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A COMPUTER FORECASTING MODEL FOR PREDICTING REQUIREMENTS FOR BEDS IN SECURE CUSTODY JUVENILE CORRECTIONS INSTITUTIONS

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1. INTRODUCTION

1.1 Background

In recent times researchers have become increasingly concerned about the need for forward planning to ensure that services are appropriately designed and targeted to meet existing and future needs of client populations. One of the areas of concern of those responsible for juvenile corrections has been that of the need to forecast the future requirements for secure custody accommodation for detainees.

This is a report on the development of a computer model for the forecasting of future needs for secure custody beds for detainees and on the construction of one such model to assist the management of the Queensland Dept of Family Services in the planning of secure custody accommodation to the year 2000.

The Juvenile Institution Forecasting (JIF) model is the main subject of discussion in this report. The JIF model has been developed from a forecasting program designed for adult prisons populations (Walker, 1984). A Fortran program listing of the model developed is included in Appendix 1. Appendix 2, defines the key variables and data matrices used in the program while Appendix 3 provides tabular examples of input data.

In the development of the model, priority was directed towards the task of forecasting the numbers of children who are likely to be held in secure custody at the end of each quarter to the end of the year 2000 given anticipated changes in the population and a number of possible policy developments and their expected effects on the numbers of children under detention.

To illustrate the way in which the model can be used, an example computer run using the model with artificially generated data has been included (see Appendix 4). The description of the model in the report together with the illustration of how the model works, should provide sufficient information to allow those responsible for the administration of juvenile corrections elsewhere, to implement the model, should they choose to do so.

The computer model, once developed and implemented, provides a facility to carry out juvenile detainee number forecasts using any new scenarios which may develop as a result of new legislation, policy or practices, and provides administrators with an up-

to-date forecast of the need for secure custody beds. The data incorporated into the model can be easily updated at any time so that emerging trends, new events and new policy initiatives can be included. This feature ensures that the model will remain up-to-date for many years to come.

2.THE DEVELOPMENT OF FORECASTING MODELS

2.1 The Need for Forecasting Models

The art of forecasting has evolved to fulfil a widespread need in administration. The costs and lead times of many public and private projects are great, and failure to complete a project on time can be immensely expensive or lead to a breakdown in services.

The provision of custodial facilities is, to some extent, a special case where the need for advanced planning is particularly evident: - first, because when existing facilities become overcrowded it is extremely difficult to find suitable alternative accommodation, and second, because building juvenile institutions does not win elections, and governments therefore tend to put off the evil day as long as possible. Administrators, faced with the fact that, even after the decision has been taken, it may be many months of planning and many further months of construction before additional capacity is achieved, must therefore have convincing proof of future need well in advance.

2.2 Classes of Prisoner Forecasting Models

In a stable situation, a graph on the wall is probably quite adequate, and the planner can simply project, by eye, the apparent trend and read off how long it will be before additional capacity is required. Working backwards from this, with some idea of the likely planning and construction time, one can set the bureaucratic wheels in motion to achieve the desired result. However, more often than not, the circumstances are not as straightforward as this. Populations age, or migrate, or decide to have more, or fewer, babies than their predecessors. Social conditions change, for the better or for the worse, sometimes making it easier for 'marginal' families to survive, and sometimes making it harder. The policies of governments change, sometimes leaning towards more in-

stitutionalisation of juveniles and sometimes towards less. It is not always so simple as a line on a graph suggests.

The estimation of future demand for juvenile institutional accommodation presents similar problems to that of adult prisoner numbers. A number of state departments in Australia and the United States (*See* New York, 1980; Brown, 1974) have constructed data-bases or forecasting models based on projections of the number of juveniles and likely future rates of institutionalisation. Generally, they follow the considerable advances which have been made in the adult sector, aided by the advent of computers and relatively standardised and comprehensive data on prisoner characteristics. Blumstein, in one of his many writings on prisoner forecasting, (Blumstein, 1983) identified six general classes of forecasting models for detainee populations :-

1. Naive projection (i.e. assuming no substantive change from the current situation).

2. Time series extrapolation (with simple linear, or more complex functions of time, but without any theory-based 'explanatory' variables to drive the model).

3. Multivariate regression (using forecasts of supposedly related variables such as age-groups, unemployment rates and average detention durations).

4. Demographic-specific detention rates (in which some primary methodology, such as 1 to 3 above, is used to forecast likely detainee numbers in each distinct age/sex/race category, which are then aggregated to give the overall forecast).

5. Disaggregated flow models (in which some primary methodology is used to forecast likely flows of different categories of detainee, such as by offence-type or reason for detention. The differences between receptions and releases are then analysed to give the overall forecast).

6. Microsimulation models (in which a primary model, constructed according to models 1 to 5, is augmented by recent statistics showing the confidence limits which may be placed on the various rates assumed within the model, providing the user with probability figures on the forecasts).

Each of these types of models has its advantages and disadvantages. The naive projection becomes a useful baseline against which other forecasts might be checked, and it clearly requires a minimum of computational effort. Each additional increment of complexity, either in terms of extra data incorporated into the model or extra relationships assumed between variables, increases the apparent authenticity of the model at the expense of greater demands on data. Thus, Flanaghan's model (Figure 1a) was commendably simple in operation, but not as powerful as, for example, Blumstein's model of the early 1980s (Figure 1b).

Models based on demographic projections and multivariate analysis of supposedly causative variables will produce reliable projections, if all the assumptions, both explicit and implicit, hold good. Unfortunately, however, when the phenomenon being

modelled is dependent upon the decision- making processes of a complex society, this is rarely the case. The processes involved in institutionalising juveniles are subject to changes in political ideology and bureaucratic practicalities, and, in turn, on the prevailing social mores regarding such vaguely-defined societal structures as 'the family'. Walker's model (Figure 1c) was an attempt to incorporate these processes explicitly.

Forecasting models based solely on sound demographic relationships can be extremely useful, particularly in the short term. But unless they also incorporate some mechanism to simulate the effects of sudden and dramatic changes of direction in the relationships assumed in the model, they are likely to be of little value for policy-making purposes. This is no less the case with respect to juvenile institutions, where there is a clear demographic component in the 'demand' for places, than it is for adult prisons where the importance of demography is less apparent.

2.3 The Importance of the Facility to Model Policy Changes

The importance of including an ability to model policy and exogenous changes - as consciously-imposed 'distortions' of a demography-based forecasting model is well demonstrated by the trends in Australian adult prison populations over the past 40 years. On its own, demography suggests that the proportion of the population which is male, aged between 19 and 29, should be a highly reliable indicator of rates of imprisonment since this age/sex group has consistently dominated prison populations over this period. Using this principle, as the short-dashed line of Figure 2 suggests, one would have expected a rapid decline in the rates of imprisonment from 1950 to 1960, followed by a reversal, a peak at around 1970, and remaining high into the 1980s. Actual experience (see the continuous line in Figure 2) shows a trend almost exactly the reverse: - rates rising erratically through the 1950s and 1960s, plummetting in the early 1970s and then recovering, prior to a further fall which was only reversed in the late 1980s.

Analysis of the political changes which occurred during this period is much more rewarding than demographic analysis in this case, and Figure 4 also shows a simple index of electoral popularity which perhaps owes something to the psephologists' "swingometer". The direction of trends in the electoral index, and in particular the timing of trend reversals (1951, 1955, 1968, 1974 and 1978), certainly have at least an air of similarity with those of the imprisonment rates. The demographic model alone would have entirely failed, while the psephologist would have at least been able to recognise the early warning signs of change.

Law and order is not the only preoccupation of political parties, so to draw conclusions of direct causality is to draw a long bow indeed, but the mechanism by which demography and politics may intertwine was examined in "SCREW THREADS" (Walker, 1985). The SCREW THREADS model envisages a chain of logical and familiar reactions to demographically-induced changes in patterns of offending, ranging from the

CONCEPTUAL PROCESSES GENERATING PRISON POPULATIONS UNDER VARIOUS ASSUMPTIONS

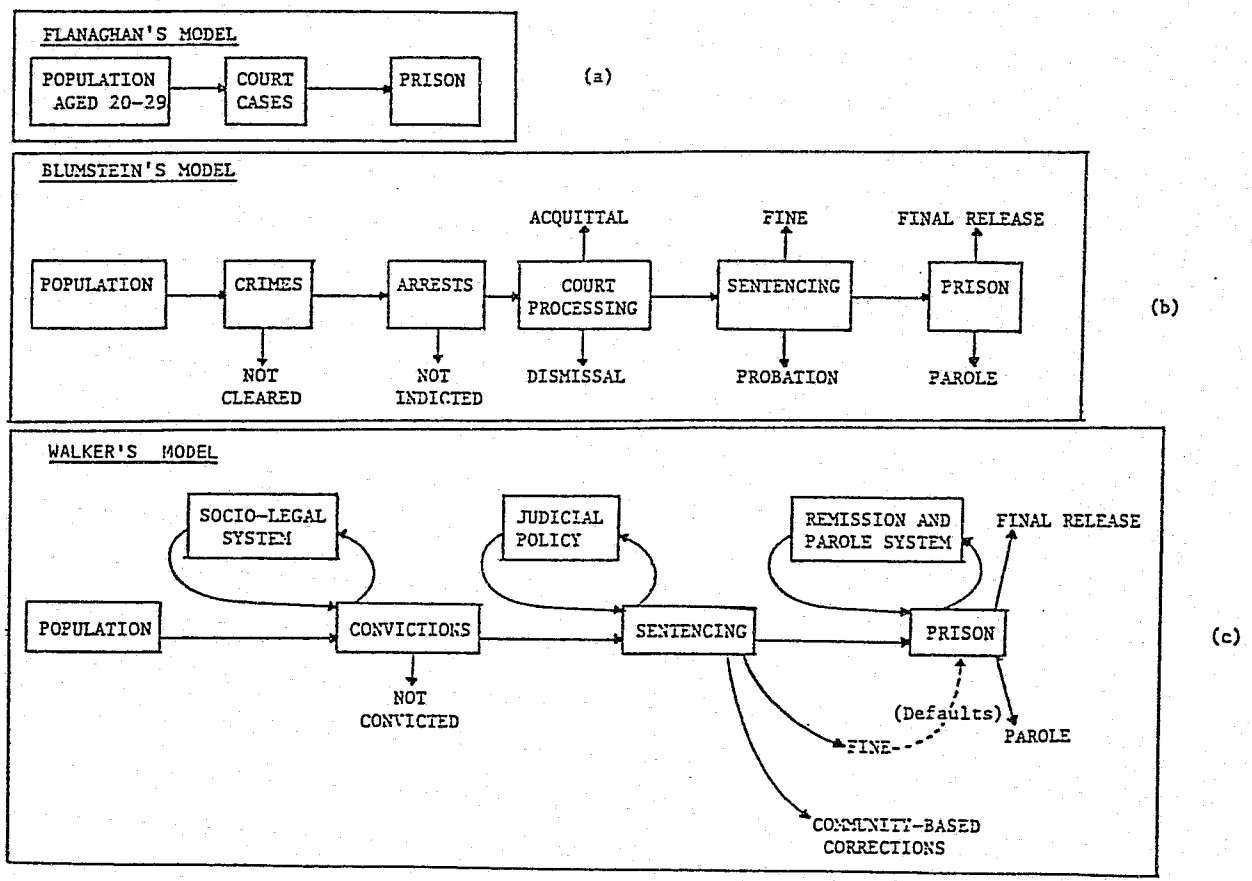


FIGURE 1

media's profit-inspired treatment of the phenomenon through the bureaucratic, judicial and political responses in which each group, conciously or unconciously, uses convenient facts, figures and events to suit its own organisational or sectional interests. If such a model is valid, then, to use a motoring analogy, demography provides only the driving force, while the clutch, gearbox, accelerator, brakes and steering are controlled by the various interest groups in the population.

2.4 Forecasting Juvenile Institution Requirements

Returning to the specific question of forecasting juvenile institutional requirements, the discussion above suggests that, while demographic projections will form the basis for the model, it must also adequately cope with changes in all of the following:

-the minimum/maximum age for juvenile institutionalisation,

-the reasons for which juveniles may be institutionalised,

-the availability of alternatives to institutions,

-the frequency with which juveniles are institutionalised in each possible set of circumstances,

-the duration for which juveniles are institutionalised,

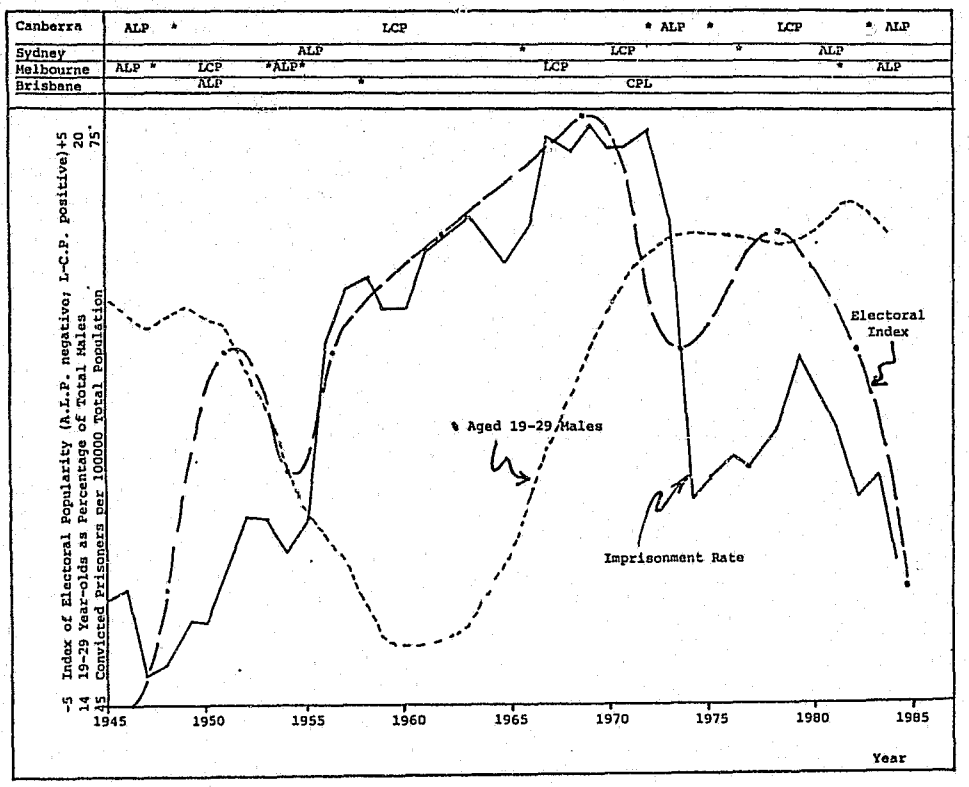
-the reasons for which juveniles might be released from institutions.

