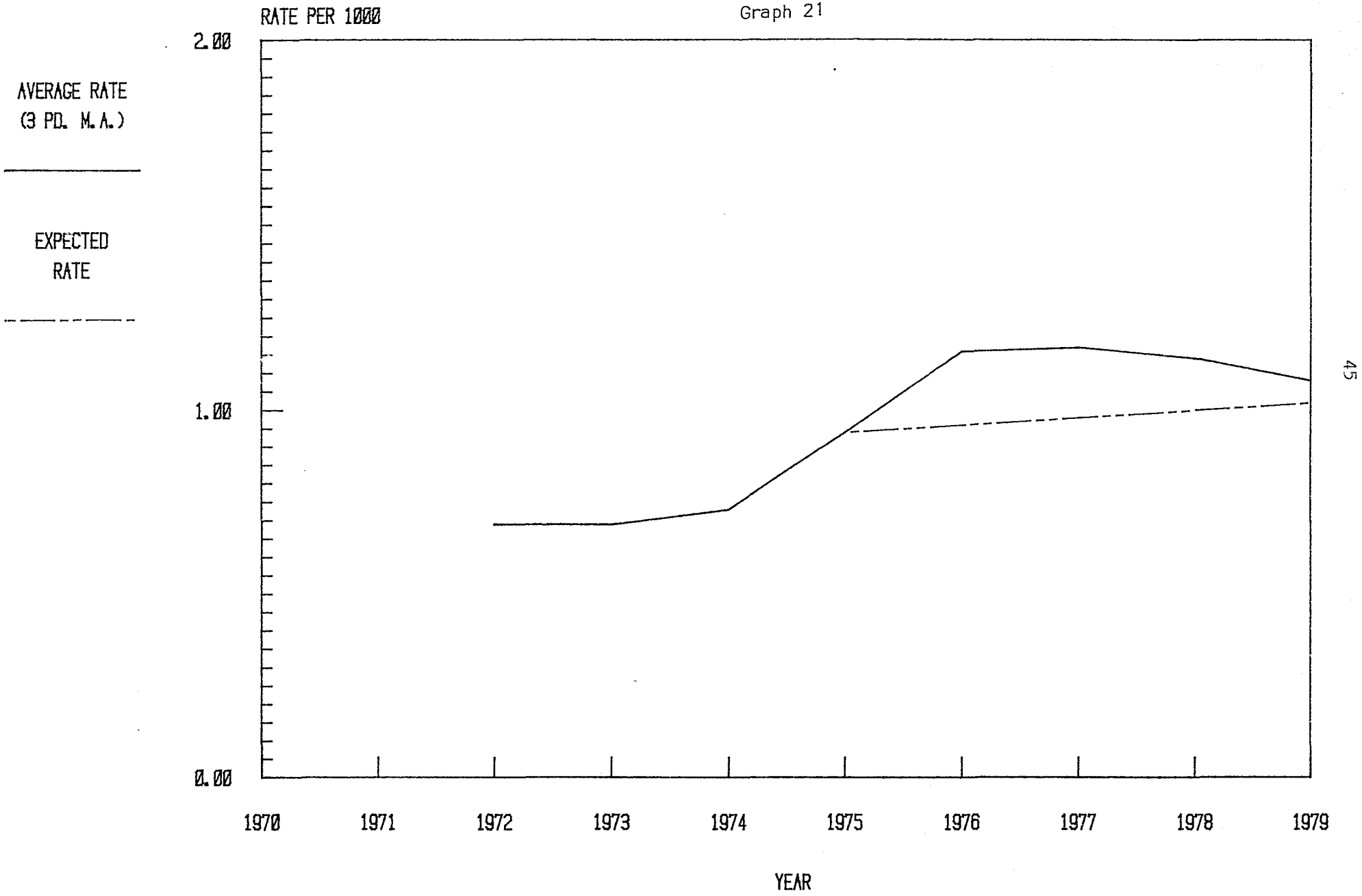
Graph 20



DEPARTMENT OF CORRECTIONS

ADULT COMMITMENTS - ANOKA COUNTY

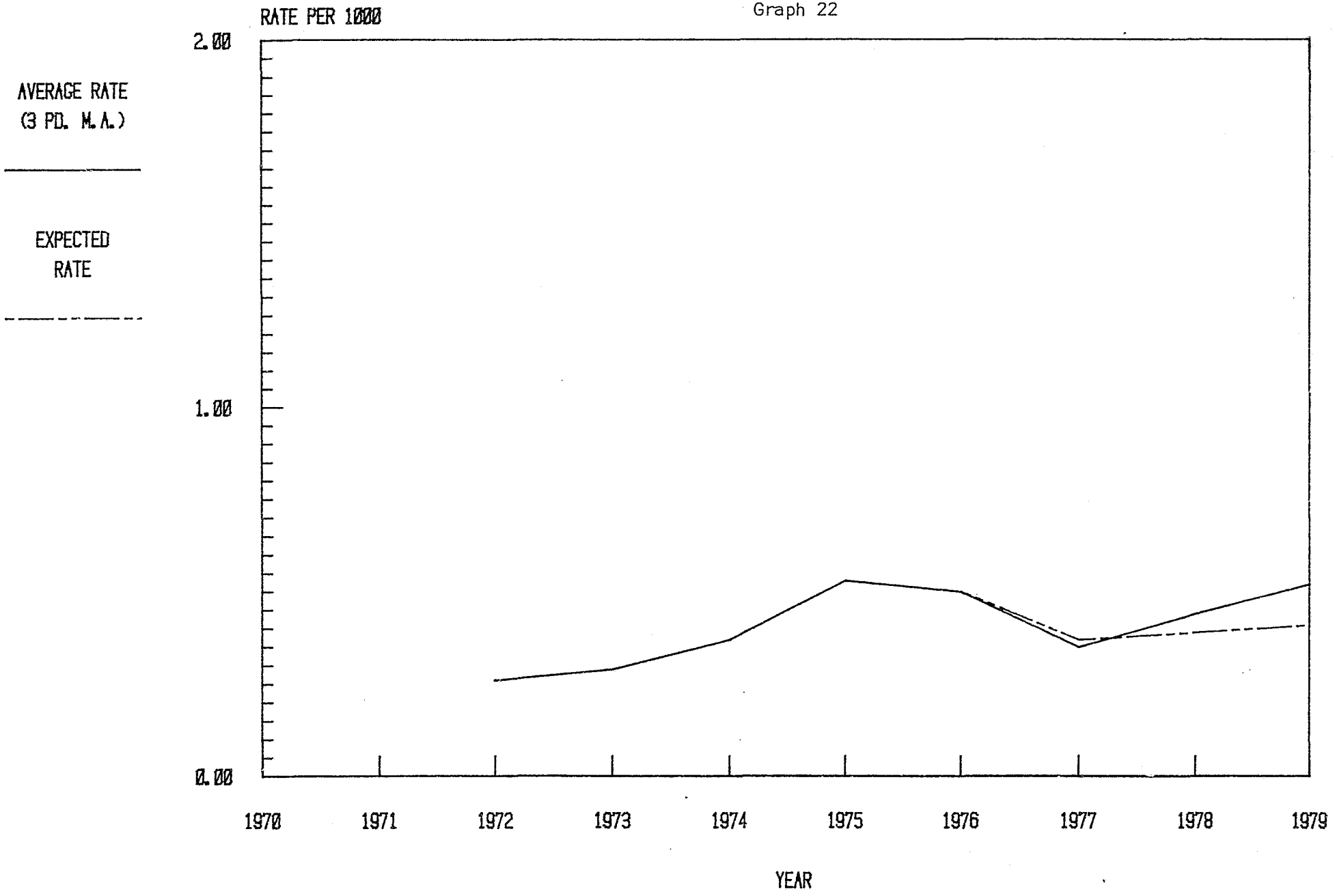
Graph 21



DEPARTMENT OF CORRECTIONS

ADULT COMMITMENTS - REGION 6W

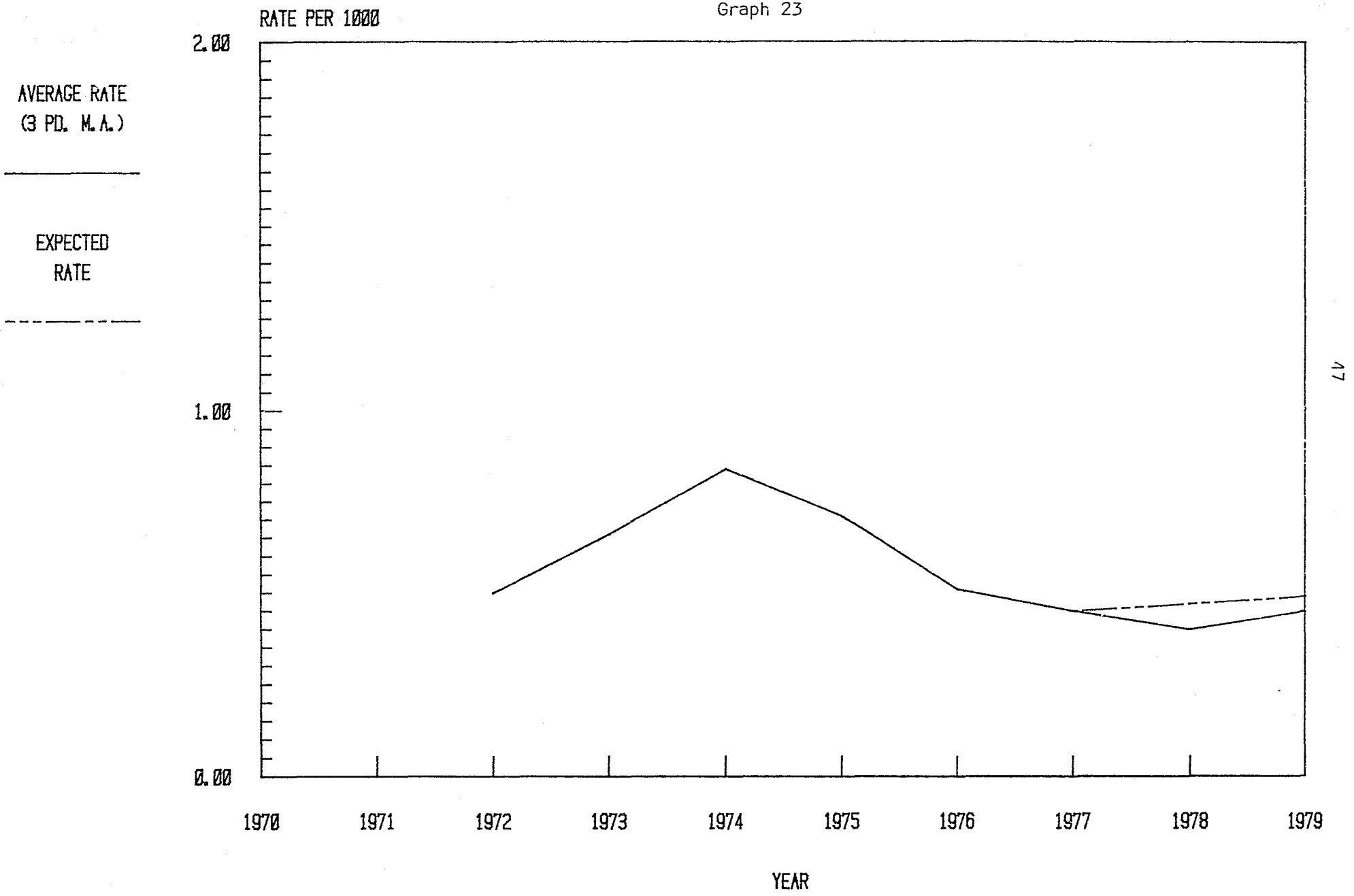
Graph 22



DEPARTMENT OF CORRECTIONS

ADULT COMMITMENTS - BLUE EARTH COUNTY

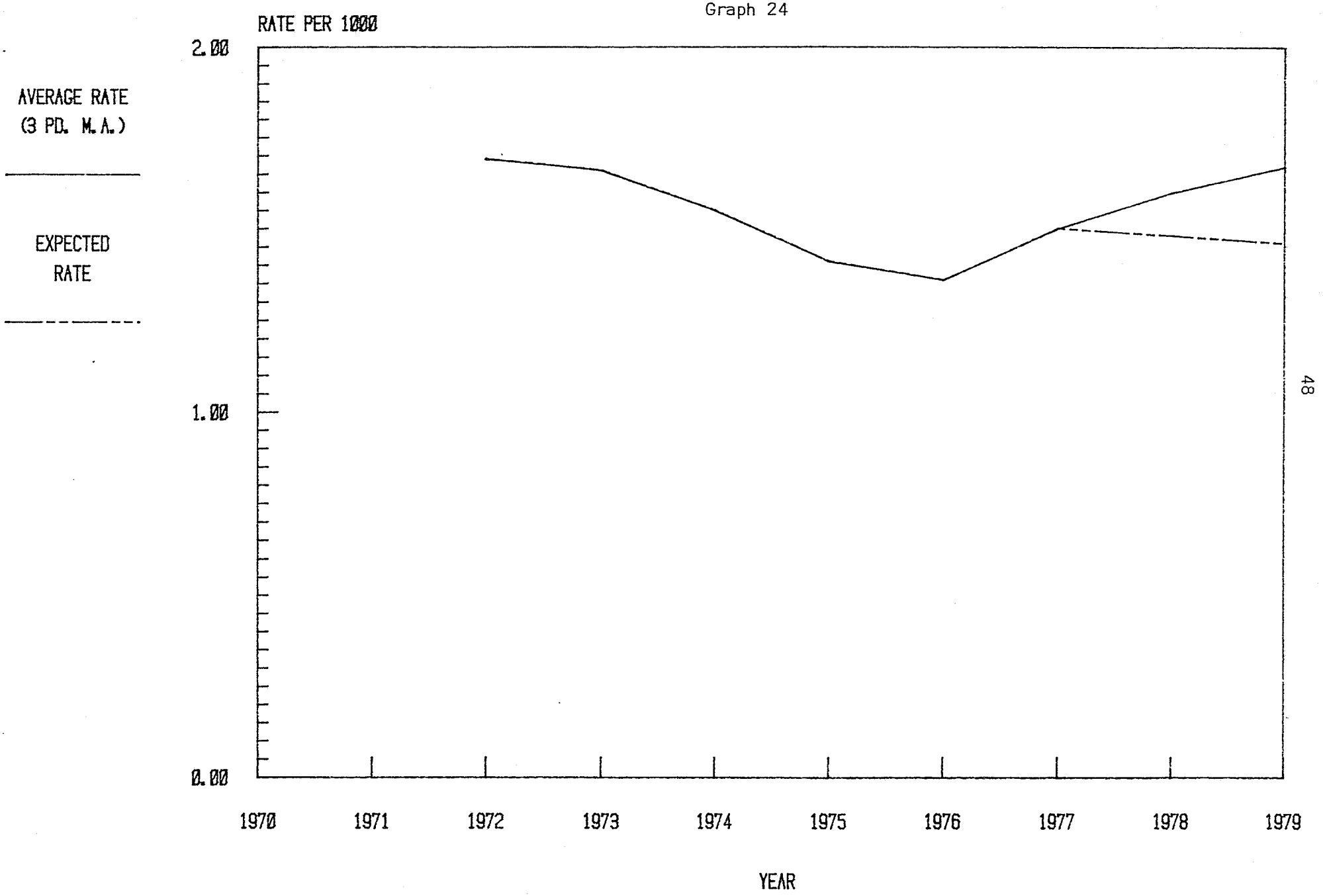
Graph 23



DEPARTMENT OF CORRECTIONS

ADULT COMMITMENTS - HENNEPIN COUNTY

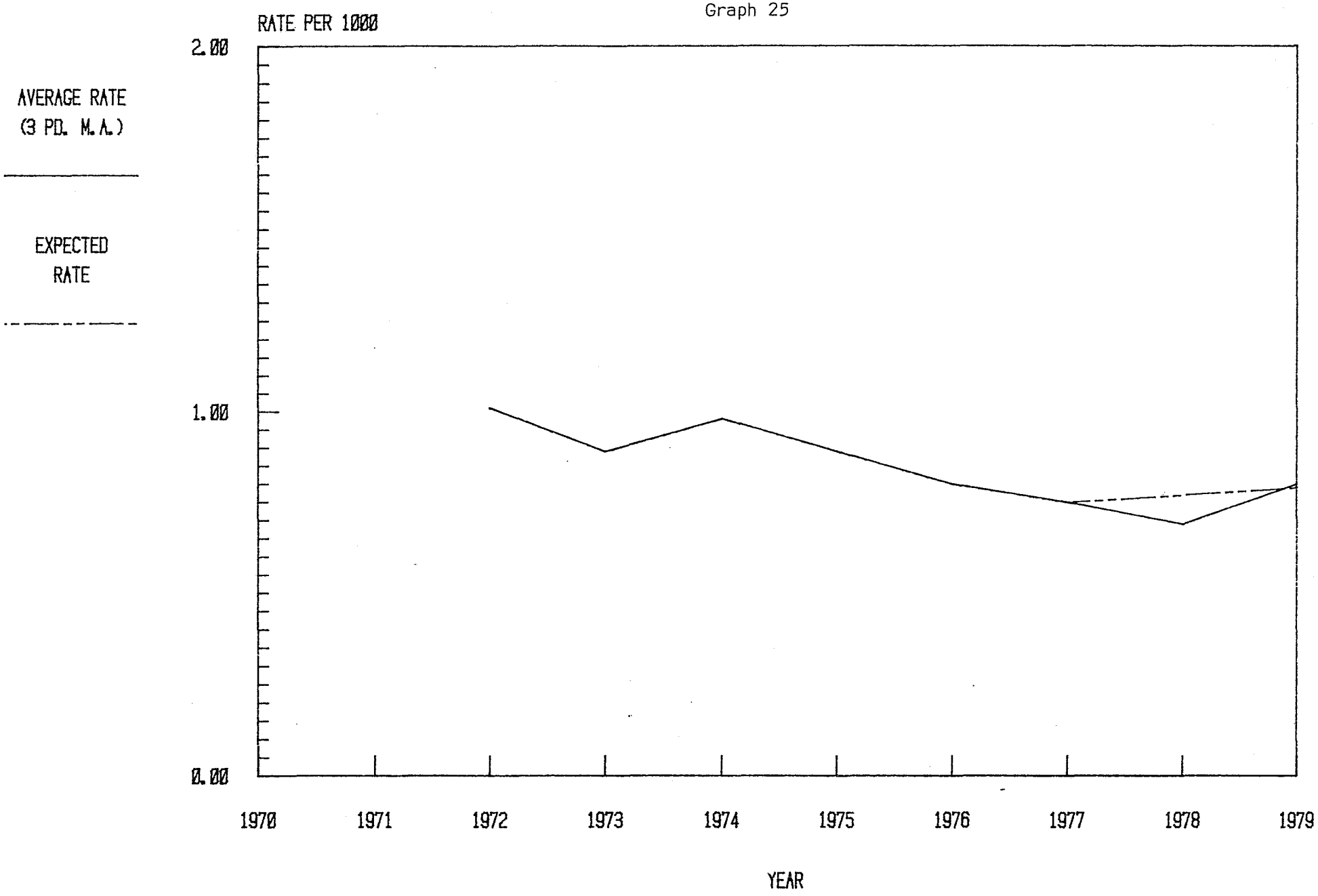
Graph 24



DEPARTMENT OF CORRECTIONS

ADULT COMMITMENTS - WASHINGTON COUNTY