The prisoner forecasting model originally developed for the Victorian Prisons Master Plan (see Neilson Associates, 1984) included mechanisms for modelling most of these types of changes. Modifications added for the analysis of prisoner numbers in Queensland enhanced its versatility and made it considerably easier to use. It was clearly in accordance with the accepted forms of demographic based forecasting models, and it could easily be adapted to the juvenile context. The model was written in simple Fortran and was sufficiently modest in storage requirements to be run on a micro-computer. It was therefore considered ideal for the purpose in hand.

Figure 3 shows the conceptual model adopted by the authors of this report. It is clearly similar to the prisons models of Figure 1, the juvenile system is intentionally more fluid. Once under the supervision of the juvenile justice system, an offender may spend periods in and out of secure custody according to factors such as the availability of alternative placements. This flexibility is not a characteristic of adult corrections. For the purposes of modelling trends, however, the simpler schema shown in Figure 4 was adopted, since, as subsequent discussion will show, the data available did not allow directly for the complexities of Figure 3.

FIGURE 2

ADMINISTRATIVE VERSUS DEMOGRAPHIC DETERMINANTS OF IMPRISONMENT RATES



NOTE: The index of electoral popularity is calculated as the net score of the federal government (Canberra) and the three major states. The Federal government counts two, and State governments count one. A Coalition (Liberal-Country Party or equivalent grouping) counts positive, and the ALP counts negative. The value of the Index for 1952 is therefore (+2 -1 +1 - 1) = 1 since the coalition held Canberra and Melbourne against the ALPs Sydney and Brisbane. The curve has been smoothed through the mid-points of periods of electoral stability.

JUVENILE CONCEPTUAL MODEL

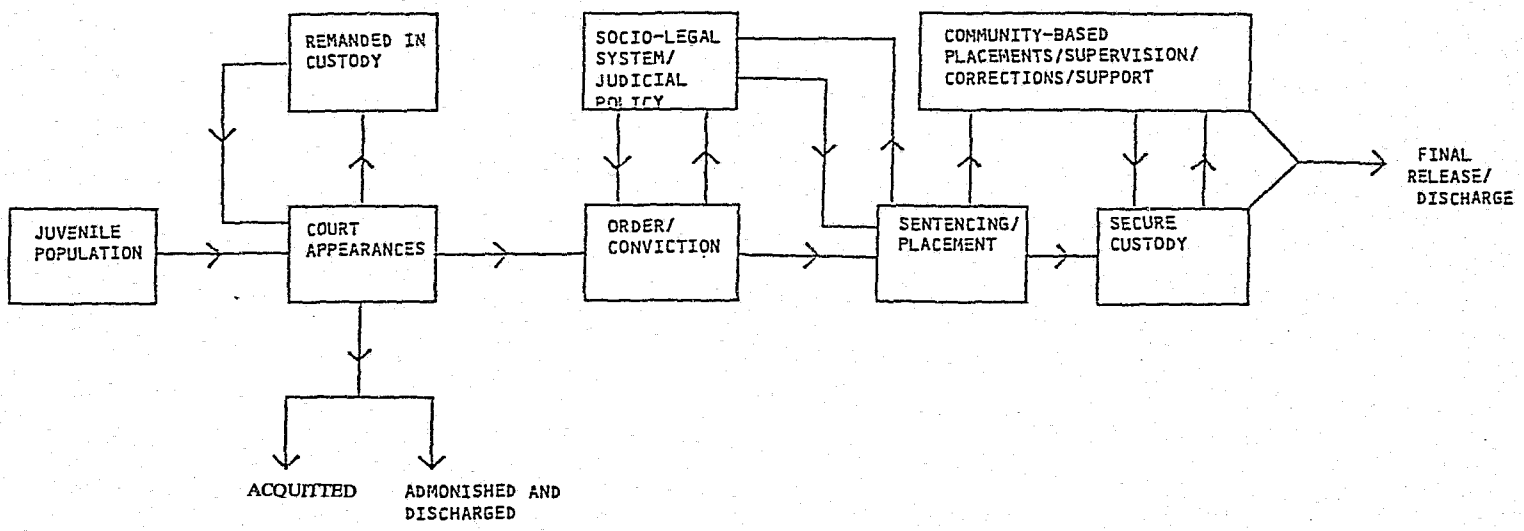
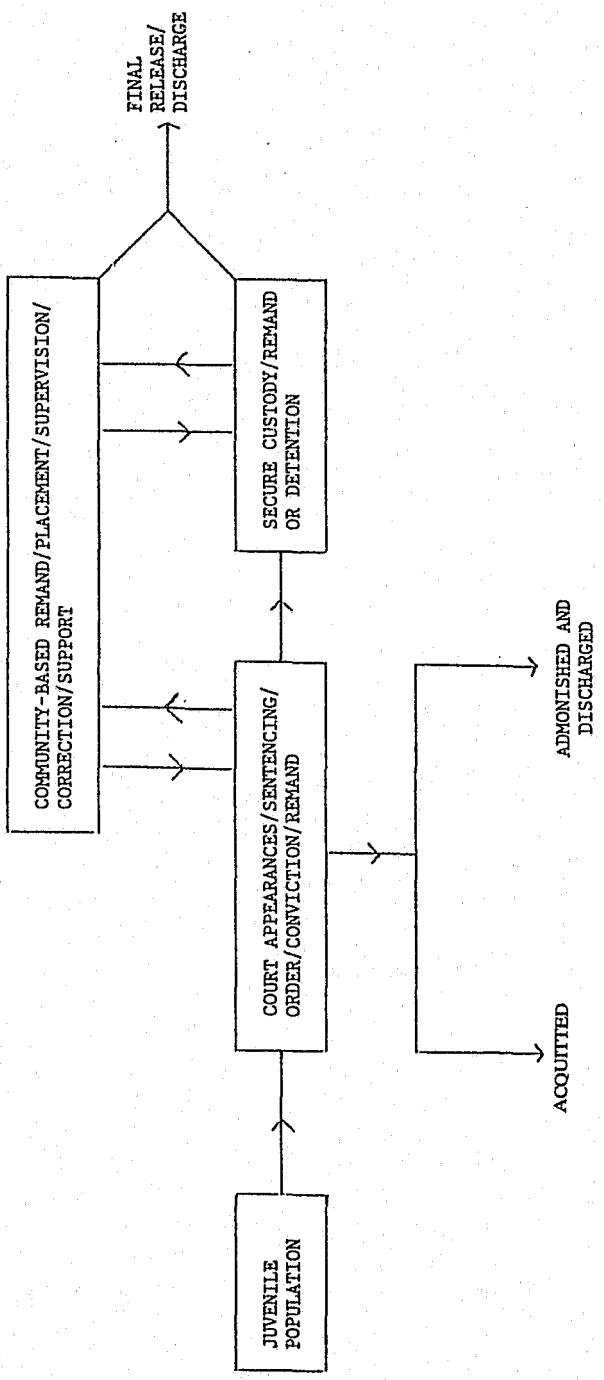


FIGURE 3

FIGURE 4


JUVENILE POPULATION
COURT APPEARANCES/SENTENCING/ ORDER/CONVICTION/REMAND
SECURE CUSTODY/REMAND OR DETENTION
COMMUNITY-BASED REMAND/PLACEMENT/SUPERVISION/ CORRECTION/SUPPORT
FINAL RELEASE/ DISCHARGE
ADMONISHED AND DISCHARGED
ACQUITTED

3. THE JUVENILE INSTITUTION FORECASTING (JIF) MODEL DATA NEEDS

Theoretical issues in relation to data needs of computer models are covered in greater detail elsewhere (Blumstein 1980; Walker, 1984). Subsequent comments relate more specifically to the juvenile model and to practical considerations in relation to its implementation.

3.1 Sources of Data

The JIF Model requires disaggregated data input from a number of sources. These data may be either available from published statistics or can be derived from the juvenile justice system. Sources of the input data, for example, may include court statistical collections, census data from institutions, national census information and in particular national juvenile population projections. Where police have a formal system of cautioning juvenile offenders rather than prosecuting them, such statistics should be included in data input to the model.

The implementation of the JIF model is likely to highlight any weakness in juvenile justice statistical systems. Any discontinuity within the system or the lack of a satisfactory interface between related statistical collections will become immediately apparent when trying to compile input data for the JIF model. For example, one weakness may be that of a lack of a facility for tracking dispositions when cases are transferred from the juvenile court to a higher court.

3.1.1 Likely Difficulties in Assembling Data

One problem likely to be encountered is that differing categories are being used among the statistical collections from which the input data is to be compiled. For instance where the intervals used for "period of detention" differ from one data source to another, it may be necessary to use data smoothing techniques (refer Walker 1986) to produce sufficient compatibility between data sources to allow them to be combined.

In other cases where complete data are not available, good estimates will suffice. Such estimates can be made by sampling a portion of the data available and extrapolating this sample until it represents the size that the data set would be if none of the data

were missing. It may be necessary to cross-check using several different methods to get a good estimate of the amount of missing data.

3.1.2 Level of Disaggregation of Input Data

One of the problems likely to be faced by forecasters in using the JIF model is that of determining an appropriate level of disaggregation of input data.

For example, court statistics may be classified into a number of offence categories too many to be conveniently used in the JIF model. Such statistical collections which have data items broken down into a large number of categories will need to be pre-processed and redefined in terms of a manageable number of broader categories. In the determination of the offender categories chosen for use in the JIF model, a number of factors need to be considered. These include the seriousness of the offence, and differences in the way the courts and others responsible for juvenile corrections deal with various detailed types of offence.

It is clear that any classification of offences chosen for the model will be most meaningful if the groups of offences fall into natural clusters in a notional sense (e.g. crimes against property should not be grouped with crimes against persons, nor should serious offences be grouped with minor offences). The chosen classification needs to provide sufficient discrimination between different offence types without having the number of categories so large as to make it difficult for the program to handle them. The number of categories is best kept to 25 or less.

3.1.3 Possible Problems in Discriminating between Detention and Remand in Custody Data

It is also likely that difficulty will be experienced in discriminating between remand in custody and detention. This is likely to be especially so in cases where several successive remand in custody periods are served prior to detention. In such cases, the time already served on remand is likely to be taken into consideration when the period in detention is determined by the court or the custodial authority. This tends to blur any distinction between remand in custody and detention thus reducing the meaningfulness of trying to differentiate. Probably the most practical way of dealing with this difficulty is to treat successive remand and detention periods as one episode of a length equal to the sum of the successive periods for which the offender has been detained, irrespective of whether these periods were remand in custody or detention. Where it is neccessary to differentiate between remand in custody and detention, the remand accommodation needs could be determined by a separate survey or by apportioning remand needs as a certain percentage of total detention needs.

3.2 The JIF Model Requires Quarterly Juvenile Population Estimates

As previously stated, the JIF model has been developed from a forecasting program designed for adult prisons populations. The program works by periodically calculating the number of detainees present in light of the population forecasts, and other data provided. The original version of the program used for forecasting adult prisoner numbers had an annual cycle period. Due to juveniles having a shorter average length of detention than adults, the JIF model has been designed to have a quarterly rather than an annual cycle period.

As previously mentioned in Para 3.1, future population estimates are required by the model as part of the source data. These are available from national statistical sources as annual population projections.

In keeping with the JIF model's quarterly cycling, it is necessary to interpolate these annual population projections to produce corresponding quarterly population estimates before they can be used in the model. This interpolation can be done quickly by using a simple computer program.

3.2.1 Need for Trend Information

A vital part of the data input requirements are the scenarios generated by officers experienced in the workings of the juvenile justice system and their estimation of the likely effects of policy, practice or legislative changes on numbers and length of stay of detainees.

Without the inclusion of scenario information the model does little more than provide estimates of future detainee numbers based on future population projections.

The issues related to the inputting of trend information and scenario development are discussed in detail in Section 4 of the report.

3.3 Verification of the Operation of the Model

Verification that the model is operating in a way which accurately represents the operation of the criminal justice system is a necessary part of the JIF model development.

This is probably done best by providing a starting base for the JIF model so that 2 or 3 years historical data are available to verify the correct operation of the model. If the model can accurately forecast the present day secure custody detainee numbers from an historical baseline data input, then some confidence can be placed in its forecasting capabilities in relation to the future numbers of detainees.

During the testing process it is possible to calibrate the model so that its accuracy in forecasting present day detainee numbers is within acceptable limits.

Any problems in relation to accuracy are likely to come from two main sources. The first problem source is likely to be some error in data input parameters which are the basis of the calculations. Careful rechecking of the conviction rate matrix or the disposition matrix with the statistical collections data from which they were derived should reveal any inaccuracies.

Secondly, careful analysis of the trends existing during the period from the baseline to the present day, may reveal that certain policy, legislative or conviction rate trends were operating during this historical period. If this is so, in order for the model to verify historical data correctly, the model will need to have these historical trends included in scenarios covering the historical period.

Apart from errors in data input due to data entry errors, no problems are likely to be encountered other than those normally encountered routinely in computer programming tasks. Such problems commonly arise during the writing and compiling of computer software and are dealt with using normal debugging procedures by the computer programmer during the implementation of the computer program.

4. CONSIDERATIONS IN THE DEVELOPMENT OF TREND SCENARIOS

4.1 Method of Scenario Development

An important part of the process is that of generating trends and hypotheses for testing. These trends then need to be quantified and applied to the model.

Here is where persons with considerable knowledge and experience of the juvenile justice system must have a vital input to the process. Perhaps new legislation may be contemplated or pending. Maybe changes in practices or procedures in relation to offenders are being contemplated by the courts, the police, or by the welfare or corrections department or its detention centres. It would be useful to know the likely effects of all such postulated changes in secure custody bed numbers over time.

The JIF model provides the facility to model such changes and estimate their cumulative effect.

Trends for input to the model can be divided into four broad categories:

(a) Policies, practices and legislation of the department directly responsible for secure custody detention.

(b) Factors outside the control of the department directly responsible for secure custody detention (e.g. police and court policies and practices).

(c) Changes in offending or sentencing patterns.

(d) Population trends due to changing birthrate and internal and external migration.

National statistical sources usually supply several different estimates of future population, related to the various possible guesses of future changing birthrate and migration patterns. Up to three such forecasts of population trend data can be retained by the JIF program as separate matrices. The scenarios merely have to identify which population trend is to be selected for the current modelling run.

However, trends due to changes in legislation, policy and practice by police, courts and the department responsible for custody of juvenile offenders do need to be accounted for in the input scenarios.

This information may be gathered by way of structured interviews with specialists who have experience with various aspects of the juvenile justice system.

The Trend Report Form shown in Appendix 6 has been found to be useful for recording and analysing this information.

From such information, it is possible to quantify the extent of the suggested trend and to apply it to the age group and offence categories for which it is appropriate.

In the development of scenarios, it may not be always possible to incorporate the trends in exactly the format proposed. This is mainly due to the fact that the JIF model needs to incorporate trends as percentages of certain age, offence or detention categories. However, by careful use of information provided a very good approximation of the magnitude and the specificity of the trend can be simulated for inclusion in scenarios. For example the trend postulated may be "that there will be better high school curricula targeted on low achievers which will keep them off the streets and therefore reduce the rate of court appearances by 50 within one year of the new curricula being implemented". Since percentages are required, it is necessary to convert the number given (50) to a percentage of total appearances of the relevant age group over that distribution of offences that court statistics indicate are applicable to the target age group and

to input this trend over four quarterly periods following the curricula implementation date.

As illustrated by the example above, irrespective of the format in which the trend is postulated, with a little care, it is possible to closely target the Offender and Age and Sex categories that are subject to the hypothesised trend and to keep the magnitude of the change in the model similar to that of the trend as originally proposed by the specialist providing trend information.

4.1.1 Trends for Inclusion in Scenarios

Trends which may be incorporated in scenarios include:

(a) Changes in certain offender group conviction **rates**, i.e.convictions for offences which can be shown to be varying **other than** in sympathy with numbers in the target population.

(b) Policies which are implemented or are due for implementation and which are likely to affect numbers in detention or their length of stay.

(c) Increases or decreases of police numbers relative to the numbers in the target population.

(d) Pending legislation which is likely to affect the number of convictions or the length of stay of detainees.

(e) Policy changes relating to parole, early release or remission.

(f) Policy changes relating to diversionary programs such as community service orders or other community placement alternatives.

(g) Local or regional policy, practice or procedure factors which are likely to have an effect on numbers detained or their length of stay (e.g. reluctance or otherwise of magistrates in country regions to sentence local offenders to detention in a remote detention centre when no local detention facilities exist).

(h) Changes in requirements by courts for pre-sentence reports causing longer periods in custody on remand.

(i) Changes in policy regarding determinate sentencing.

4.1.2 The Amalgamation of Trends to form Scenarios

Clearly, it is possible to run the JIF computer program applying trends one at a time. However in practical situations, there may be a considerable number of suggested trends generated, and hence it becomes impractical to input them singly. The influences affecting detainee numbers interact and operate concurrently. It is therefore appropriate to speculate on various combinations of trends.

It follows that it is advisable for researchers involved in the forecasting of secure custody numbers, to allocate trends to three or four trend sub-groups, each sub-group representing one scenario.

Some rational basis for the allocation of trends needs to be chosen. One basis could be that of the allocation of all trends which are going to produce an adverse effect on bed requirements to one scenario, while all those causing a reduction in demand could be allocated to another scenario. The result of such allocation would be to provide forecasts of the "worst possible" and the "best possible" situations.

On the other hand, since it is can be argued that neither the "worst possible" nor "best possible" situations are likely to apply in practice, other groupings of trends need to be considered. In the real life situation it is clear that some trends will show a need for an increase in beds while other trends will indicate a decline in bed numbers. A scenario incorporating all "very likely" trends would provide a somewhat more realistic forecast than either the "worst possible" or "best possible" scenario forecast.

Another strategy is to inspect all the trends provided by the specialists and to put them into intuitively coherent groups and in so doing, form a number of alternative scenarios.

In all, 3 to 5 scenarios should provide a broad enough range of forecast options initially. After study of these forecasts, other scenarios may well emerge which warrant testing.

4.1.3 Time Frame for Input of Trends

When specialists on the juvenile justice system suggest likely trends for inclusion in scenarios it is necessary to obtain full information, not only as to the magnitude of the trend, but also how the trend is expected to vary over time.

It will be recalled that the JIF model cycles quarterly. It follows that trends may be input at quarterly intervals. It is also clear that a trend which is hypothesised as following a growth in magnitude over a period of say three years and then reaching an equilibrium, needs to be included in the scenarios in a way that reflects this "tapering in" of the growth effect.

Since the JIF model works so as to maintain a trend input at any one time (i.e. during any one quarterly cycle) at the new level following the input of that trend, an increase of, say, three percent in the offending rate would be reflected in the output as a related increase in bed numbers. The resulting new bed number level would be maintained constant thereafter provided there are no subsequent trends input or projected changes in population. While the JIF model maintains such a trend-produced-change in forecast bed numbers over time, it does not extrapolate such changes into the future. It follows that when hypothesised trends are required to show either a continued increase or decrease over time, such continued effects need to be represented by a sequence of quarterly trends in the scenario.

For instance, in the case referred to above where a trend is hypothesised to "taper in" over three years the overall trend magnitude may be broken down to a series of 12 smaller quarterly trends.

For example, if it is hypothesised that over a period of three years there will be a gradual increase in offending by break, entering and stealing amounting to a 24 percent increase, such a hypothesised trend could be modelled by including a quarterly increase of 1.81 percent for each of 12 successive quarters thus representing a linear increase during the "tapering in" period. It is worth noting that 1.81 percent rather than 2 percent represents the "compound interest" effect of the successive inclusion of trends over time. It is also clear that a "tapering in" effect which follows any non-linear pattern could just as easily be modelled by inputting a series of quarterly trends of the required magnitude.

Since the JIF model maintains bed numbers forecast at the new level following the input of a trend, it is clear that in order to represent a trend of a transitory nature which will reverse after a short time, it is also necessary to enter into the scenario a second trend of reverse direction to model the trend's reversal.

4.1.4 Seasonal Fluctuations of Detainees

The issue of seasonal fluctuations can be adequately addressed within the JIF Model. To estimate the effect of any seasonal fluctuation it may suffice to plot seasonal patterns in court statistics or in institution numbers over a number of years. If the annual pattern appears to remain constant over a number of years such a pattern may be used to modify quarterly forecasts via scenario inputs. If however some on-going trend is detected or hypothesised, this may also be applied as a trend within a scenario.

5. QUEENSLAND VERSION OF JUVENILE INSTITUTION FORECASTING MODEL

In order to illustrate the operation of the JIF model this chapter describes the Queensland experience relating to the model's development. A general description of the version of the model is given. This is supplemented by tables comprising the input data matrices, a sample of the computer output produced using artificially generated test data and a listing of the Fortran source code used in the compilation of the computer model.

5.1 General Comments on the Data and on the Model Design Used in the Queensland Study

5.1.1 Data Inputs Used

The JIF model uses the following data inputs:-

(a) data based on the 30th June "stock on hand" numbers of detainees in secure custody, by time remaining to serve (see example "stock on hand" data, line 4 input file JSCENEJ Appendix 4 on page 52. The left hand value is the number of detainees on hand with less than 3 months to serve, the next value is the number with three months but less than six months to serve, and so on),

(b) historical through-put statistical information related to the Juvenile Justice System, including information on conviction rates by age and sex, police cautions and court dispositions (see Appendix 3, file QJCRATE in Table 3 and file QJDISPP in Table 4, which contain example data - pages 48 and 49),

(c) Australian Bureau of Statistics Queensland quarterly population projections for 5-17 year olds by age and sex to the year 2000 (see file QJPOPA, Appendix 3 Table 2 on page 47) and

(d) Trend data provided by Departmental officers familiar with the juvenile justice system (see file JSCENEJ, Appendix 4, page 52). The scenarios generated in consultation with senior departmental officers provided vital input data to the model. Without these judgements by experienced officers regarding trends and factors likely to affect future needs for secure custody, the model would do little more than account for changes due to projected shifts in population.

The main source of information was departmental statistical records. In particular, computer analyses of Australian Bureau of Statistics Children's Court statistical tapes provided much of the required information on offending rates and on treatment of offenders by the courts.

5.1.2 Processing of Available Data

Because departmental statistics are not kept in a form which is tailored to suit the JIF model, an amount of data pre- processing was required.

To facilitate this task a considerable amount of computer software was written to pre-process the institution movement data. This software was able to reduce the time needed to process the data, to sort and test various aspects of the data so as to show up missing information. Even so, this task was time-consuming. Certain estimates and extrapolations were used to compensate for missing data. Fortunately it was possible through carrying out verification checks, to be satisfied that the basic data input to the model was a good estimation of the true situation.

5.1.3 Verification of the Operation of the Model

The issue of verification of the operation of the model has previously been discussed in some detail in Section 3.3. Procedures outlined in this section were applied during the development process. In addition to the cross-checking of data input to the model by comparison of data from various statistical sources, additional verification of the input parameters was provided by the program's ability to forecast the end of year figures for detainees on hand for the years 1985 to 1987 from the 1984 end of year data and estimated 1984/85 through-put data, population and scenario data.

5.1.4 The Program Model and Output

An example of the computer output generated by running the JIF model using the artificially generated statistical juvenile justice test data, and a scenario of four hypothesised trends together with actual Australian Bureau of Statistics population projections for Queensland till the year 2000 is set out in Appendix 3, Table 1, page 46. The program, after processing the input information, provides annual estimates of future numbers of offenders by age and offence (offender matrix - see Appendix 4, page 53), estimates of future numbers being dealt with either by the police by way of caution or through the courts by outcome including estimated length of detention (disposition numbers matrix - see page 54). The program also provides quarterly estimates of annual through-put of detainees by length of detention received and quarterly estimates of numbers on hand by remaining time to serve, to the year 2000 (see Appendix 4 page

66). In addition, annotation of each trend input in each scenario together with details of the manner of it's application and the quarter in which the trend operates, appears in the computer output (see Appendix 4 pages 52-61). The Fortran program listing, JIF.FOR, is shown in Appendix 1.

5.1.5 Features and Enhancements of the Program Model

As previously stated, the JIF model computer program is based on one originally used for forecasting numbers of adult prisoners (Walker, 1984). This juvenile version of the program differs from the original in that it makes allowances for differences between the juvenile and adult justice systems.

During the testing of the program, it became clear that due to the much smaller numbers of juvenile offenders as compared with adults, systematic rounding errors in computer calculations would lead to the under-estimation of the small numbers in the long term detainee categories. This difficulty was overcome by modifying the program so as to introduce a slight degree of randomness in rounding and in the allocation of incoming cases to sentence length categories. In the real life situation some randomness is experienced in the numbers of court appearances and in sentences given. As a result of this modification the under-estimation problem has also been overcome. It is a simple matter to modify, calibrate or eliminate this randomness feature should this be required.

5.1.6 Graphical Output

The program unit, Subroutine GRAPH, which is responsible for producing the graphical output, is shown in Appendix 1 on page 36 in the Fortran listing. Examples of the graphical output produced by the computer program can be seen in Appendix 4 page 68 and in Figure 5, page 21. As can be seen from the example (Appendix 4, page 68), detainee estimates are plotted against years to which the forecasts relate. The two lines of title are input from lines six and seven of file JSCENEJ (see Appendix 4, page 52).

5.2 Detailed Outline of Data Input

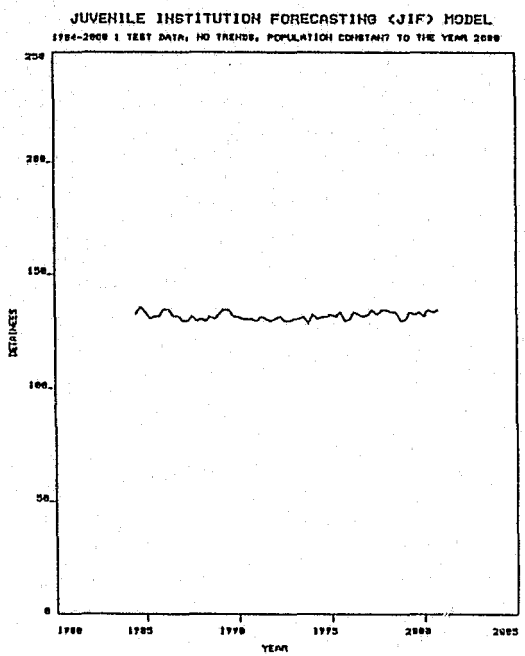
5.2.1 The Population Estimates

The fertility rate used for future population estimates for 10 - 17 year olds is already largely determined by the fact that most of the juveniles who will be detained between now and the year 2000 have already been born.