Graph 25

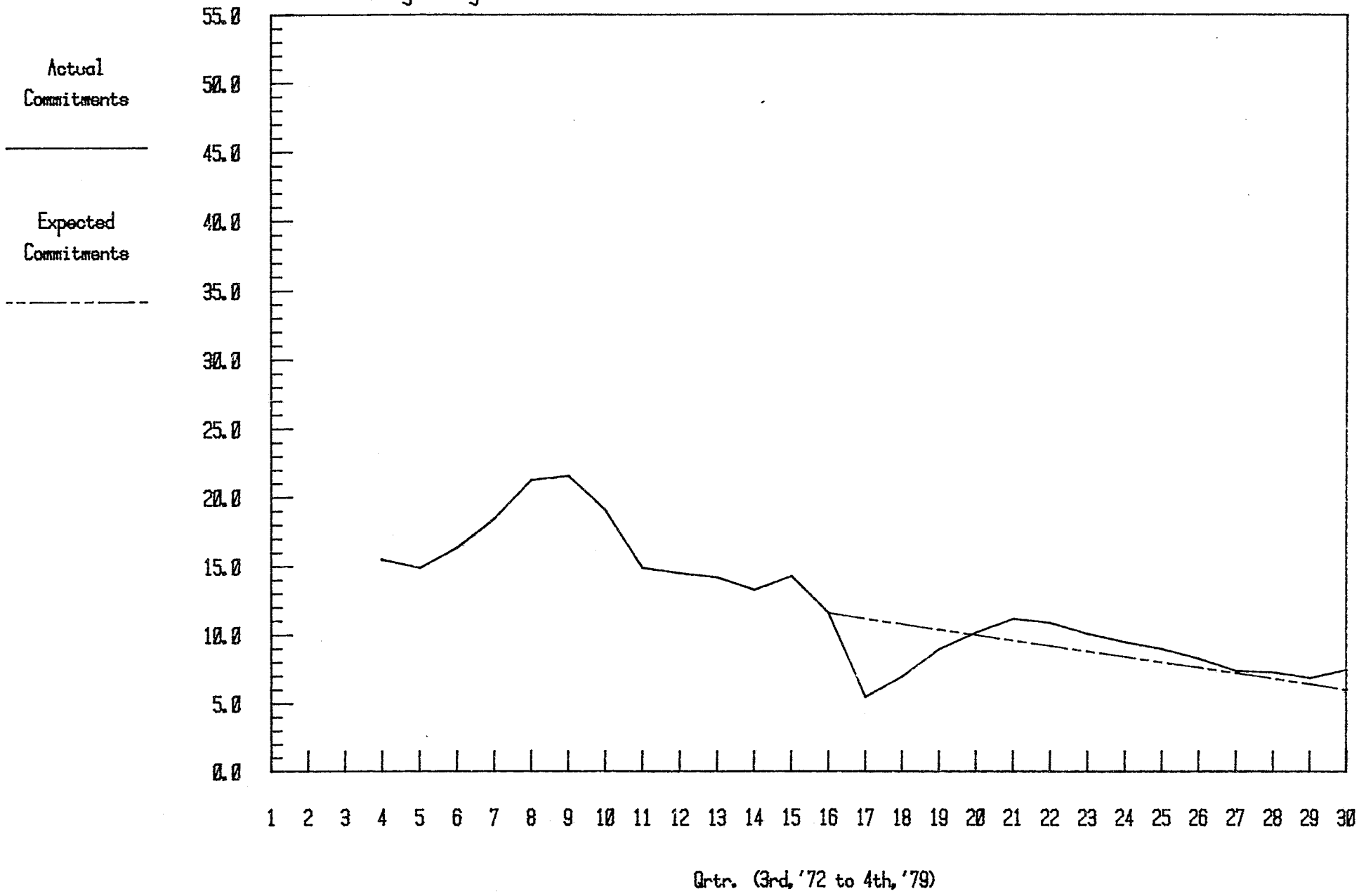


ADULT COURT DISPOSITIONS COMPARISON

PRE-CCA/POST-CCA CHARGEABLE COMMITMENTS

4-Period Moving Average

Graph 26

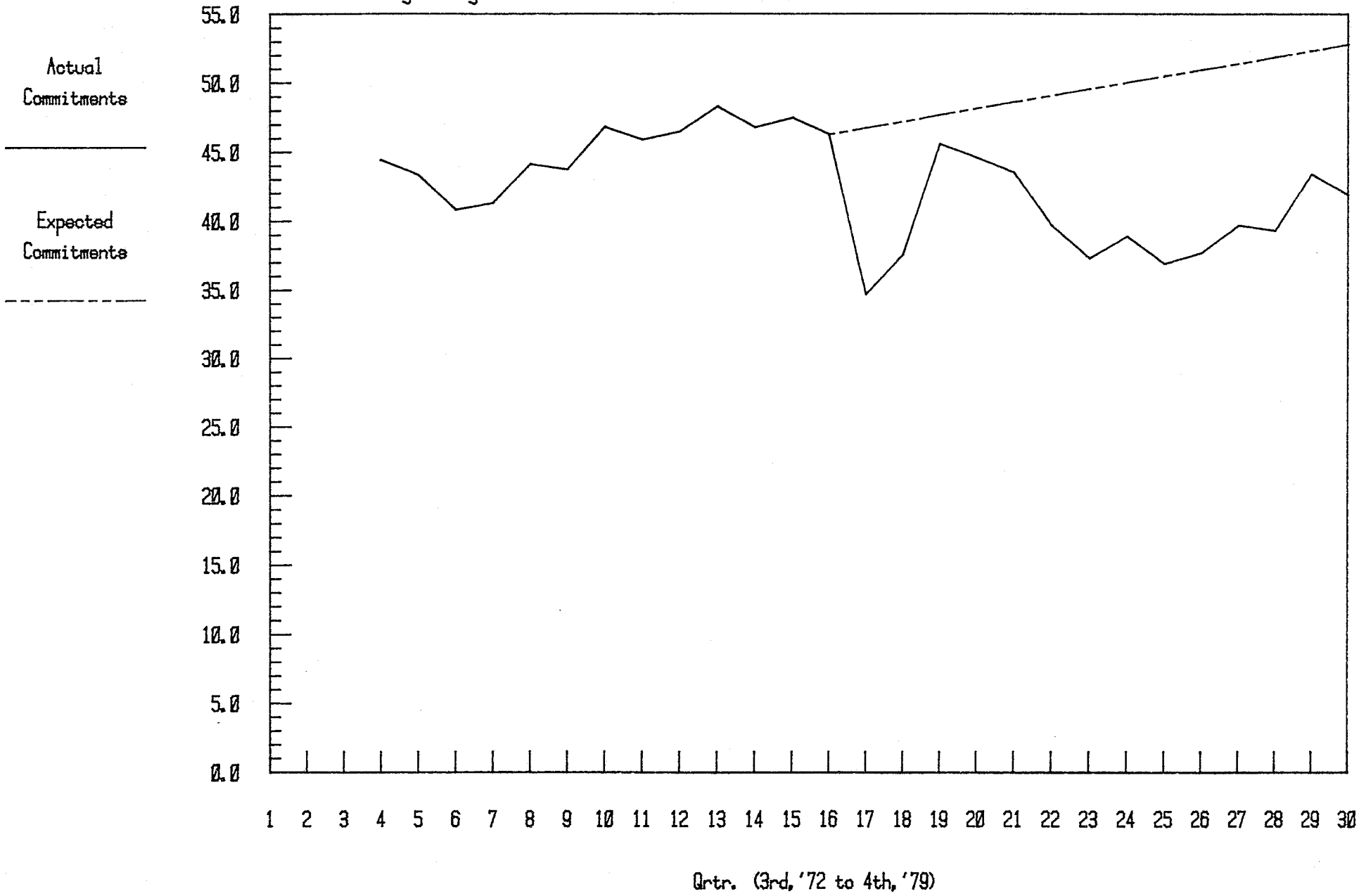


ADULT COURT DISPOSITIONS COMPARISON

PRE-CCA/POST-CCA NON-CHARGEABLE COMMITS.