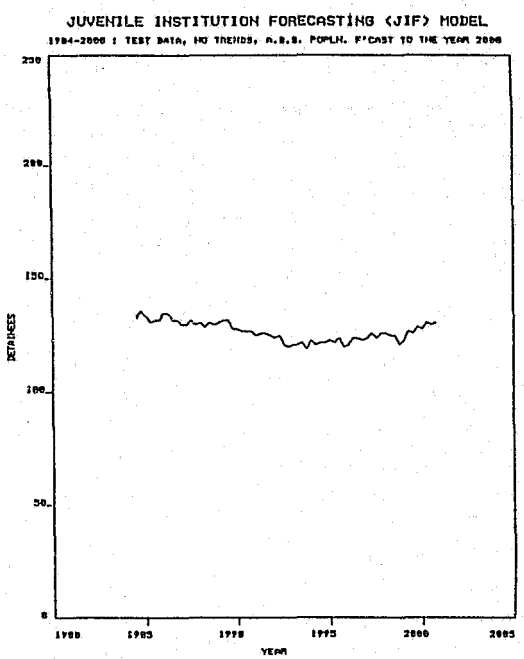
FIGURE 5

JIF MODEL GRAPHICAL OUTPUT - FOUR RUNS USING TEST DATA

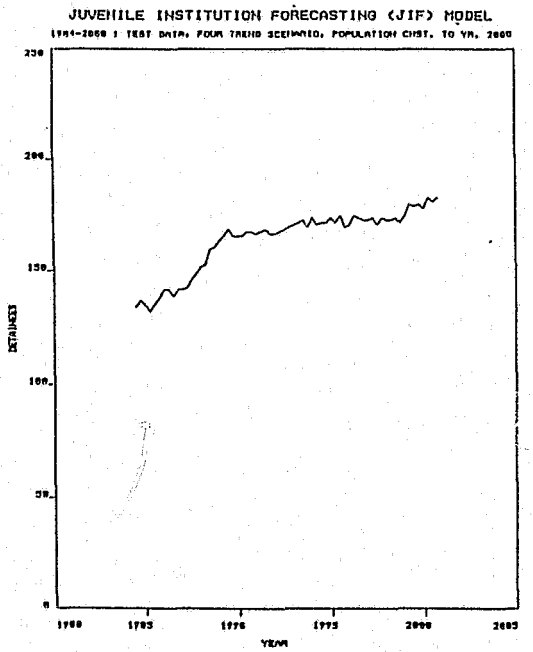
(a) Population Held Constant - No Trends
(b) ABS Population Projection - No Trends
(c) ABS Population Projection - 4 Trend Scenario
(d) ABS Population Projection - 5 Trend Scenario



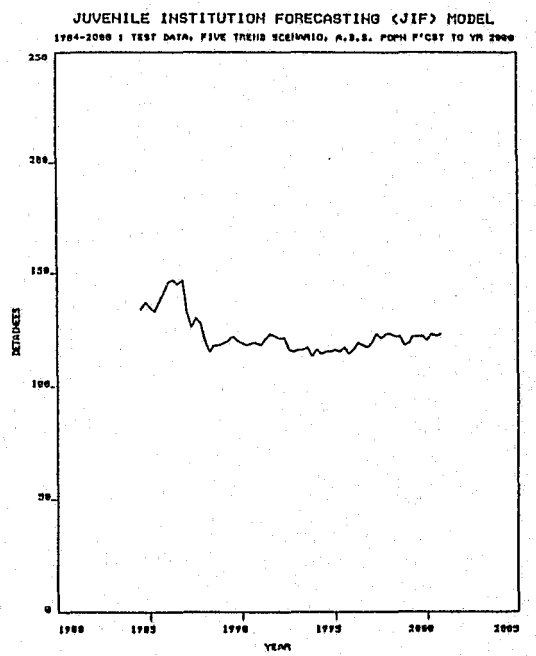
(a)



(b)



(c)



(d)

Three sets of Australian Bureau of Statistics (A.B.S.) population projections for the 10 - 17 year old age group were used in the model. These different estimates are a result of various population growth scenarios used by A.B.S. in compiling the estimates. The differences in the population estimates are related to possible differences in external and internal migration. The other major factor affecting the 10 - 17 year old age group population projections into the future are recent historical and future fertility rates.

Preliminary testing of the model using three different population projection estimates provided by the Australian Bureau of Statistics shows that, in relation to the offending population, only small differences in the forecast number of detainees on hand resulted among the different population estimates. This is due mainly to the liklihood of their being only small changes due to migration. Fertility, as already observed, is largely determined. The projections used, relate to different estimates of internal and external migration and to a small extent, fertility. In other States or countries greater differences among population estimates may well result due to migration factors.

5.3 Scenarios

5.3.1 Method of Scenario Development

Senior departmental officers were asked to speculate on the factors which they considered would have the greatest impact on the need for secure custody beds in the future. The major issues raised included:

a. the impact of new child welfare legislation;

b. factors outside the control of the Department (e.g. police policies, other legislation); and

c. the availability of alternatives to secure custody.

The factors were quantified to give estimates of their anticipated effects on the total pool of children requiring secure custodial care.

5.3.2 Factors for Inclusion in Scenarios

In all a total of 18 separate trends were identified for inclusion in scenarios; Five illustrative examples similar in type to those identified, are listed below. It was not always possible to incorporate the trends in exactly the format proposed for reasons explained in Section 4.1.3. Where it was not possible to input the proposed trend in the exact format in which it was given, care was taken to represent as clearly as possible the

offender group designated and to keep the magnitude of the change similar to that of the trend as originally proposed.

5.3.3 Examples of Hypothesised Trends for Inclusion in Scenarios

(a) Growth in Numbers Appearing Beyond Population Growth. There has been an increase in overall numbers of juveniles appearing before the courts of about four percent **above** the rate of increase expected from the growth in population. It was further hypothesised that this is a temporary trend which will fade and vanish by 1993.

The four percent growth factor was applied to each year from 1985 to 1989; tapering to three percent in 1990; two percent in 1991; and one percent in 1992.

(b) Increase in Male and Female Drug Offending Rate. Statistical data from 1978 to 1985 show a trend of an average 24.5 percent increase of both male and female drug offending above the overall increase in offending rates and general population growth. It was hypothesised that this trend will continue for some time and then taper off to zero by 1993.

The 24.5 percent increase was applied to 1985, 1986 and 1987; 24 percent in 1988; 20 percent in 1989; 15 percent in 1990; 13 percent in 1991; and 5 percent in 1992.

(c) Increase in Firearm Offences. Similarly statistical data from 1979 to 1985 show an average increase of 24 percent per annum in juvenile firearm offences, discounting for the overall increase of four percent in offending behaviour and general population increases. It was hypothesised that this trend would not continue beyond 1986 due to tougher gun laws.

The 24 percent increase was applied in 1985 and 1986.

(d) Increase in Property Offending - Breaking, Entering and Stealing, etc. There has been an average 2.4 percent increase annually in property offending among 12 - 17 year olds since 1979 over and above that due to population growth. It was further hypothesised that the trend is a temporary one which will vanish by the end of 1988.

The factor was applied as 2.4 percent in 1985, 1986, 1987; and two percent in 1988.

(e) Educational Initiatives Reduce Conviction Rate in 10- 15 Year Olds It was estimated that the introduction of Education Department initiatives providing special education programs targeted at early school leavers would have the effect of decreasing the juvenile conviction rate by 25 percent each year for 1987 and 1988.

5.4 Method of Inputting Trends to the Model and Types of Trend

The hypothesised trends above, serve as examples which give some small indication of the kinds of different inputs to scenarios which can be used in the model. An example of the method of use of the above trends is given below. The scenario file JSCENEJ, shown in Appendix 4, page 52 provides an illustrative mix of the different types of trends catered for. The first four lines of the file are read in to provide parameter control. Line five of the file provides detainee "stock on hand" numbers for the base year by number of quarters remaining to serve. Lines six and seven provide labelling for the graph and the printed output. Subsequent lines of the file provide trend information and are read line by line under the control of the parameter control values in lines 2 and 3. Under this control each quarterly cycle of the program inputs the trends relevant to that quarter.

The first two trend lines (lines 8 and 9 in file JSCENEJ, Appendix 4, page 52), dealing with the selected population projection and increased court appearances respectively, are input during the program cycle representing the first quarter of 1984. The first of these two trend lines causes the high population projection to be used in subsequent calculations. The second reflects the identified trend of an increase in numbers of court appearances over and above that which can be accounted for by population growth and this increase is applied to all offence categories. In each trend line of the scenes file JSCENEJ, are parameter control values to the left of the trend description. These are used to identify the type of trend, to apply the trend to the appropriate age and offence categories and to communicate to the program the magnitude of the detected or hypothesised trend.

It is relatively easy to input almost any trends to the program. The types of trends that the program specifically caters for include change in population projection forecast projections, changes in police caution or apprehension rates, changes in conviction rates or court disposition patterns, changes in offending and or sentencing patterns, changes in the use of community placement alternatives, remission rates and pre-release schemes. In addition, legislative changes or policy initiatives of welfare departments can easily be represented in the trend scenario. All of these trends can be targeted to the specific age, sex and offence categories to which they are applicable.

5.5 Four Demonstration Runs showing the Operation of the Model

The following four demonstration runs of the JIF model are designed to illustrate its capabilities and characteristics. As previously stated, the input data is contained in a number of computer disk files, these being read by the program. Firstly files QJPOPA, QJPOPB and QJPOPD contain respectively medium, low, and high A.B.S. quarterly

population projections by age and sex from 1984-2000 (see Table 2, Appendix 3 page 47 for an example of the contents of these files). These files provide the means of inputting to the model different A.B.S. population forecasts.

File QJCRATE contains disaggregated statistical data on juvenile conviction rates by age and sex (see Appendix 3 page 48), while file QJDISPP contains similar disaggregated data on police cautions, and court dispositions involving both community placement and length of detention data by offence category (see Appendix 3, page 49). Both of these files provide basic statistical input to the program. The numerical contents of these two files are read respectively into conviction rate and disposition matrices within the program. These matrices are modified during each quarterly cycle of the program by the trend information supplied from the scenario file JSCENEJ so as to account for hypothesised trends in the produced forecast of detainee numbers.

5.5.1 Four Scenarios

To demonstrate the model four computer runs have been carried out, each run using one of the following four scenarios.

Scenario 1 No trends and no population change,

Scenario 2 No trends and A.B.S. high population projections for Queensland to the year 2000

Scenario 3 Trends 1 to 4 from section 5.3.3 and A.B.S. high populations for Queensland to 2000, and

Scenario 4 Trends 1 to 5 from section 5.3.3 and A.B.S. high populations for Queensland to 2000.

5.5.2 Run 1, Scenario 1

Without population changes or input scenarios the numbers of detainees forecast by the model, as explained earlier, will remain constant. This condition is demonstrated in the first run in which the population has been held constant artificially by putting dummy constant data into the population forecast input files.

The results of running the JIF model under such "no scenario, population constant" conditions is the forecast of a constant number of detainees, as would be expected. The forecast number of detainees for the period 1984-2000, for these conditions is shown in the program output graph (Fig 5(a), page 21).

5.5.3 Run 2, Scenario 2

For demonstration purposes a further "no scenario" run of the program was carried out. This time however the actual A.B.S. population forecast figures have been included. The output graph which plots the forecast numbers for the period 1984-2000 (Fig 5(b), page 21) in sympathy with the forecast population trends (see Appendix 3, Table 1 page 46), shows a gradual decline followed by a partial recovery towards the year 2000.

5.5.4 Run 3, Scenario 3

In this demonstration run of the JIF model, in addition to the A.B.S. population forecast figures 1984-2000, a four trend scenario has been added. Hypothesised trends (a) to (d) as outlined in 5.3.3 above are included. The full computer output from this four trend run is also included (see Appendix 4.) This scenario is incorporated by way of the scenario file JSCENEJ which is shown in Appendix 4 on page 52. It will be noted that all four hypothesised trends are such as to increase the numbers of detainees forcast. The resultant output graph showing the numbers forecast to the year 2000 appears in Fig 5(c), page 21 and also in Appendix 4 following the printed output on page 68.

5.5.5 Run 4, Scenario 4

In the last demonstration run an additional trend (5.3.3 (e)) was added to the previous trends, making a five trend scenario. While the first four trends caused an increase of detainee numbers over time, the fifth trend was in the direction of decreased numbers.

5.5.6 Getting the Feel for the Model

By carefully following the output in Appendix 4 it is possible to obtain some understanding of the operation of the model. Further understanding will arise from the task of defining offence, and disposition categories and assembling population projection data in the required format. The compilation of data from statistical sources and its processing into the required format for inclusion in files to form the disposition and conviction matrices provides an opportunity to digest more of the flavour of the model and to come to grips with the model's functioning at a more detailed level. The analysis of hypothesised trends, their amalgamation to form scenarios and test running of the model will soon provide the user with not only a feel for the operation of the model but some insights into what effect certain trends and policies are likely to have on detainee numbers.

6. SUMMARY

In summary it needs to be stressed that the JIF model is a dynamic one which enables a series of "what-if" questions about future possible policy initiatives to be tested out to estimate their effect on the demand for secure custody accommodation.

The model offers considerable flexibility in the type of trends that can be represented. There is no limit to the number of trends that can be accommodated simultaneously or in any one scenario.

The model allows for the inclusion of any anticipated future events and trends which are likely to affect the numbers of juveniles who will require custody. Sufficient information has been provided in this report to enable the model to be implemented by practitioners throughout the juvenile justice field, should they wish to do so. Departments responsible for juvenile corrections wishing to construct the JIF model, would have most of the required data already. The balance of the data requirements for the model are obtainable from published and other statistical sources.

The computer program listed in Appendix 1 is written in Fortran 4, and is available through the Australian Institute of Criminology for use by government departments. Since the original development on a LABTAM 3000 machine the program has been imported to IBM-compatible personal computers and to a Digital Equipment Corporation VAX/VMS version V4.5 where it compiled without modification. The program should compile with little or no modification using most versions of Fortran available for micro-computers. The subroutine GRAPH is written for the Prospect Graphics Fortran Library which interfaces with Prospero Fortran. However, with some modification, GRAPH could be made to run using other Fortran Graphics Libraries.

The model is sufficiently economical in its memory and processing requirements to be easily accommodated in most micro-computers and it is therefore feasible for implementation in most organisations needing such a research and planning tool.

One way in which the model could be enhanced is by the addition of an interactive module which would ascertain trend information for scenarios in a user-friendly way by asking the user a series of questions. Such an extension of the package would be relatively easy to write and would expand the role of the model beyond its present one to one that would also instruct, stimulate and help users to generate creative responses in scenario development even though the user may have little knowledge of computers.

In conclusion it is important to stress again that the interactive nature of the model allows for inclusion of "what-if" questions and additional or alternative trends or scenarios at will thus enabling the provision of timely advice to planners and decision makers.

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APPENDIX 1

APPENDIX 1

The JIF Program. Below is a listing of the Juvenile Institution Forecasting Program, JIF.FOR, written in FORTRAN 4. Graphical output is easily suppressed if not required.

```
      DIMENSION IPOP(9,3),ICRATE(9,2,22),NCONV(10,3,23),ICOM(80)
     1,NXDISP(24,23),DISP(24,23),NPRREC(21,67),NPRNOW(21,67)
     2,PRSEED(20,9,5),
     3XLAB(20),YLAB(20),
     4DSIZE(4),CHARS(4),X(67),Y(67),NMODS(80),QOFFSH(12,23),XNAME(12)
     5,YNAME(12),TITLE(12),HEADER(18)
      INTEGER*1 QOFFSH
      INTEGER*2 NMODS
      INTEGER*1 XNAME,YNAME
      INTEGER*4 TITLE,HEADER
C
C     THE  FIRST  SECTION INSERTS BASE YEAR NUMBERS  OF  DETAINEES,  BY
C     EFFECTIVE PERIOD REMAINING TO BE SERVED,  INTO NPRREC AND NPRNOW.
C     THE  1984 INSTITUTION CENSUS FIGURES WERE USED HERE.  NPRREC WILL
C     CONTAIN DETAINEES RECEIVED EACH YEAR,  WHILE NPRNOW WILL  CONTAIN
C     THE NUMBERS ON HAND AT THE END OF YEAR.
C
      DATA NPRREC/1407*0/,NPRNOW/1407*0/ -
     4, XLAB/4H1980,4H1985,4H1990,4H1995,16*4H2000/,YLAB/4H1500,4H2000,
     54H2500,17*4H3000/,DSIZE/.02,.04,.08,1.0/,CHARS/1H.,1H+,1HX,1H*/
C
C
C
C      NOW READ THE OFFENCE-NAMES (QOFFSH), THE CONVICTION-RATES (ICRATE),
C      THE DISPOSITION RATES (DISP), AND THE SENTENCE-LENGTH MATRICES
C
      OPEN(12,'QJORATE')
      OPEN(13,'QJOFFSH')
      OPEN(14,'QJDISPP')
      OPEN(15,'QJPRSE2')
      OPEN(19,'JSCENEJ')
      OPEN(11,'QJQPOPB')
      OPEN(20,'QJQPOPA')
      OPEN(21,'QJQPOPD')
      OPEN(18,'INOUT')
C
      READ(13,3000)((QOFFSH(L1,K1),L1=1,12),K1=1,23)
 3000 FORMAT(12A1)
      READ(12,4000)ICRATE
4000  FORMAT(9I7)
      READ(14,4001)DISP
4001  FORMAT(24F6.2)
      READ(15,4002)PRSEED
4002  FORMAT(20F3.0)
      READ(19,1900)RUNNO,NMODS,RETAIN,REMRAT,PRERE,JPOP,DIV,
     1(NPRREC(NO,1),NO=1,20),(TITLE(I),I=1,12),(HEADER(I),I=1,18)
 1900 FORMAT(A4/40I2/40I2/3F5.3,I5,F5.0/20I5/12A4/18A4)
C
C    THE  FIRST ROW OF THE ON HAND MATRIX NPRNOW RECEIVES THE  FIRST
C    ROW  OF THE RECEIVALS MATRIX NPRREC INTO WHICH IS READ THE  THE
C    STOCK  OF  DETAINEES  ON 30TH JUNE BY TIME TO SERVE IN  THE  20
C    QUARTERLY EPISODE LENGTH CATEGORIES.   DETSL,  WITH THE AID  OF
C    MATRIX  PRSEED,  PROVIDES  CODE  TO CONVERT FROM THE  13  INPUT
C    SENTENCE LENGTH CATEGORIES USED IN THE DISPOSITION MATRIX  DISP
C    TO  THE  20 CATEGORIES OF DETENTION LENGTH USED IN THE  PROGRAM
C    OUTPUT.
C
      DO 100 N1=1,20
      NPRNOW(21,1)=NPRNOW(21,1)+NPRREC(N1,1)
  100 NPRNOW(N1,1)=NPRREC(N1,1)
```


(continued on next page)

```
C
C       NOW, FOR EACH QUARTER(1 TO 67), WE MODIFY (IF REQUIRED) THE
C       DISPOSITION MATRIX (DISP) AND THE APPEARANCE RATES (ICRATE),
C       READ THE POPULATION FIGURES (IPOP), CALCULATE AND PRINT THE
C       NUMBERS OF PERSONS APPEARING (NCONV) ON A QUARTERLY CYCLE.
C
      WRITE(18,1442)TITLE,HEADER
1442  FORMAT(1X,12A4/1X,18A4//)
      XR=0.75
      IQ=3
      IYC=1
      DO 1 I=1,67
      WRITE(1,1543)I
1543  FORMAT(1X,'PROCESSING QUARTER NO. ',I3)
      IF(IQ .EQ. 5)IYC=IYC+1
      IF(IQ .EQ. 5)IQ=1
1235  IF(NMODS(I).EQ.0)GO TO 830
      NMOD=NMODS(I)
      DO 832 II=1,NMOD
      READ(19,1901,ERR=833)IRT,L1,L2,M1,M2,MALT,PARAM,ICOM
 1901 FORMAT(6I5,F15.3,80A1)
  832 CALL SCENAR(I,DISP,ICRATE,IRT,L1,L2,M1,M2,PARAM,MALT,QOFFSH,
     1PRERE,RETAIN,REMRAT,JPOP,ICOM)
830   READ(JPOP,4005)IPOP
4005  FORMAT(9I6)
      GOTO 835
833   WRITE(18,4017)I,IYC,IPOP
4017  FORMAT(1X,'BAD READ FMT 1901'/1X,2I3/1X,9I6/)
      GOTO 1358
835   DO 11 K=1,3
      DO 11 L=1,23
   11 NCONV(10,K,L)=0
      DO 2 J=1,9
      DO 21 K=1,3
   21 NCONV(J,K,23)=0
      DO 2 L=1,22
      DO 22 K=1,2
   22 NCONV(J,K,L)=IFIX(0.5+(ICRATE(J,K,L)/10000000.)*IPOP(J,K))
    2 NCONV(J,3,L)=NCONV(J,1,L)+NCONV(J,2,L)
      DO 3 J=1,9
      DO 3 K=1,3
      DO 3 L=1,22
    3 NCONV(J,K,23)=NCONV(J,K,23)+NCONV(J,K,L)
      DO 4 K=1,3
      DO 4 L=1,23
      DO 4 J=1,9
    4 NCONV(10,K,L)=NCONV(10,K,L)+NCONV(J,K,L)
      IF(I.EQ.1)WRITE(18,1801)RUNNO
 1801 FORMAT(1X,40X,A4/)
      IYR=1983+IYC
      IF(IQ.EQ.2.AND.IYR.EQ.1990.OR.IQ.EQ.2.AND.IYR.EQ.1995.OR.IQ.EQ.2
     1 .AND.IYR.EQ.2000.OR.I.EQ.1) GOTO 9996
      GOTO 850
9996  WRITE(18,8000)IQ,IYR,((QOFFSH(K1,L),K1=1,12),
     1((NCONV(J,K,L),J=1,10),K=1,3),L=1,23)
 8000 FORMAT(1X/// ' NUMBER OF PERSONS APPEARING BY AGE, SEX AND MOST SE
     1RIOUS OFFENCE - QUEENSLAND - QTR. NO.',I1,I6/13X,
     2                                   'AGE:  5-9    10     11     12
     3  13     14     15     16     17    TOTAL'/(' ',12A1/13X,' M',10I6/13X,
     4' F',10I6/13X,' T',10I6))
```


(continued on next page)

```
C
C       NOW CONVERT THE NUMBERS CONVICTED INTO PERSONS BY
C       DISPOSITION (NXDISP) AND PRINT.
C
  850 DO 8 L=1,23
      NXDISP(L,23)=0
    8 NXDISP(24,L)=0
      DO 10 M=1,23
      DO 10 L=1,22
      NXDISP(M,L)=IFIX(0.5+DISP(M,L)*NCONV(10,3,L)/100.)
      NXDISP(24,L)=NXDISP(24,L)+NXDISP(M,L)
   10 NXDISP(M,23)=NXDISP(M,23)+NXDISP(M,L)
      DO 112 L=1,22
  112 NXDISP(24,23)=NXDISP(24,23)+NXDISP(24,L)
      IYR=1983+IYC
      IF(IQ.EQ.2.AND.IYR.EQ.1990.OR.IQ.EQ.2.AND.IYR.EQ.1995.OR.IQ.EQ.2
     1 .AND.IYR.EQ.2000.OR.I.EQ.1) GOTO 7999
      GOTO 9999
7999  WRITE(18,8100)IQ,IYR
 8100 FORMAT(//13X,'NUMBER OF JUVENILES BY MOST SERIOUS OFFENCE AND DISP
     1OSITION - QUEENSLAND - QTR. NO.',I1,I6,/13X,
     2                                   'CAUTN DISM CM.PL A-D  C-P
     3RCZ  FINE CSO  SUPV C-C  -DETENTION PRIODS(MONTHS)',38('-'),
     4   'TOTAL'/64X,'0-1  1-2  2-3  3-4  4-5  5-6  6-9  9-12 12-1818-24
     524-3636-48 48+  ')
9998  WRITE(18,8200)((QOFFSH(K1,L),K1=1,12),(NXDISP(M,L),M=1,24),L=1,23)
 8200 FORMAT(' ',12A1/12X,23I5,I8)
C
C       NOW WORK OUT THE ACTUAL SENTENCE LENGTHS TO BE SERVED,
C       FOR DETAINEES.
C
9999  CALL DETSL(NXDISP,PRSEED,NPRREC,I,XR,DIV)
C
C       NOW  ROW  I+1  OF  NPRREC  CONTAINS  THIS  QUARTER'S  INSTITUTION
C       RECEIVALS  BY EFFECTIVE  SENTENCE SO WE CAN COMPLETE ROW  I+1  OF
C       NPRNOW  - THE END-OF-QUARTER TOTALS.  RETAIN IS THE PROPORTION OF
C       THOSE SENTENCED TO AN EFFECTIVE SENTENCE OF LESS THAN ONE QUARTER
C       WHO WILL STILL BE IN CUSTODY AT THE END OF QUARTER. THE REMISSION
C       SYSTEM  IS  REFLECTED  IN  THE PROCEDURE  BY  REDUCING  THE  TIME
C       REMAINING OF 'REMRAT' OF THE DETAINEES BY TWO QUARTERS, WHILE THE
C       OTHER    ONE    MINUS    REMRAT    ONLY    REDUCE    ONE    QUARTER.
C
      PROP=RETAIN
      PRE=PRERE
      DO 20 N1=1,18
      NPRNOW(N1,I+1)=IFIX(.5+PROP*NPRREC(N1,I+1)+
     1PRE*((1-REMRAT)*NPRNOW(1+N1,I)+REMRAT*NPRNOW(2+N1,I)))
      PROP=1.0
      PRE=1.0
20    NPRNOW(21,I+1)=NPRNOW(21,I+1)+NPRNOW(N1,I+1)
      NPRNOW(19,I+1)=IFIX(.5+(1-REMRAT)*NPRNOW(20,I)+NPRREC(19,I+1))
      NPRNOW(20,I+1)=NPRREC(20,I+1)
      NPRNOW(21,I+1)=NPRNOW(21,I+1)+NPRNOW(19,I+1)+NPRNOW(20,I+1)
      IYR=1983+IYC
      IF(I.EQ.1.OR.IQ.EQ.2.AND.IYR.LT.1990)GOTO 6999
      GOTO 1
 6999 WRITE(18,8010)IQ,IYR,(NPRREC(N1,I+1),N1=1,21),
     1(NPRNOW(N1,I+1),N1=1,21)
 8010 FORMAT(/////' DETAINEES RECEIVED DURING QTR. NO.',I1,I6,
     1                                      ', AND DETAINEES ON HA
     2ND AT END OF QTR. - BY TIME REMAINING TO SERVE.(MONTHS)' /  ' TIME
     3 REMAINING:'/ 3X,'0-3   3-6   6-9   9-12  12-15 15-18 18-21 21-24
     424-27 27-30 30-33 33-36 36-39 39-42 42-45 45-48 48-51 51-54 54-57
     5 57+  TOTAL'/' DETAINEES RECEIVED:'/21I6/' DETAINEES ON HAND:'
     6/21I6)
    1 IQ=IQ+1
```