4-Period Moving Average

Graph 27

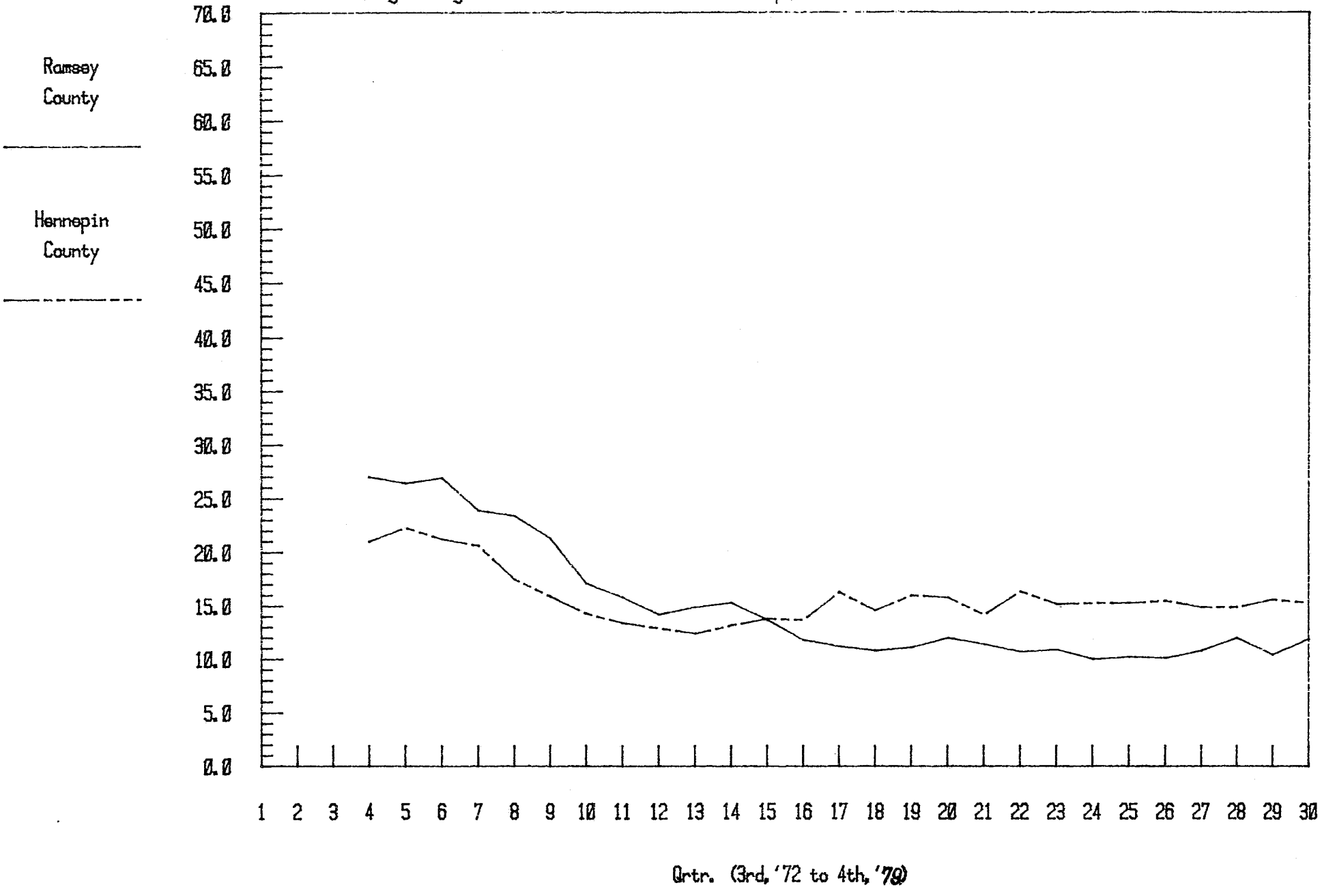


ADULT COURT DISPOSTIONS COMPARISON

HENNEPIN/RAMSEY CHARGEABLE COMMITMENTS

4-Period Moving Average

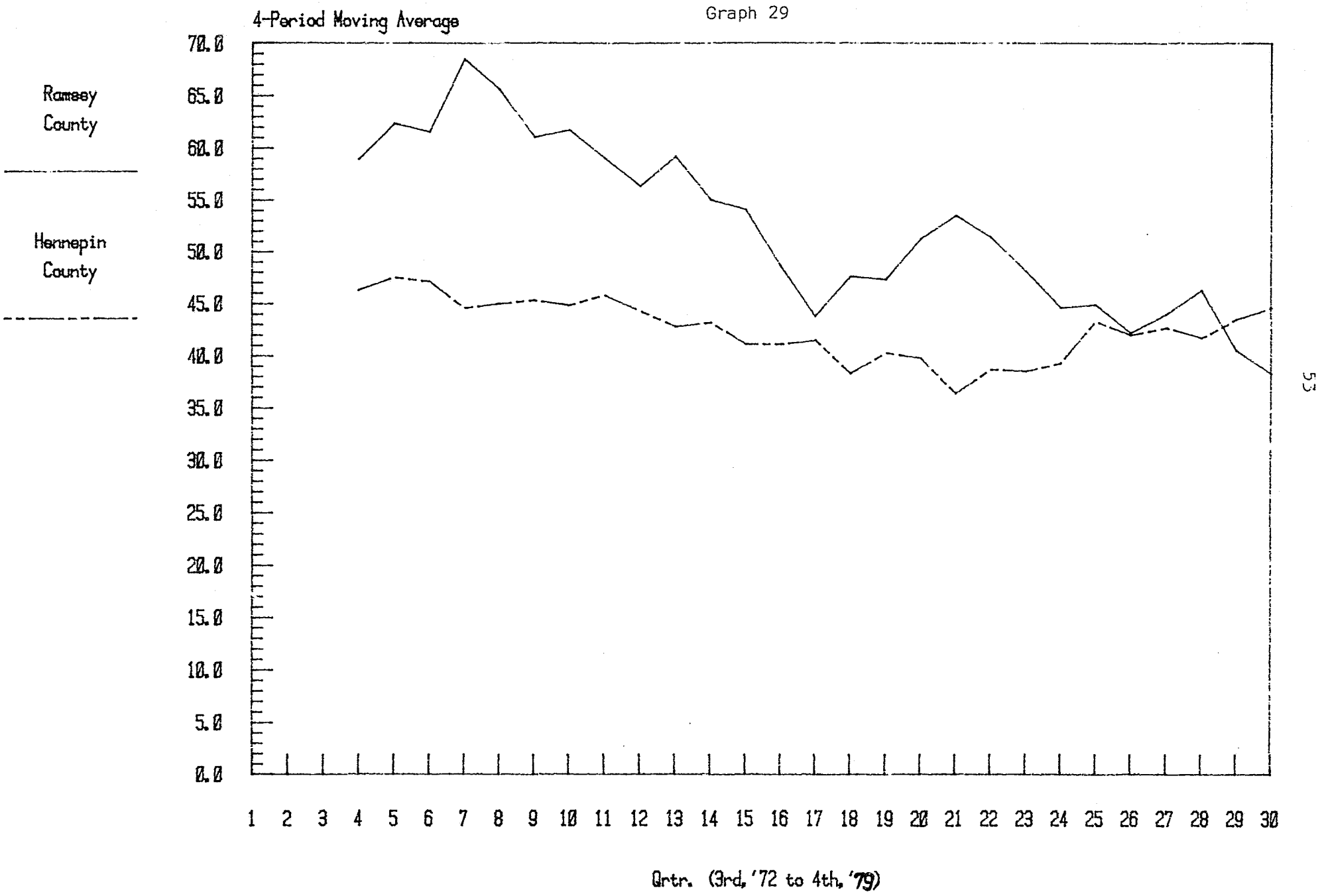
Graph 28



ADULT COURT DISPOSTIONS COMPARISON

HENNEPIN/RAMSEY NON-CHARGEABLE COMMITS.