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```
C
C       NOW WE HAVE RUN THROUGH THE FULL SIXTEEN YEAR PERIOD - PRINT
C       SUMMARY TABLES TO SHOW THE TRENDS IN TOTAL CLIENT NUMBERS.
C
       WRITE(18,8011)
 8011 FORMAT(/////' SUMMARY OF DETAINEES RECEIVED DURING THE QTR.',
     1                              ' BY TIME REMAINING TO SERVE - 1984-2000
     2 REMAINING:'/11X,'0-3   3-6   6-9   9-12  12-15 15-18 18-21 21-24
     424-27 27-30 30-33 33-36 36-39 39-42 42-45 45-48 48-51 51-54 54-57
     5 57+ TOTAL'/' DETAINEES RECEIVED:'/' YEAR QTR.')
       IQ1=2
       IYC=0
       DO 1357 I1=2,67
       IQ1=IQ1+1
       IF(IQ1.EQ.5)IQ1=1
       IF(IQ1.EQ.1)IYC=IYC+1
       IYR=1984 + IYC
1357   WRITE(18,8012)IYR,IQ1,(NPRREC(N1,I1),N1=1,21)
       WRITE(18,8013)
 8013 FORMAT(/////' SUMMARY OF DETAINEES ON HAND AT THE END OF THE',
     1                          ' QTR. BY TIME REMAINING TO SERVE - 1984-2000
     2 REMAINING:'/11X,'0-3   3-6   6-9   9-12  12-15 15-18 18-21 21-24
     424-27 27-30 30-33 33-36 36-39 39-42 42-45 45-48 48-51 51-54 54-57
     5 57+ TOTAL'/' DETAINEES ON HAND:'/' YEAR QTR.')
       IQ1=2
       IYC=0
       DO 1367 I1=2,67
       IQ1=IQ1+1
       IF(IQ1.EQ.5)IQ1=1
       IF(IQ1.EQ.1)IYC=IYC+1
       IYR=1984 + IYC
1367   WRITE(18,8012)IYR,  IQ1,(NPRNOW(N1,I1),N1=1,21)
8012   FORMAT(1X,65(I4,I3,21I6))
       DO 1359 I=1,66
       Y(I)=FLOAT(NPRNOW(21,I+1))
       X(I)=1984.+((FLOAT(I+1))/4.0)
 1359 CONTINUE
 1358 CLOSE(18)
       CALL GRAPH(X,Y,1,66,1980.,2005.,0.,250.,'/YEAR         /'
     1,'/DETAINEES    /',TITLE,HEADER)
       STOP
       END
C
C-------------------------------------------------------------------------------
C
C      THE FOLLOWING ROUTINE WORKS OUT SENTENCE-LENGTHS FOR DETAINEES
C
       SUBROUTINE DETSL(NXDISP,PRSEED,NPRREC,I,X,DIV)
       DIMENSION NXDISP(24,23),PRSEED(20,9,5),NPRREC(21,67)
       IP1=I+1
       FT=1.0
       NXDISP(16,23)=NXDISP(16,23)+NXDISP(15,23)+NXDISP(14,23)
       NXDISP(15,23)=NXDISP(13,23)+NXDISP(12,23)+NXDISP(11,23)
       DO 1 N=1,9
       IF(NXDISP(N+14,23).GE.1.AND.NXDISP(N+14,23).LE.12.AND.N.GT.4)
      1GOTO 5
       NR=1
       GOTO 50
    5  FT=(5.0-FLOAT(NR))*0.5
       CALL RANDM(X,NR)
50     DO 2 N1=1,20
       NPRREC(N1,IP1)=NPRREC(N1,IP1)+IFIX(.5+NXDISP(N+14,23)*
      1FT * PRSEED(N1,N,NR)/DIV)
    2  CONTINUE
       FT=1.0
    1  CONTINUE
       DO 3 N1=1,20
     3 NPRREC(21,IP1)=NPRREC(21,IP1)+NPRREC(N1,IP1)
       RETURN
       END
```


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```
C
C-----------------------------------------------------------------------
C
C
C     THE FOLLOWING IS A RANDOM NUMBER ROUTINE FOR RANDOM ALLOCATION
C     OF LONGER INPUT EPISODE LENGTHS TO SHORTER OUTPUT EPISODE LENGTH
C     CATEGORIES
C
      SUBROUTINE RANDM (X,NR)
      DATA K, J, M, RM/5701,3612,566927,566927.0/
      IX=INT(X*RM)
      IRAND=MOD(J*IX+K,M)
      X=(FLOAT(IRAND)+0.5)/RM
      IF(X.LT.0.25)NR=2
      IF(X.GE.0.25.AND.X.LT.0.5)NR=3
      IF(X.GE.0.5.AND.X.LT.0.75)NR=4
      IF(X.GE.0.75)NR=5
      RETURN
      END
C
C-----------------------------------------------------------------------
C
      SUBROUTINE SENLEN(DISP,L,SENPER,@OFFSH)
      DIMENSION DISP(24,23),@OFFSH(12,22)
      INTEGER*1 @OFFSH
C
C THIS ROUTINE INCREASES (SENPER +VE) OR DECREASES (SENPER -VE) SENTENCE
C LENGTHS FOR DETERMINATE INSTITUTION SENTENCES BY SENPER PER CENT.  IT
C PERFORMS THIS FEAT BY WORKING OUT WHAT PROPORTION (ADDPER) OF THOSE
C DETAINED IN EACH DETENTION LENGTH CATEGORY MUST BE SHIFTED INTO THE NEXT
C HIGHEST(OR LOWEST) CATEGORY TO ACHIEVE THE DESIRED EFFECT.  THE TOTAL
C PERCENT DETAINED (TOTPER) IS MAINTAINED CONSTANT.
C
      TOTPER=DISP(11,L)+DISP(12,L)+DISP(13,L)+DISP(14,L)+DISP(15,L)+
     1   DISP(16,L)+DISP(17,L)+DISP(18,L)+DISP(19,L)+DISP(20,L)+
     2   DISP(21,L)+DISP(22,L)+DISP(23,L)
      IF(TOTPER.EQ.0.)RETURN
      YEARS=.15*DISP(11,L)+.46*DISP(12,L)+.8*DISP(13,L)+1.1*DISP(14,L)+
     1   1.5*DISP(15,L)+1.8*DISP(16,L)+2.5*DISP(17,L)+3.5*DISP(18,L)+
     2   5*DISP(19,L)+7*DISP(20,L)+10*DISP(21,L)+14*DISP(22,L)
      AVSEN=(YEARS+18.*DISP(23,L))/TOTPER
      ADDYRS=YEARS*SENPER
      IF(ADDYRS.GT.0)ADDPER=ADDYRS/(.31*DISP(11,L)+.34*DISP(12,L)
     1+.3*DISP(13,L)+.4*DISP(14,L)+.3*DISP(15,L)+.7*DISP(16,L)+
     2 1.*DISP(17,L)+1.5*DISP(18,L)+2.*DISP(19,L)+3.*DISP(20,L)+
     3 4.*DISP(21,L)+4.*DISP(22,L))
      DISDCR=(.31*DISP(12,L)+
     1 .34*DISP(13,L)+.3*DISP(14,L)+.4*DISP(15,L)+.3*DISP(16,L)+
     2 7.*DISP(17,L)+1.*DISP(18,L)+1.5*DISP(19,L)+2.*DISP(20,L)+
     3 3.*DISP(21,L)+4.*DISP(22,L)+4.*DISP(23,L))
      IF(DISDCR.EQ.0.0)RETURN
      IF(ADDYRS.LT.0)ADDPER=ADDYRS/DISDCR
      TEM=DISP(11,L)
      DISP(11,L)=DISP(11,L)*(1.-ADDPER)
      IF(DISP(11,L).GE.0.)GO TO 849
      DISP(12,L)=DISP(12,L)+DISP(11,L)
      DISP(11,L)=0.
  849 DISP(23,L)=DISP(23,L)+ADDPER*DISP(22,L)
      DO 842 M=12,22
      TEM1=DISP(M,L)
      DISP(M,L)=DISP(M,L)+ADDPER*(TEM-DISP(M,L))
      IF(DISP(M,L).GE.0.)GO TO 842
      IF(M.LT.22)DISP(M+1,L)=DISP(M+1,L)+DISP(M,L)
      DISP(M,L)=0.
  842 TEM=TEM1
```


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      TOTFIX=TOTPER/(DISP(11,L)+DISP(12,L)+DISP(13,L)+DISP(14,L)+
     1          DISP(15,L)+DISP(16,L)+DISP(17,L)+DISP(18,L)+DISP(19,L)
     2          +DISP(20,L)+DISP(21,L)+DISP(22,L)+DISP(23,L))
      DO 844 M=11,23
  844 DISP(M,L)=DISP(M,L)*TOTFIX
      AVS2=(.15*DISP(11,L)+.46*DISP(12,L)+.8*DISP(13,L)+1.1*DISP(14,L)+
     1    1.5*DISP(15,L)+1.8*DISP(16,L)+2.5*DISP(17,L)+3.5*DISP(18,L)+
     2    5*DISP(19,L)+7*DISP(20,L)+10*DISP(21,L)+14*DISP(22,L)+18*DISP
     3    (23,L))/TOTPER
      AVSENM=AVSEN*3.05
      AVS2M=AVS2*3.05
      WRITE(18,1850)(QOFFSH(K1,L),K1=1,12),(DISP(M,L),M=11,23),AVSENM,
     1 AVS2M
 1850 FORMAT(' NEW SENTENCE LENGTH DISTRIBUTION FOR ',12A1,':  ',
     113F6.2/
     2' AVERAGE SENTENCE CHANGED FROM ',F5.2,' MTHS TO ',F5.2,' MTHS.')
      RETURN
      END
C
C-------------------------------------------------------------------------------
C
      SUBROUTINE SCENAR(I,DISP,ICRATE,IRT,L1,L2,M1,M2,PARAM,MALT,
     1 QOFFSH,PRERE,RETAIN,REMRAT,JPOP,ICOM)
      DIMENSION DISP(24,23),ICRATE(9,2,22),QOFFSH(12,22),ICOM(80)
      INTEGER*1 QOFFSH
      WRITE(18,1831)ICOM
 1831 FORMAT(////1X,80A1)
      GOTO(511,512,513,514,515,516,517,518,519),IRT
      WRITE(18,1281)
 1281 FORMAT(1X,'IRT IS NOT WITHIN RANGE 1 TO 9 - CHECK SCENARIO FILE')
      STOP
  511 REMRAT=PARAM
      WRITE(18,1812)PARAM
 1812 FORMAT(/' REMISSION RATE CHANGED TO ',F6.4)
      RETURN
  512 WRITE(18,1849)
 1849 FORMAT(/)
      DO 3 L=L1,L2
    3 CALL SENLEN(DISP,L,PARAM,QOFFSH)
      RETURN
  513 JPOP=21
      WRITE(18,1810)
 1810 FORMAT(/' HIGH POPULATION PROJECTION SELECTED')
      RETURN
  514 JPOP=20
      WRITE(18,1809)
 1809 FORMAT(/' LOW POPULATION PROJECTION SELECTED')
      RETURN
  515 DO 7 J=M1,M2
      DO 7 L=L1,L2
      ICRATE(J,1,L)=ICRATE(J,1,L)+IFIX(.5+PARAM*ICRATE(J,1,L))
    7 ICRATE(J,2,L)=ICRATE(J,2,L)+IFIX(.5+PARAM*ICRATE(J,2,L))
      PARAM=100.*PARAM
      WRITE(18,1848)
 1848 FORMAT(/)
      DO 77 L=L1,L2
   77 WRITE(18,1806)PARAM,(QOFFSH(K1,L),K1=1,12),M1,M2
 1806 FORMAT(' ',F8.2,' PER CENT CHANGE IN CONVICTION RATES FOR ',12A1,
     1' COLUMNS',I3,' TO',I3)
      RETURN
  516 PRERE=PARAM
      WRITE(18,1805)PRERE
 1805 FORMAT(/' MEAN PROPN. OF DETAINEES, IN PRE-RELEASE ELIGIBILITY
     1 QUARTER, PRESENT =',F6.2)
      RETURN
```


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517   RETAIN=PARAM
      WRITE(18,1803)RETAIN
 1803 FORMAT(/' PRESENT QUARTER RETENTION RATE =',F6.2)
      RETURN
518   WRITE(18,1890)
1890  FORMAT(/)
      DO 10 L=L1,L2
      DO 10 M=M1,M2
      DISP(M,L)=DISP(M,L)+PARAM*DISP(MALT,L)
   10 DISP(MALT,L)=DISP(MALT,L)*(1.-PARAM)
      DO 1010 L=L1,L2
      DO 1010 M=M1,M2
 1010 WRITE(18,1801)PARAM,MALT,M,(QOFFSH(K1,L),K1=1,12),L
 1801 FORMAT(1X,F8.4,' TIMES COLUMN',I3,' TRANSFERED TO COLUMN',
     1I3,' IN DISPOSITIONS FOR ',12A1,I5)
      RETURN
519   WRITE(18,1890)
      DO 110 L=L1,L2
      DO 110 M=M1,M2
      DISP(MALT,L)=DISP(MALT,L)+PARAM*DISP(M,L)
  110 DISP(M,L)=DISP(M,L)*(1.-PARAM)
      DO 1011 L=L1,L2
 1011 WRITE(18,1891)PARAM,M1,M2,MALT,(QOFFSH(K1,L),K1=1,12),L
 1891 FORMAT(1X,F8.4,' TIMES COLUMNS',I3,' TO ',I3,
     1' TRANSFERED TO COLUMN',I3,' IN DISPOSITIONS FOR ',12A1,I5)
      RETURN
      END
C
C-------------------------------------------------------------------------------
C
      SUBROUTINE GRAPH(X,Y,M,N,XLO,XHI,YLO,YHI,XNAME,
     1YNAME,ITITLE,HEADER)
C
C
C THIS PROCEDURE DRAWS A GRAPH CONSISTING OF A PERIMETER,
C AXES - ANNOTED WITH LABELS AND VALUES, AND A LINE-PLOT
C REPRESENTING INPUT DATA. IT DOES NOT ASSUME THAT GRAPH
C WILL DISPLAY VALUES ONLY IN THE POSITIVE X-Y QUADRANT.
C THE GRAPH IS SCALED SUCH THAT THE FULL RANGE OF INPUT
C VALUES CAN BE DISPLAYED WITHIN THE PERIMETER. THE
C FUNCTION TO BE PLOTTED MAY BE LINEAR OR CURVILINEAR.
C THE INPUT PAREMETERS ARE DEFINED AS FOLLOWS:
C       X = MATRIX OF REAL X-VALUES
C       Y = MATRIX OF REAL Y-VALUES
C       M = NUMBER OF SEPARATE FUNCTIONS TO BE REPRESENTED
C       N = NUMBER OF DATA PTS TO BE REPRESENTED
C       XHI = HIGHEST X-VALUE FOR X-AXIS LABEL
C       XLO = LOWEST X-VALUE FOR X-AXIS LABEL
C       YHI = HIGHEST Y-VALUE FOR Y-AXIS LABEL
C       YLO = LOWEST Y-VALUE FOR Y-AXIS LABEL
C       XNAME = NAME TO LABEL X-AXIS( MAX SIZE:12 CHARS)
C       YNAME = NAME TO LABEL Y-AXIS( MAX SIZE:12 CHARS)
C       TITLE = MAIN TITLE TO APPEAR ON TOP OF PAGE(MAX SIZE:48 CHARS)
C       HEADER = SUB-HEADING TO APPEAR UNDER TITLE(MAX SIZE:72 CHARS)
C
C NB: THE SUB-ROUTINE MAKES CALLS TO STANDARD GSX GRAPHICS INTERFACE
C ROUTINES. HENCE IT IS ASSUMED THAT THE GSX PACKAGE HAS BEEN LOADED
C BEFORE THIS SUB-ROUTINE IS CALLED.
C
C
      INCLUDE 'B:GDEVDR'
      INCLUDE 'B:GDEVIN'
      INCLUDE 'B:GDEVOT'
      INCLUDE 'B:GDEVPT'
      INCLUDE 'B:GINTIN'
C
```