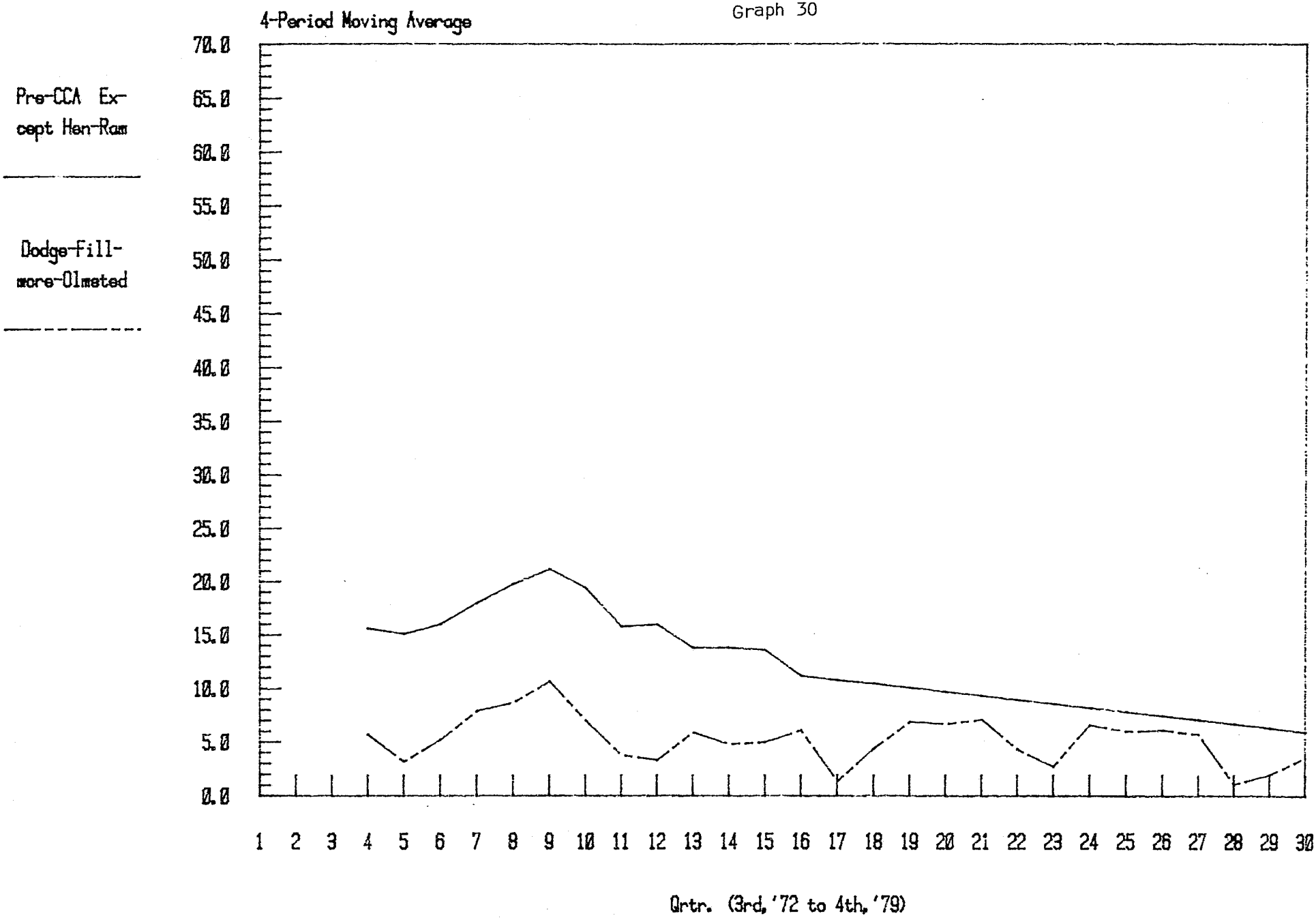
Graph 29



ADULT COURT DISPOSITIONS COMPARISON

PRE-CCA/D-F-O CHARGEABLE COMMITMENTS

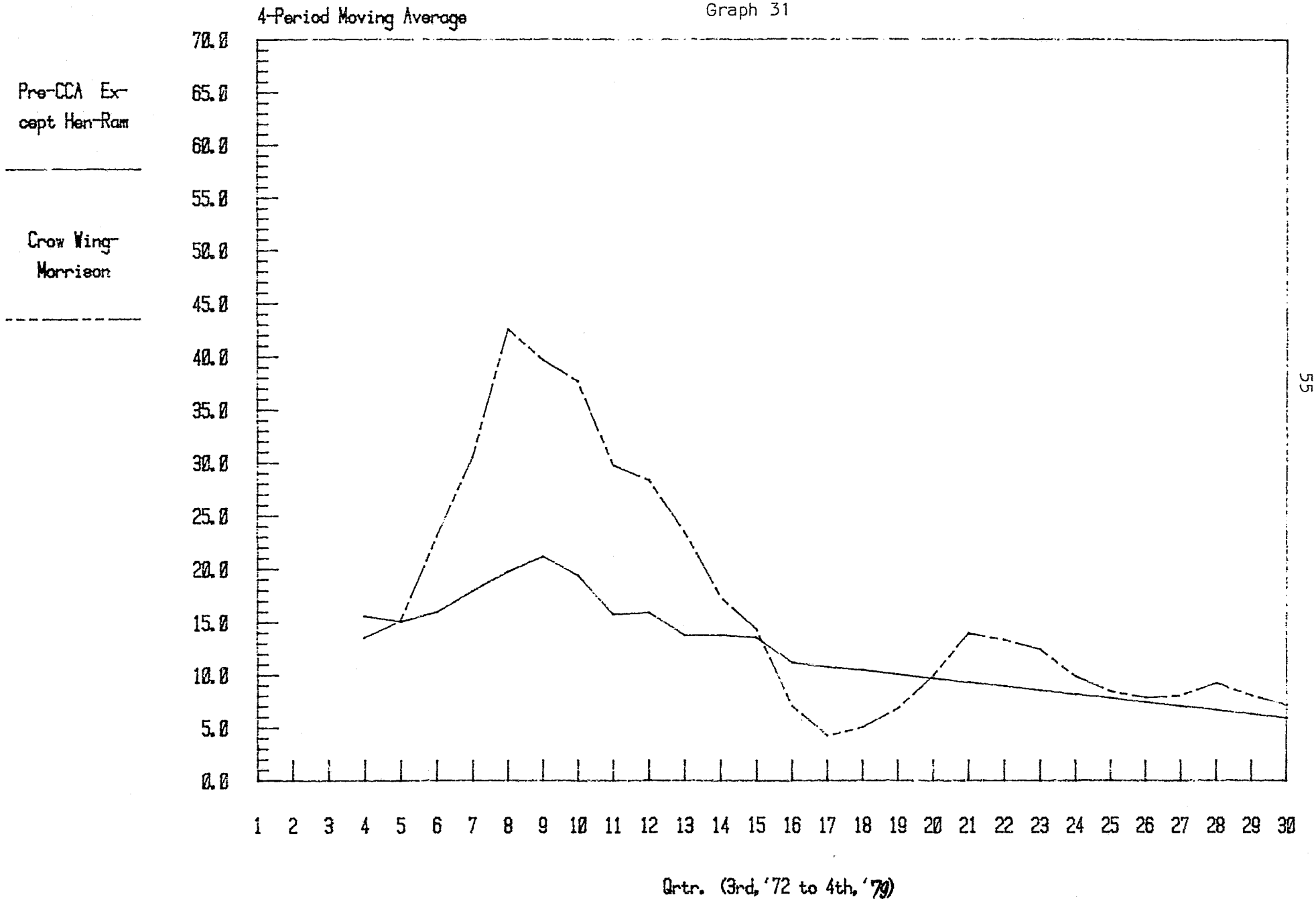
Graph 30



ADULT COURT DISPOSITIONS COMPARISON

PRE-CCA/CROW-MORR. CHARGEABLE COMMITS.

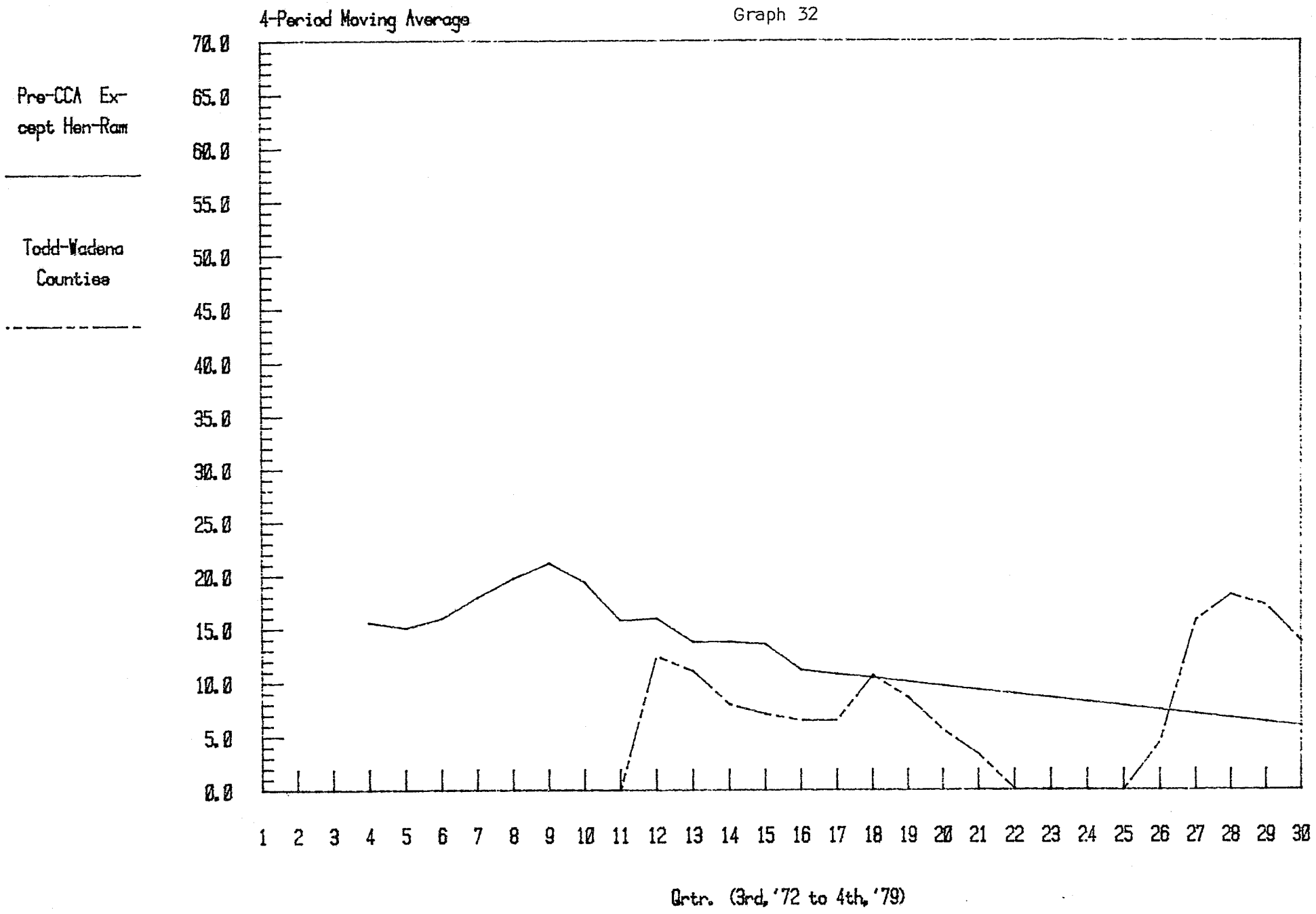
Graph 31



ADULT COURT DISPOSITIONS COMPARISON

PRE-CCA/TODD-WADENA CHARGEABLE COMMITS.