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```
C
      DIMENSION X(M,N),Y(M,N),XNAME(12),YNAME(12)
     1,ITITLE(12),XDATA(200),YDATA(200),IHEAD(80),HEADER(18)
      INTEGER*1 IHOL(30),IHEAD
      INTEGER*4 ITITLE,HEADER
C
C
C  OPEN THE PRINTER AND SET SOME INITIAL VALUES
C
      CALL WOPEN (21)
*     CALL GESCPE(2)
      CALL WCLEAR
C  NB: LATER CALCULATIONS OF PRINTING POSITIONS ASSUME A CHARACTER
C  SIZE OF 5.0MM.....DON'T MODIFY ARBITRARILY
      CALL SETKSZ(5.0)
      CALL SETLTP(1)
      CALL SETLWD(JLWMIN*SXNDC*IXMM)
      CALL GTRAN2
C
C
C  CHECK SIZE OF DATA VALUES
C
      DO 13 I=1,M
      DO 13 J=1,N
      IF ((X(I,J).LE.XHI).AND.(X(I,J).GE.XLO)) GOTO 14
      WRITE(6,15)
   15 FORMAT(//,'1','X-VALUES OUT OF RANGE')
      RETURN
   14 CONTINUE
      IF ((Y(I,J).LE.YHI).AND.(Y(I,J).GE.YLO)) GOTO 13
      WRITE(6,19)
   19 FORMAT(//,'1','Y-VALUES OUT OF RANGE')
      RETURN
   13 CONTINUE
C
      IF (M.LT.NLTYPS) GOTO 21
      WRITE(6,22)
   22 FORMAT(//,'1','NO. OF FUNCTIONS EXCEEDS NO. OF LINETYPES')
      RETURN
   21 CONTINUE
C
      XVAL = XLO
      NDECXL = 1
    1 IF (AMOD(XVAL,10.0).LT.10.0) GOTO 2
      NDECXL = NDECXL + 1
      XVAL = XVAL/10.0
      GOTO 1
    2 CONTINUE
      XVAL = XHI
      NDECXH = 1
    3 IF (AMOD(XVAL,10.0).LT.10.0) GOTO 4
      NDECXH = NDECXH + 1
      XVAL = XVAL/10.0
      GOTO 3
    4 CONTINUE
      YVAL = YLO
      NDECYL = 1
    5 IF (AMOD(YVAL,10.0).LT.10.0) GOTO 6
      NDECYL = NDECYL + 1
      YVAL = YVAL/10.0
      GOTO 5
    6 CONTINUE
      YVAL = YHI
      NDECYH = 1
    7 IF (AMOD(YVAL,10.0).LT.10.0) GOTO 8
      NDECYH = NDECYH + 1
      YVAL = YVAL/10.0
      GOTO 7
    8 IF (MAX0(NDECXL,NDECXH,NDECYL,NDECYH).LE.4) GOTO 10
      WRITE(6,9)
    9 FORMAT(//,'1','DATA VALUES EXCEED SIZE ALLOWED IN FORMAT 25')
      RETURN
```


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```
C
C
C  CHECK SIZE OF DRAWING AREA
C
   10 IF ((IXMM.GE.80).AND.(IYMM.GE.80)) GOTO 12
      WRITE(6,11)
   11 FORMAT(//,'1','DRAWING AREA IS TOO SMALL')
      RETURN
C
C
C  DRAW BOX AROUND THE GRAPH
C
   12 CALL MOVETO(20.0,20.0)
      CALL LINETO(IXMM/1.0,20.0)
      CALL LINETO(IXMM/1.0,(IYMM-20.0)/1.0)
      CALL LINETO(20.0,(IYMM-20.0)/1.0)
      CALL LINETO(20.0,20.0)
C
C  CALCULATE LOCATION OF X-AXIS AND Y-AXIS
C
      XAXIS = 0.
      YAXIS = 0.
      IF (XLO.LT.0.)YAXIS = IXMM*(1.0-XHI/(XHI-XLO))
      IF (YLO.LT.0.)XAXIS = (IYMM-20.0)*(1.0-YHI/(YHI-YLO))
C
C  DRAW X-AXIS AND Y-AXIS (IF NECESSARY)
C
   16 IF (XAXIS.EQ.0.) GOTO 17
        CALL MOVETO(20.0,XAXIS)
        CALL LINETO(IXMM/1.0,XAXIS)
   17 IF (YAXIS.EQ.0.) GOTO 18
        CALL MOVETO(YAXIS,20.0)
        CALL LINETO(YAXIS,(IYMM-20.0)/1.0)
C
C
C  ANNOTATE THE X AND Y AXES
C
C
   18 IF (YAXIS.NE.0.) GOTO 20
      IVAL = INT(XLO)
      ENCODE(IHOL,25)IVAL
C  NB:IF DATA SIZE IN FORMAT 25 IS CHANGED X-COORD IN TWO CALLS
C  TO PTEXT MUST ALSO BE CHANGED
   25 FORMAT('/',I4,'/')
      CALL PTEXT(20.0,12.0,IHOL)
        GOTO 30
C
   20 CALL PTEXT(YAXIS,12.0,'/0/')
C
   30 IVAL = INT(XHI)
      ENCODE(IHOL,25)IVAL
      CALL PTEXT(IXMM-7.0-4+NDECXH,12.0,IHOL)
C
C
      IF (XAXIS.NE.0.) GOTO 35
      IVAL = INT(YLO)
      ENCODE(IHOL,25)IVAL
C  NB:IF DATA SIZE IN FORMAT 25 IS CHANGED X-COORD IN PTEXT MUST CHANGE
      CALL PTEXT((10.0-4+NDECYL),20.0,IHOL)
         GOTO 40
C
   35 CALL PTEXT(10.0,XAXIS,'/0/')
C
   40 IVAL = INT(YHI)
      ENCODE(IHOL,25)IVAL
C  NB:IF DATA SIZE IN FORMAT 25 IS CHANGED X-COORD IN PTEXT MUST CHANGE
      CALL PTEXT((10.0-4+NDECYH),IYMM-23.0,IHOL)
C
C
      CALL PTEXT(IXMM/2.0,5.0,XNAME)
      CALL SETKUP(90.0)
      CALL PTEXT(5.0,(IYMM-20.0)/2.0,YNAME)
      CALL SETKUP(0.0)
```


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```
C
C
C  MARK OUT THE SCALE ON THE X-AXIS
C  FIRST CALCULATE SIZE OF INTERVALS GIVEN A MAX NO. OF INTERVALS = 5
C
      XVAL = XLO + 1.
      XRANGE = XHI - XLO
C
C  IF RANGE<30 WILL BE ABLE TO DEAL IN UNITS OF 5
C
      IF (XRANGE.GE.30) GOTO 70
C  IF REACHED THE END OF THE AXIS - FINISHED
   55 IF (XVAL.GE.XHI) GOTO 100
C  IF IT'S A MULTIPLE OF 5 - MARK IT
      IF (AMOD((XVAL-XLO),5.).EQ.0.) GOTO 60
      XVAL = XVAL + 1.
      GOTO 55
C  PRINT THE MARKER AND ASSOCIATED VALUE
   60 CALL MOVETO(20.0+(IXMM-20.0)*(XVAL-XLO)/XRANGE,20.0)
      CALL LINETO(20.0+(IXMM-20.0)*(XVAL-XLO)/XRANGE,17.0)
      IVAL = INT(XVAL)
      ENCODE(IHOL,25)IVAL
      CALL PTEXT(((20.0+(IXMM-20.0)*(XVAL-XLO)/XRANGE)-5.0-4+NDECXH)
     1,12.0,IHOL)
      XVAL = XVAL + 1.
      GOTO 55
C
C  IF THE RANGE>=30 WILL NEED TO FIND A POWER OF 10 THAT DIVIDES THE
C  AXIS INTO MAXIMUM OF 5 INTERVALS...SO FIRST FIND THE POWER OF 10
C  LESS 1 OF THE DATA RANGE
C
   70 IPOWER = 0
   75 IF (XRANGE.LE.10.) GOTO 80
      IPOWER = IPOWER + 1
      XRANGE = XRANGE/10.
      GOTO 75
   80 XVAL = XLO + 1.
      XRANGE = XHI - XLO
      XUNIT = 10.0**IPOWER
C
C  IF THE RANGE CONTAINS >5 INTERVALS - DOUBLE THE UNITS
C
      IF (XRANGE/XUNIT.LE.5.) GOTO 90
C  IF END OF RANGE REACHED - FINISHED
   82 IF (XVAL.GE.XHI) GOTO 100
      IF (XRANGE/XUNIT.GT.3.) XUNIT = 2*XUNIT
C  FIND FIRST DATA VALUE THAT IS MULTIPLE OF THE DIVISOR - MARK IT
      IF (AMOD((XVAL-XLO),XUNIT).EQ.0.) GOTO 85
      XVAL = XVAL + 1.
      GOTO 82
C  PRINT THE MARKER AND ASSOCIATED VALUE
   85 CALL MOVETO(20.0+(IXMM-20.0)*(XVAL-XLO)/XRANGE,20.0)
      CALL LINETO(20.0+(IXMM-20.0)*(XVAL-XLO)/XRANGE,17.0)
      IVAL = INT(XVAL)
      ENCODE(IHOL,25)IVAL
      CALL PTEXT(((20.0+(IXMM-20.0)*(XVAL-XLO)/XRANGE)-5.0-4+NDECXH)
     1,12.0,IHOL)
C  IF CURRENT VALUE IS WITHIN 1 UNIT OF END - INCREMENT MORE SLOWLY
      IF (XVAL.GE.(XHI-XUNIT)) GOTO 87
C  ELSE GO UP IN MUTIPLES OF THE DIVISOR UNIT
      XVAL = XVAL + XUNIT
      GOTO 85
   87 XVAL = XVAL + 1.
      GOTO 82
```


(continued on next page)

```
C
C  IF RANGE CONTAINS =<5 INTERVALS OF DIVISOR UNIT - PROCEED
C  IF END OF RANGE REACHED - FINISHED
C
   90 IF (XVAL.GE.XHI) GOTO 100
      IF (XRANGE/XUNIT.LE.3.) XUNIT = .5*XUNIT
C  FIND FIRST DATA VALUE THAT IS MULTIPLE OF THE DIVISOR - MARK IT
      IF (AMOD((XVAL-XLO),XUNIT).EQ.0.) GOTO 95
      XVAL = XVAL + 1.
      GOTO 90
C  PRINT THE MARKER AND ASSOCIATED VALUE
   95 CALL MOVETO(20.0+(IXMM-20.0)*(XVAL-XLO)/XRANGE,20.0)
      CALL LINETO(20.0+(IXMM-20.0)*(XVAL-XLO)/XRANGE,17.0)
      IVAL = INT(XVAL)
      ENCODE(IHOL,25)IVAL
      CALL PTEXT(((20.0+(IXMM-20.0)*(XVAL-XLO)/XRANGE)-5.0-4+NDECXH)
     1,12.0,IHOL)
C  IF CURRENT VALUE IS WITHIN 1 UNIT OF END - INCREMENT MORE SLOWLY
      IF (XVAL.GE.(XHI-XUNIT)) GOTO 97
C  ELSE GO UP IN MUTIPLES OF THE DIVISOR UNIT
      XVAL = XVAL + XUNIT
      GOTO 95
   97 XVAL = XVAL + 1.
      GOTO 90
  100 CONTINUE
C
C  NOW DO THE SAME FOR THE Y-AXIS IE. DERIVE AN APPROPRIATE
C  SCALE AND MARK IT OUT
C
      YVAL = YLO + 1.
      YRANGE = YHI - YLO
C
C  IF RANGE<30 WILL BE ABLE TO DEAL IN UNITS OF 5
C
      IF (YRANGE.GE.30) GOTO 120
C  IF REACHED THE END OF THE AXIS - FINISHED
  105 IF (YVAL.GE.YHI) GOTO 150
C  IF IT'S A MULTIPLE OF 5 - MARK IT
      IF (AMOD((YVAL-YLO),5.).EQ.0.) GOTO 110
      YVAL = YVAL + 1.
      GOTO 105
C  PRINT THE MARKER AND ASSOCIATED VALUE
  110 CALL MOVETO(17.0,20.0+(IYMM-40.0)*(YVAL-YLO)/YRANGE)
      CALL LINETO(20.0,20.0+(IYMM-40.0)*(YVAL-YLO)/YRANGE)
      IVAL = INT(YVAL)
      ENCODE(IHOL,25)IVAL
      CALL PTEXT(10.0-4+NDECYH,(20.+(IYMM-40.)*(YVAL-YLO)/YRANGE),IHOL)
      YVAL = YVAL + 1.
      GOTO 105
C
C  IF THE RANGE>=30 WILL NEED TO FIND A POWER OF 10 THAT DIVIDES THE
C  AXIS INTO MAXIMUM OF 5 INTERVALS...SO FIRST FIND THE POWER OF 10
C  LESS 1 OF THE DATA RANGE
C
  120 IPOWER = 0
  125 IF (YRANGE.LE.10.) GOTO 130
      IPOWER = IPOWER + 1
      YRANGE = YRANGE/10.
      GOTO 125
  130 YVAL = YLO + 1.
      YRANGE = YHI - YLO
      YUNIT = 10.0**IPOWER
C
C  IF THE RANGE CONTAINS >5 INTERVALS - DOUBLE THE UNITS
C
      IF (YRANGE/YUNIT.LE.5.) GOTO 140
C  IF END OF RANGE REACHED - FINISHED
  132 IF (YVAL.GE.YHI) GOTO 150
      IF (YRANGE/YUNIT.GT.3.) YUNIT = 2*YUNIT
C  FIND FIRST DATA VALUE THAT IS MULTIPLE OF THE DIVISOR - MARK IT
      IF (AMOD((YVAL-YLO),YUNIT).EQ.0.) GOTO 135
```


(continued on next page)