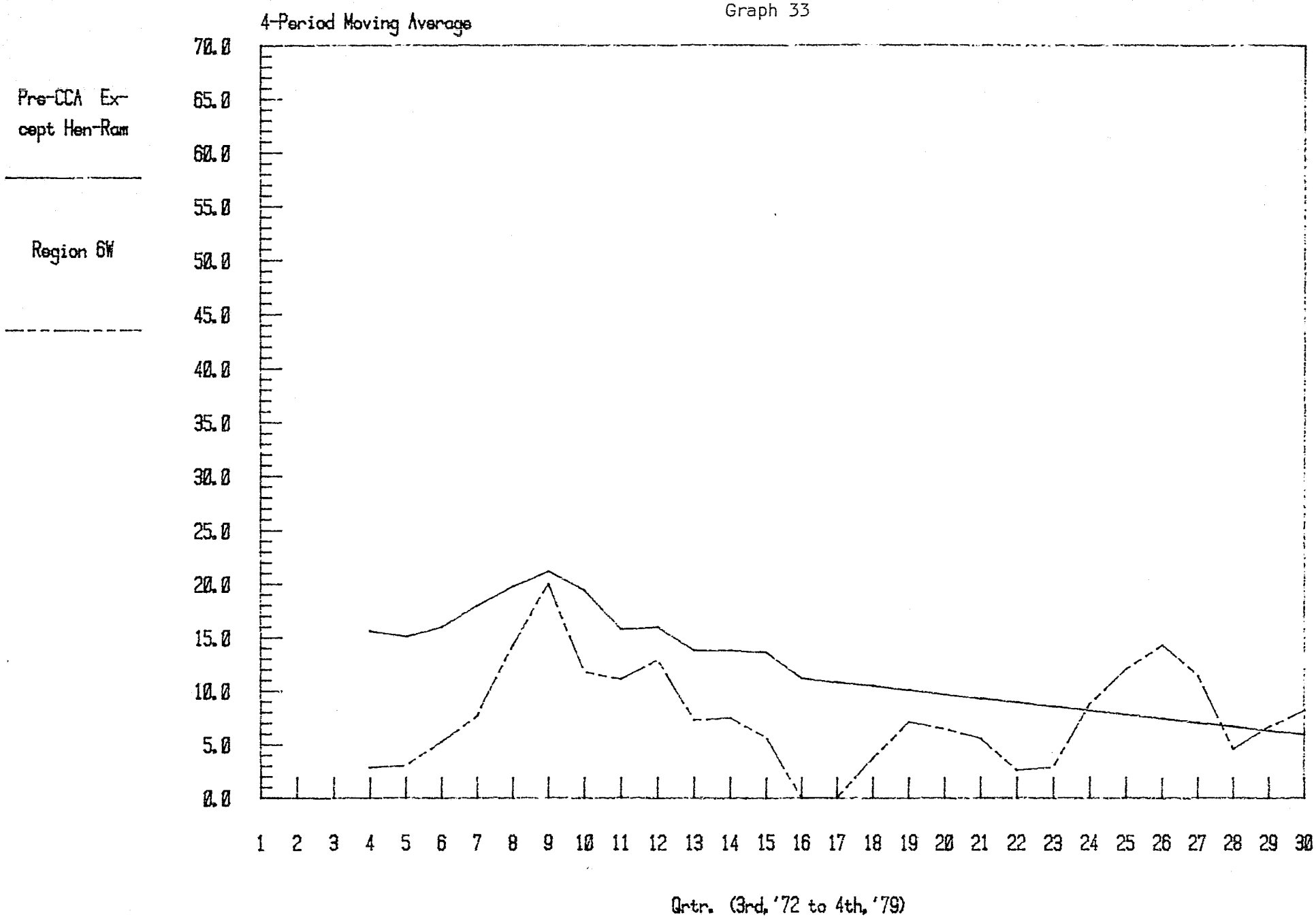
Graph 32



ADULT COURT DISPOSITIONS COMPARISON

PRE-CCA/REGION-6W CHARGEABLE COMMITMENTS

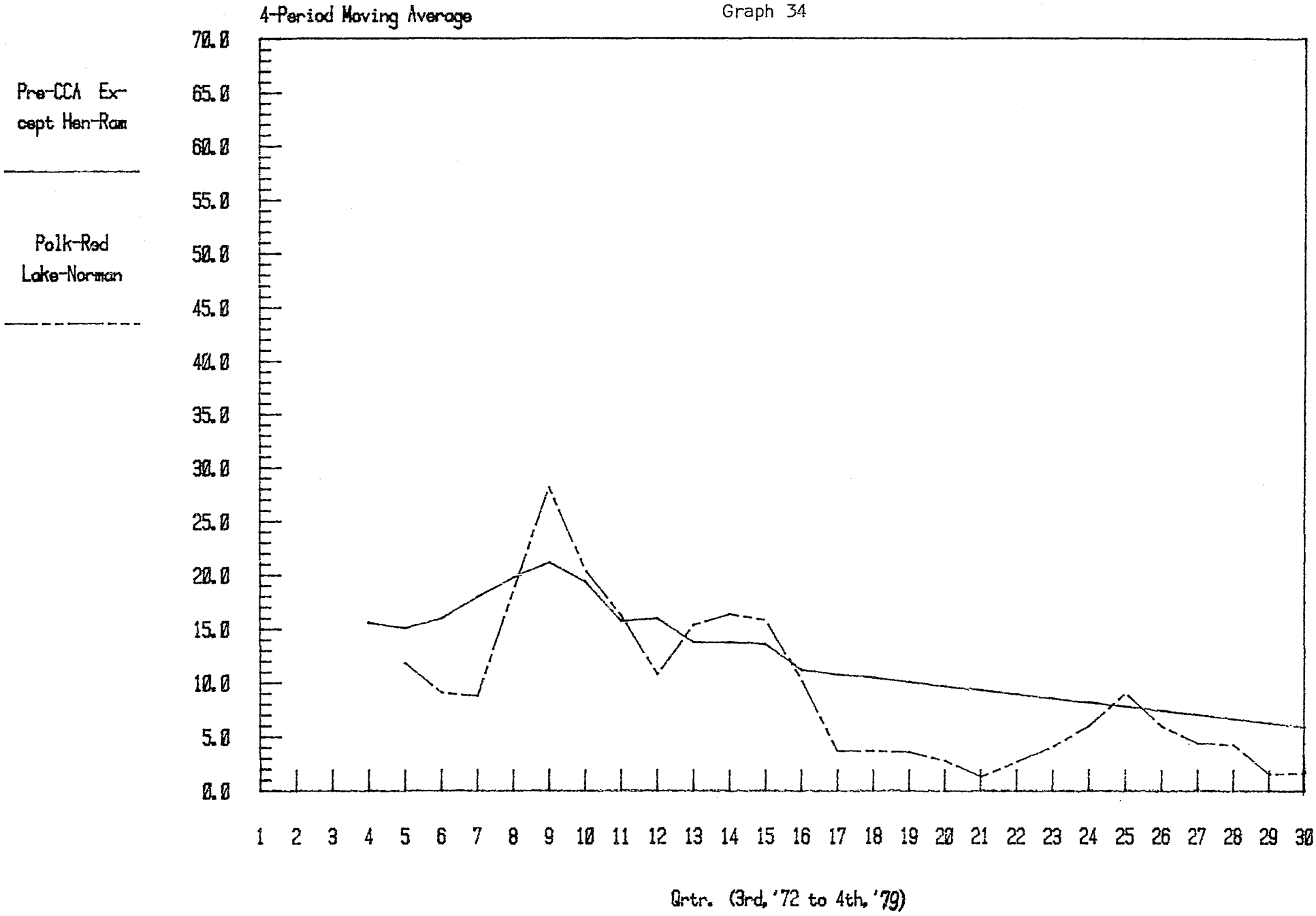
Graph 33



ADULT COURT DISPOSITIONS COMPARISON

PRE-CCA/P-RL-N CHARGEABLE COMMITMENTS

Graph 34

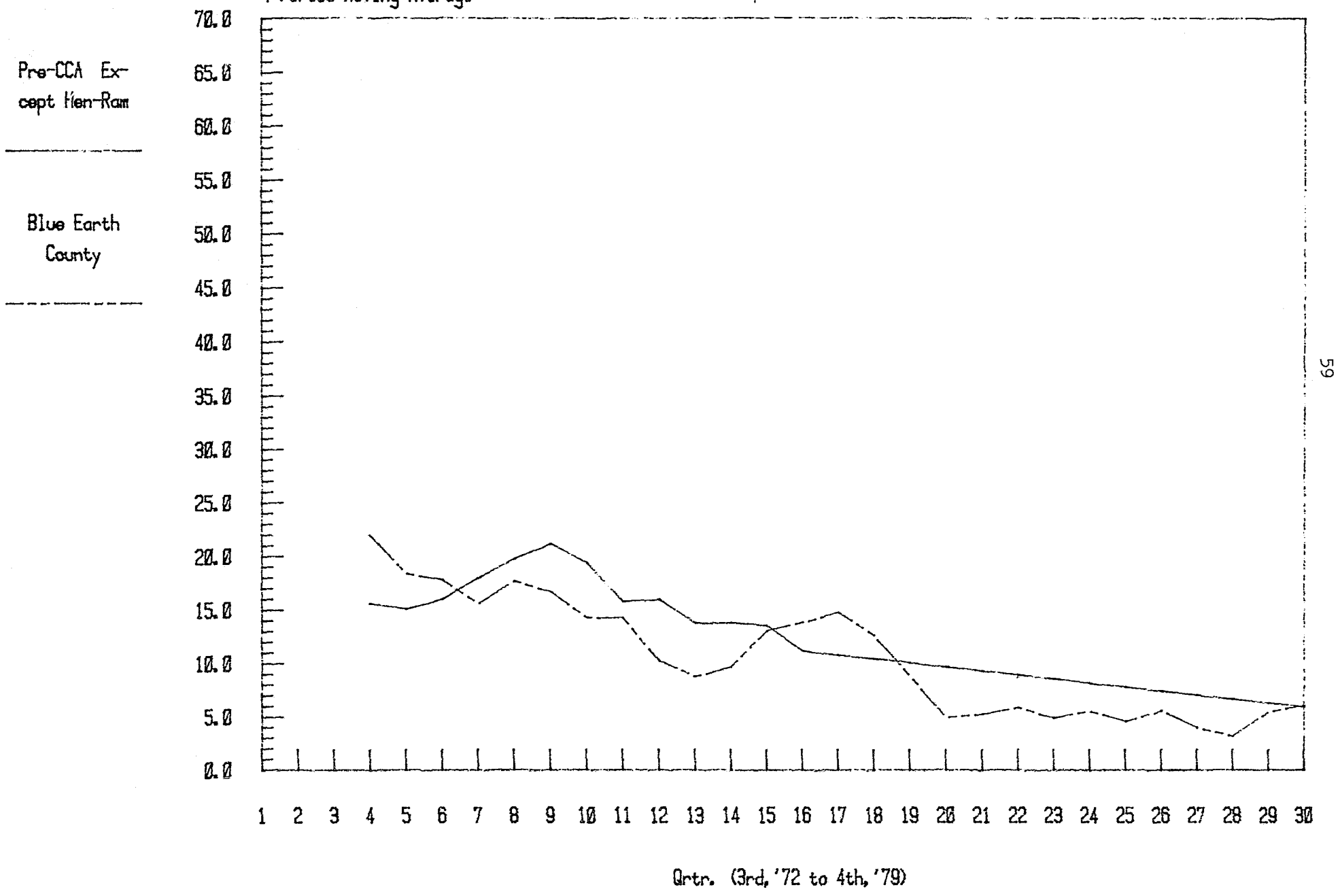


ADULT COURT DISPOSITIONS COMPARISON

PRE-CCA/BLUE EARTH CHARGEABLE COMMITS.

4-Period Moving Average

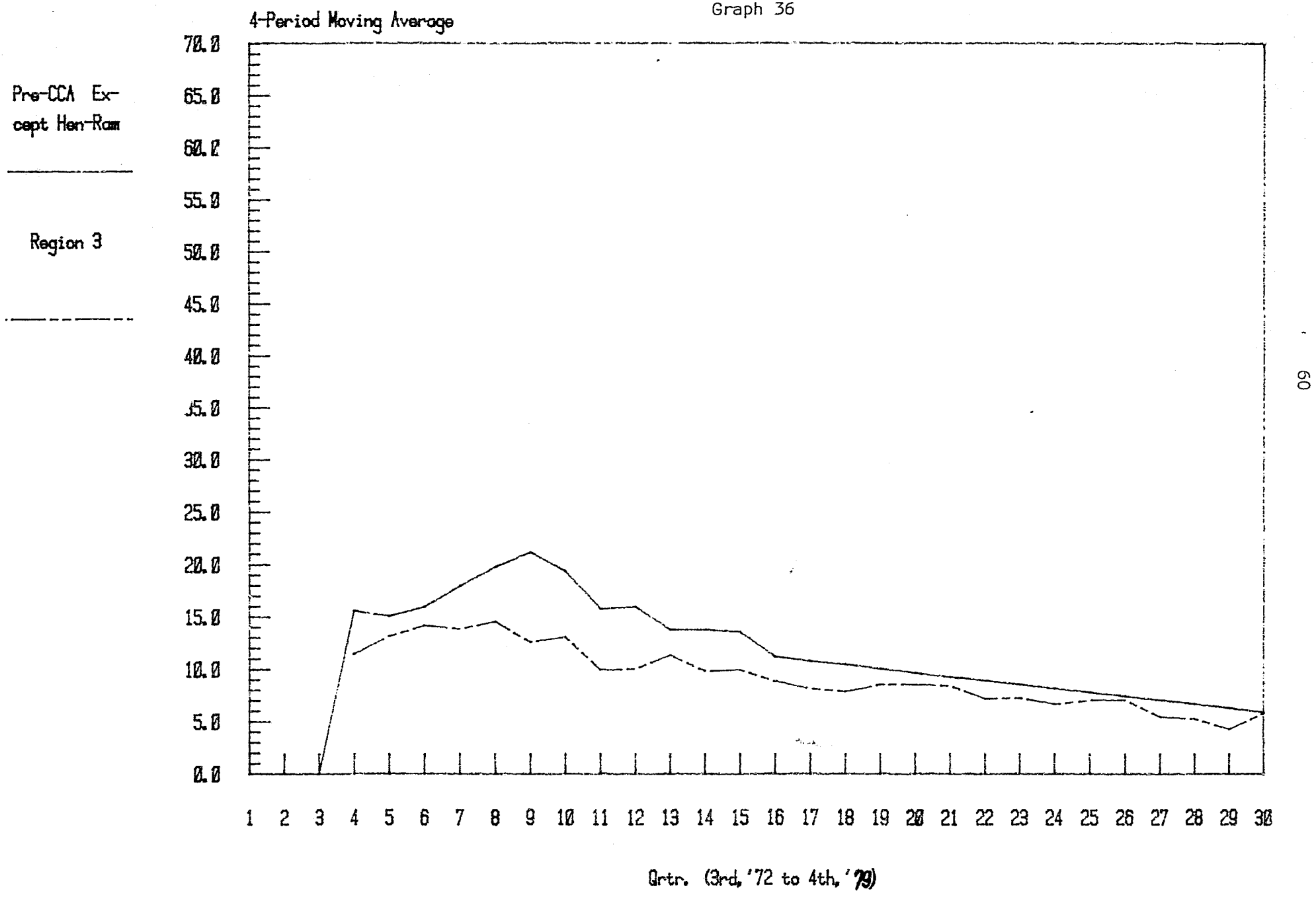
Graph 35



ADULT COURT DISPOSITIONS COMPARISON

PRE-CCA/REGION-3 CHARGEABLE COMMITMENTS

Graph 36

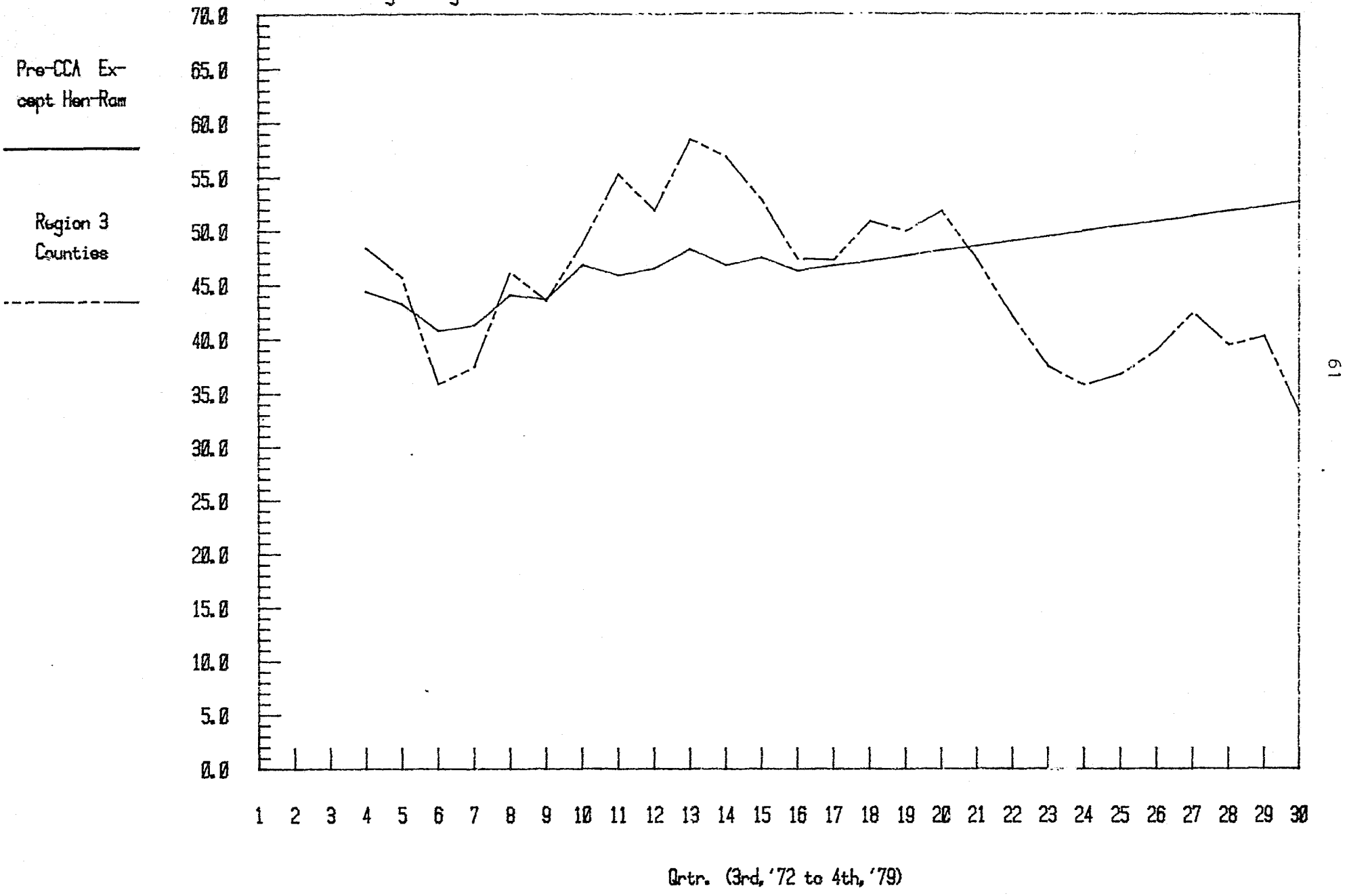


ADULT COURT DISPOSITIONS COMPARISON

PRE-CCA/REGION 3 NON-CHARGEABLE COMMITS.

4-Period Moving Average

Graph 37

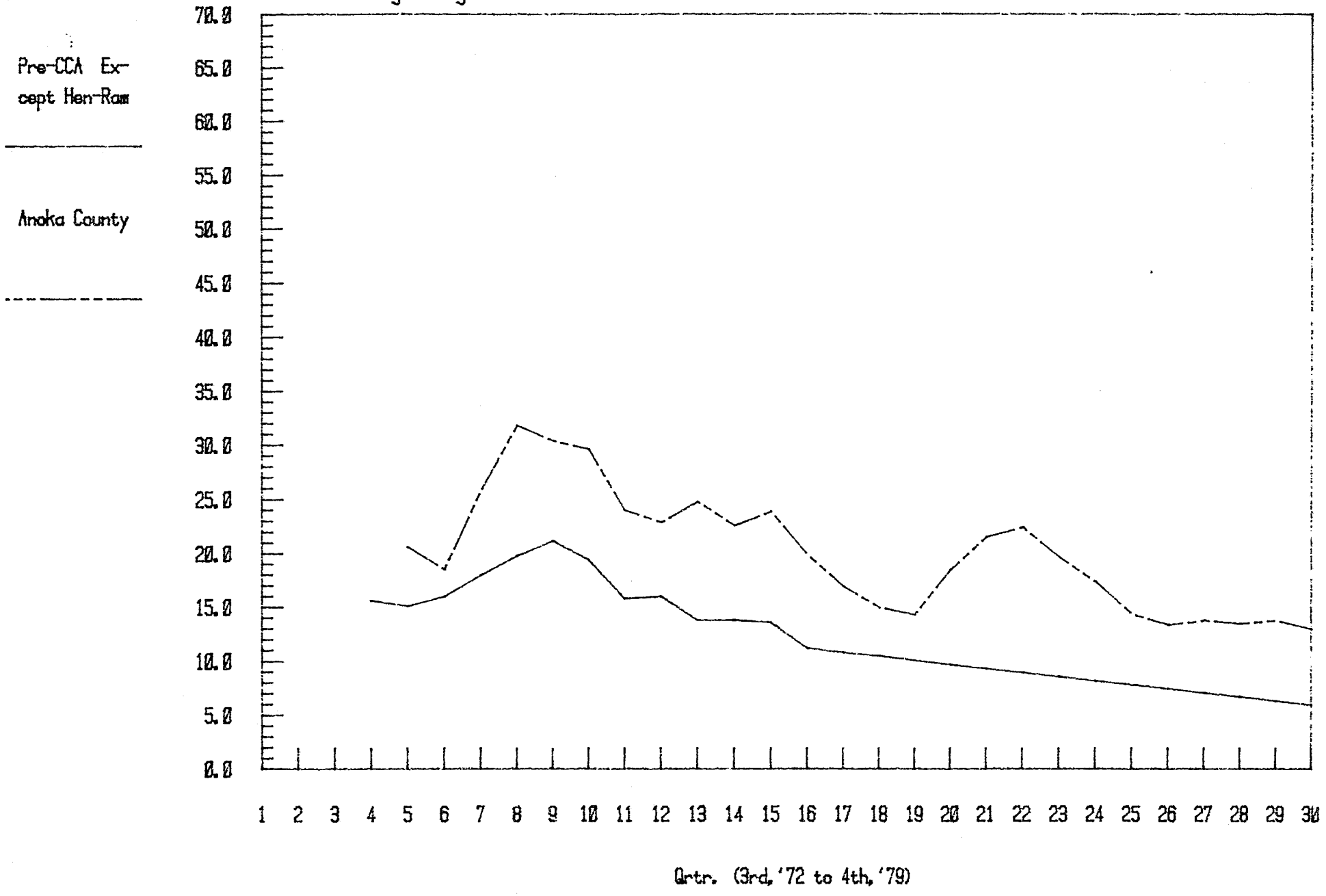


ADULT COURT DISPOSITIONS COMPARISON

PRE-CCA/ANOKA CHARGEABLE COMMITMENTS

4-Period Moving Average

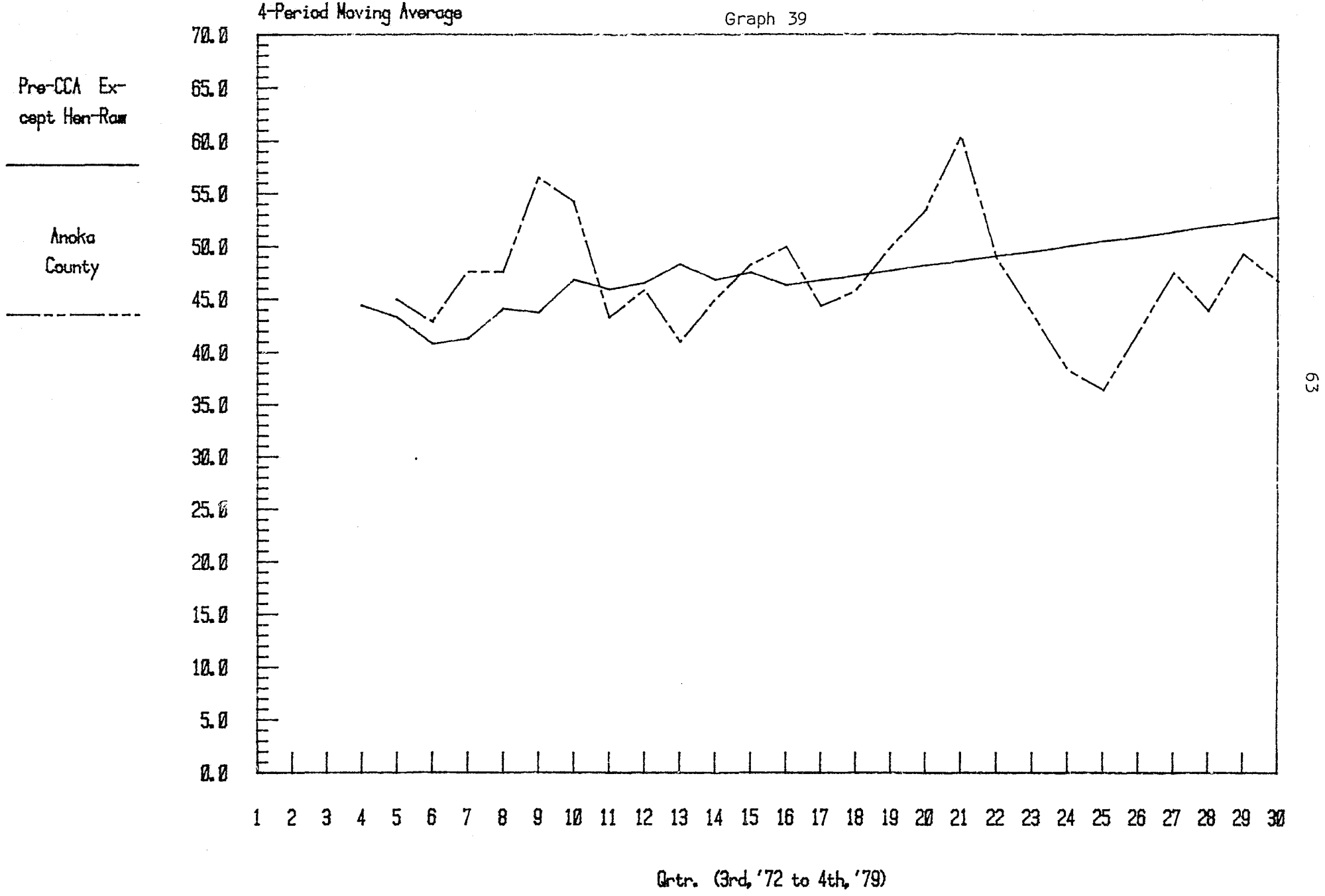
Graph 38



ADULT COURT DISPOSITIONS COMPARISON

PRE-CCA/ANOKA CO. NON-CHARGEABLE COMMITS.

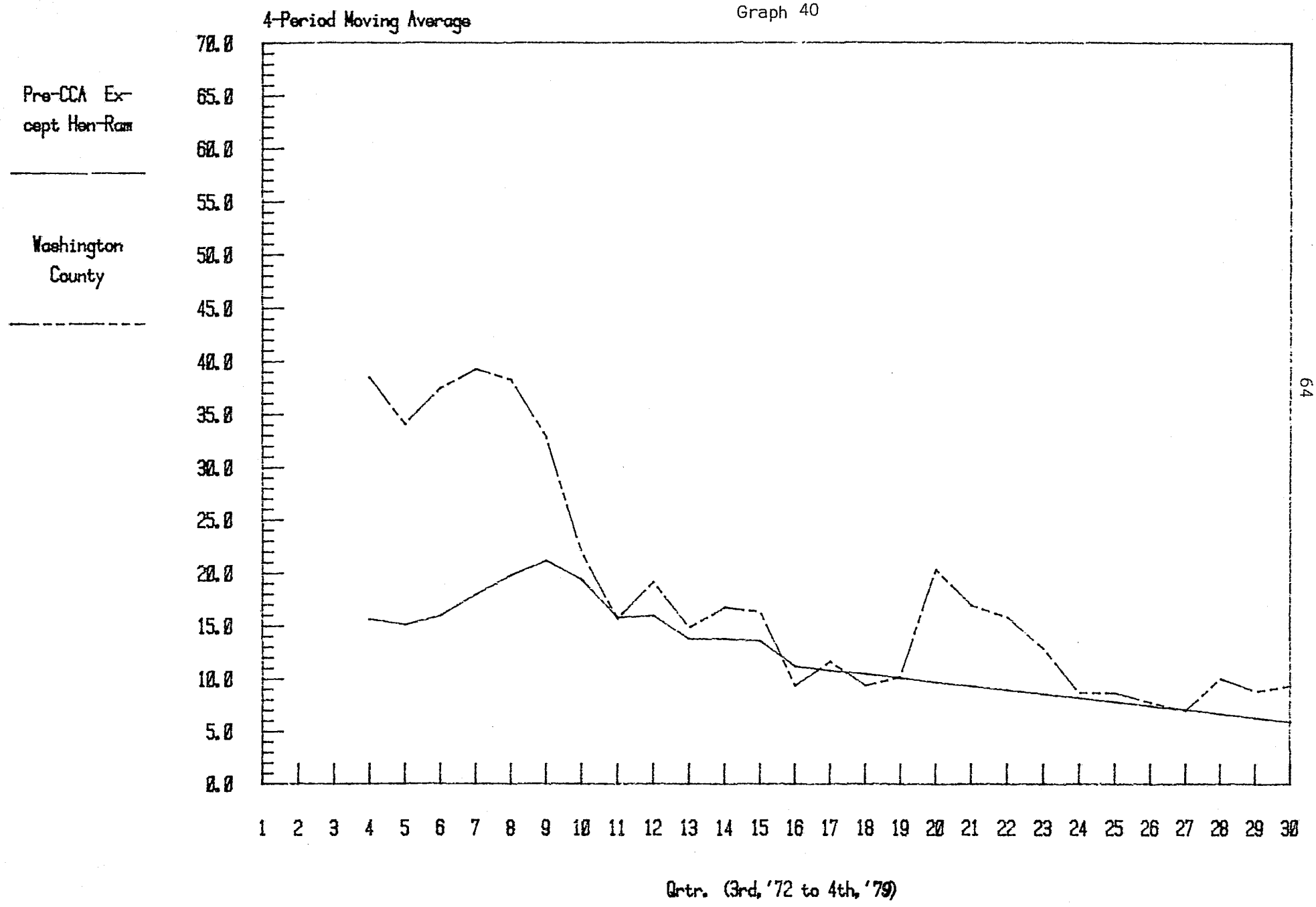
Graph 39



ADULT COURT DISPOSITIONS COMPARISON

PRE-CCA/WASHINGTON CHARGEABLE COMMITS.

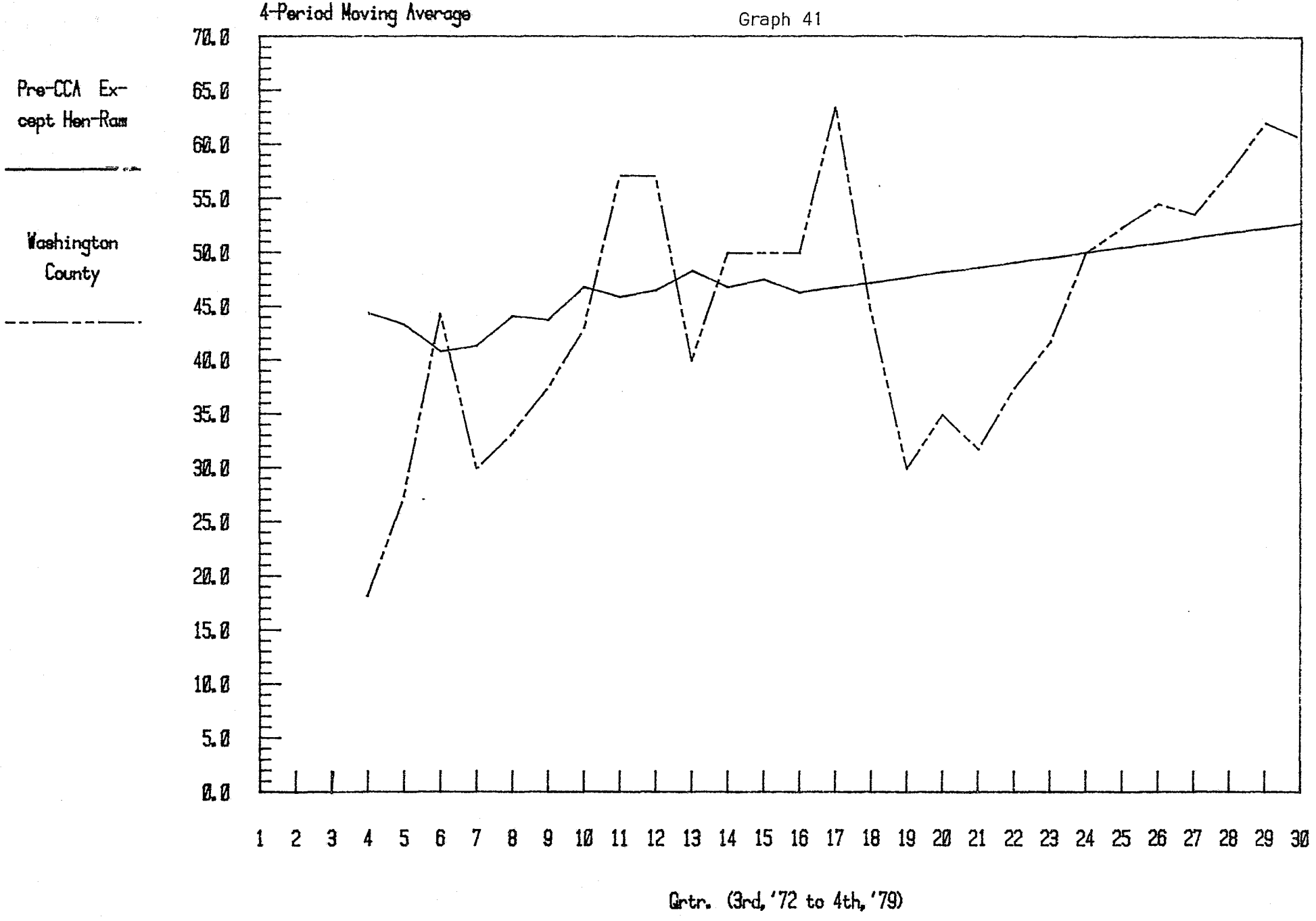
Graph 40



ADULT COURT DISPOSITIONS COMPARISON

PRE-CCA/WASH. CO. NON-CHARGEABLE COMMITS.

Graph 41



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