```
      YVAL = YVAL + 1.
      GOTO 132
C  PRINT THE MARKER AND ASSOCIATED VALUE
  135 CALL MOVETO(17.0,20.0+(IYMM-40.0)*(YVAL-YLO)/YRANGE)
      CALL LINETO(20.0,20.0+(IYMM-40.0)*(YVAL-YLO)/YRANGE)
      IVAL = INT(YVAL)
      ENCODE(IHOL,25)IVAL
      CALL PTEXT(10.-4+NDECYH,(20.+(IYMM-40.)*(YVAL-YLO)/YRANGE),IHOL)
C  IF CURRENT VALUE IS WITHIN 1 UNIT OF END - INCREMENT MORE SLOWLY
      IF (YVAL.GE.(YHI-YUNIT)) GOTO 137
C  ELSE GO UP IN MUTIPLES OF THE DIVISOR UNIT
      YVAL = YVAL + YUNIT
      GOTO 135
  137 YVAL = YVAL + 1.
      GOTO 132
C
C  IF RANGE CONTAINS =<5 INTERVALS OF DIVISOR UNIT - PROCEED
C  IF END OF RANGE REACHED - FINISHED
C
  140 IF (YVAL.GE.YHI) GOTO 150
      IF (YRANGE/YUNIT.LE.3.) YUNIT = .5*YUNIT
C  FIND FIRST DATA VALUE THAT IS MULTIPLE OF THE DIVISOR - MARK IT
      IF (AMOD((YVAL-YLO),YUNIT).EQ.0.) GOTO 145
      YVAL = YVAL + 1.
      GOTO 140
C  PRINT THE MARKER AND ASSOCIATED VALUE
  145 CALL MOVETO(17.0,20.0+(IYMM-40.0)*(YVAL-YLO)/YRANGE)
      CALL LINETO(20.0,20.0+(IYMM-40.0)*(YVAL-YLO)/YRANGE)
      IVAL = INT(YVAL)
      ENCODE(IHOL,25)IVAL
      CALL PTEXT(10.-4+NDECYH,(20.+(IYMM-40.)*(YVAL-YLO)/YRANGE),IHOL)
C  IF CURRENT VALUE IS WITHIN 1 UNIT OF END - INCREMENT MORE SLOWLY
      IF (YVAL.GE.(YHI-YUNIT)) GOTO 147
C  ELSE GO UP IN MUTIPLES OF THE DIVISOR UNIT
      YVAL = YVAL + YUNIT
      GOTO 145
  147 YVAL = YVAL + 1.
      GOTO 140
C
C  FINISHED SCALING AND MARKING OUT THE AXES
C
  150 CONTINUE
C
C  PRINT TITLE ON TOP OF PAGE
C
      ENCODE (IHEAD,2000)HEADER
 2000 FORMAT('/',18A4,'/')
      CALL PTEXT(20.0,(IYMM-15.0),IHEAD)
      CALL SETKSZ(5.0)
      ENCODE (IHEAD,2001)ITITLE
 2001 FORMAT('/',12A4,'/')
      CALL PTEXT(20.0,(IYMM-8.0),IHEAD)
C
C  SET UP THE WINDOW AND VIEWPORT SO THAT DATA RANGE
C  IS SCALED TO FIT PLOTTING AREA
C
C
      CALL WINDOW(XLO,XHI,YLO,YHI)
      CALL VPORT(20.0/IXMM,1.0,20.0/IYMM,(IYMM-20.0)/IYMM)
      CALL CLIP
```


(continued on next page)

```
C
C
C  PLOT THE LINE(S) REPRESENTING INPUT DATA VALUES
C  VARYING THE LINE STYLE FOR EACH DATA SET
C
C
      NLT = 1
      DO 350 I = 1,M
         IF (NLT.GT.NLTYPS) NLT = 1
         CALL SETLTP(NLT)
         DO 347 J = 1,N
            XDATA(J) = X(I,J)
            YDATA(J) = Y(I,J)
  347    CONTINUE
        CALL PLINE(XDATA,YDATA,N)
        NLT = NLT + 1
  350 CONTINUE
C     CALL PLINE(X,Y,N)
C
C
C  CLOSE DOWN THE PRINTER
C
C
      CALL WUPDTE
      CALL GESCPE(3)
      CALL WCLEAR
      CALL WCLOSE
      RETURN
      END
C
C-------------------------------------------------------------------------------
C
```

End Listing

APPENDIX 2

APPENDIX 2

Glossary of Key Variables and Matrices

Variable Name	Variable/Matrix dimension	Variable/Matrix Function
I	=1(2nd quarter year 1984).....67(4 quarter year 2000)	Controls quarterly cycling of program
J	=1(5-9 yrs),2(10 yrs), 3(11 yrs).....9(17 yrs)	Represents age categories in Conviction Rate Matrix
K	=1(Male),2(Female),3(Total)	Represents sex categories in Conviction Number output Matrix
L	=1(Homocide)),2(Grevious Assault).....22(Care & Control Application) [See Appendix 5]	Represents offence categories
M	=1(police caution),2(dismissed/withdrawn).....23(48+ month detention). [See categories in Table 4]	Represents court disposition categories
N1	=1(0<3 mths), 2(1<6 mths).....20(48+ mths)	Sentence length categories in output
IPOP(J,K)	=general POPulation in year 1, by age (J) and sex (K)	Provides the population estimates for quarter being forecast
ICRATE(J,K,L)	=Conviction RATEs per 10,000,000 population by age (J), sex (K) and offence (L)	Matrix contains conviction rate data
NCONV(J,K,L)	=Number of persons CONVicted, by age (J), sex (K) and offence (L)	Matrix contains conviction number estimates
NXDISP(M,L)	=Number of persons X DISPosition, by disposition (M) and offence (L)	Matrix contains disposition number estimates
DISP(M,L)	=DISPosition rates (percentages) by disposition (M) and offence (L)	Matrix holds disposition rate data
PRSEED(N1,N)	=PRISoners Expected Eligibility Date, by head sentence (N) and actual expected time to serve (N1)	Matrix contains input sentence length categories to output categories
NPREEC(N1,I)	=Number of PRisoners RECeived in quarter I, by time to serve (N1)	Matrix contains number of detainees received
NPRNOW(N1,I)	=Number of PRisoners NOW (i.e. on hand at end of quarter I, by time to serve (N1)	Matrix contains number of detainees on hand

APPENDIX 3

Table 1

A.B.S. Queensland Juvenile Population Estimation 1970 - 2000
High Projection

Year	No. 10 - 17 year olds
1970	280173
1971	286688
1972	295321
1973	302768
1974	309622
1975	313044
1976	315150
1977	317530
1978	319292
1979	321985
1980	326327
1981	337178
1982	348435
1983	356477
1984	361319
1985	361824
1986	359565
1987	354832
1988	348411
1989	338804
1990	329247
1991	322961
1992	319046
1993	318331
1994	317897
1995	319821
1996	322325
1997	325605
1998	329050
1999	331783
2000	334018

Table 2 *

A.B.S. Population Projections, Qld, Years 1984-2000 (High Estimates)

			Age in Years								
Year	Qtr.	Sex	5-9	10	11	12	13	14	15	16	17
1984	2	M	103027	22658	23259	24544	24693	23401	22708	21670	21324
		F	98277	21315	22451	23678	23777	22412	21845	21030	20365
		T	201304	43973	45710	48222	48470	45813	44553	42700	41689
1984	3	M	102582	22426	23107	24221	24654	23722	22878	21925	21404
		F	97761	21177	22166	23370	23751	22752	21985	21232	20529
		T	200343	43603	45273	47591	48405	46474	44863	43157	41933
1984	4	M	102138	22194	22956	23898	24615	24043	23049	22181	21485
		F	97246	21040	21881	23063	23725	23092	22125	21434	20693
		T	199384	43234	44837	46961	48340	47135	45174	43615	42178
1985	1	M	101694	21962	22804	23575	24576	24364	23219	22436	21565
		F	96731	20903	21596	22755	23699	23432	22265	21636	20857
		T	198425	42865	44400	46330	48275	47796	45484	44072	42422
1985	2	M	101250	21730	22653	23253	24537	24685	23390	22692	21646
		F	96216	20766	21312	22448	23674	23772	22406	21838	21022
		T	197466	42496	43965	45701	48211	48457	45796	44530	42668
1985	3	M	101107	21501	22421	23101	24214	24646	23711	22862	21901
		F	96080	20500	21175	22163	23366	23746	22746	21978	21223
		T	197187	42001	43596	45264	47580	48392	46457	44840	43124
1985	4	M	100965	21273	22189	22950	23891	24607	24032	23032	22157
		F	95945	20234	21038	21878	23059	23721	23086	22118	21425
		T	196910	41507	43227	44828	46950	48328	47118	45150	43582
1986	1	M	100823	21045	21957	22799	23568	24568	24353	23202	22412
		F	95809	19968	20901	21593	22752	23695	23426	22258	21627
		T	196632	41013	42858	44392	46320	48263	47779	45460	44039
1986	2	M	100681	20817	21725	22648	23246	24529	24674	23373	22668
		F	95674	19703	20764	21309	22445	23670	23766	22399	21829
		T	196355	40520	42489	43957	45691	48199	48440	45772	44497
1986	3	M	100734	20703	21497	22416	23095	24206	24635	23694	22838
		F	95647	19670	[illegible]	21172	22160	23362	23740	22739	[illegible]
		T	196381	[illegible]		[illegible]98	45255	47568	48375	[illegible]	
1986	4	M	[illegible]	[illegible]	42091	[illegible]	[illegible]944	23887	[illegible]	[illegible]	39803
		[illegible]	[illegible]708	21612	21589	2155[illegible]			[illegible]948	21455	20517
		F	105334	20535	20515	20491	2[illegible]	[illegible]088	19524	20123	19444
		T	216242	42147	42104	42048	41946	41825	40172	41578	39961
1999	4	M	111141	21644	21593	21564	21513	21451	20843	21250	20746
		F	105554	20566	20519	20496	20456	20401	19739	19972	19612
		T	216695	42210	42112	42060	41969	41852	40582	41222	40358
2000	1	M	111374	21677	21598	21571	21526	21466	21038	21045	20976
		F	105774	20597	20524	20502	20467	20415	19954	19821	19780
		T	217148	42274	42122	42073	41993	41881	40992	40866	40756
2000	2	M	111607	21710	21603	21578	21539	21480	21233	20840	21205
		F	105994	20628	20528	20507	20478	20428	20169	19670	19948
		T	217601	42338	42131	42085	42017	41908	41402	40510	41153
2000	3	M	111840	21743	21608	21585	21552	21495	21429	20635	21435
		F	106215	20659	20533	20513	20489	20442	20384	19519	20116
		T	218055	42402	42141	42098	42041	41937	41813	40154	41551
2000	4	M	112033	21800	21640	21589	21559	21507	21443	20830	21230
		F	106397	20713	20564	20517	20494	20453	20397	19734	19965
		T	218430	42513	42204	42106	42053	41960	41840	40564	41195

* The file QJPOPA comprises the numeric contents similar to those in in this table.

Table 3 *

Qld. Juvenile Offence Rate from Analysis of Court Statistics

(number per 10,000,000 of population)

		Age in Years								
		5-9	10	11	12	13	14	15	16	17
1. HOMICIDE ETC.	M	0	0	0	0	405	0	881	1384	0
	F	0	0	0	0	0	0	0	0	0
2. GREVIOUS ASSAULT	M	0	0	0	0	2025	2564	5284	7383	469
	F	0	0	0	0	421	446	458	1427	0
3. DRIVER ASSAULT	M	0	0	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0	0	0
4. GENERAL ASSAULT	M	0	0	1720	1630	2835	14529	36551	72450	1876
	F	0	0	0	0	2944	1785	14649	19496	0
5. SEXUAL ASSAULTS	M	0	0	0	0	8504	26922	14092	33687	0
	F	0	0	0	0	0	0	0	0	0
6. CARNAL KNOWLEDGE	M	0	0	0	0	0	1709	5284	5538	0
	F	0	0	0	0	0	0	0	0	0
7. ROBBERY AND EXTORTION	M	0	0	0	0	810	1282	2642	5999	0
	F	0	0	0	0	0	0	916	1427	0
8. FRAUD AND MISAPPROPRIATION	M	0	0	0	0	6885	7265	14973	38763	4221
	F	0	0	0	0	3365	0	3662	24251	0
9. U.U.M.V.	M	0	883	2150	5704	25513	55126	85873	117674	4690
	F	0	0	0	845	2103	4908	5035	7608	0
10. STEALING	M	0	16330	58042	99413	165634	297423	346574	448085	20165
	F	0	11260	21380	49835	208605	221310	388647	370423	11785
11. UNLAWFUL POSSESSION	M	0	1324	3440	6519	17009	23503	40074	39686	2814
	F	0	0	0	0	3785	5354	8240	9986	0
12. BURGLARY	M	0	11916	27086	56226	116632	196145	244407	274573	12662
	F	0	1407	2672	10136	12617	18740	32959	24251	0
13. ARSON	M	0	441	0	0	810	855	1321	923	469
	F	0	0	0	0	0	0	0	0	0
14. PROPERTY DAMAGE	M	0	2648	4729	6926	26728	32905	72221	103369	7972
	F	0	0	0	0	2523	4908	14191	9986	0
15. DRINK DRIVING	M	0	0	0	0	0	855	4844	23073	469
	F	0	0	0	0	0	0	0	1902	0
16. DANGEROUS DRIVING	M	0	0	0	0	0	427	1761	9229	938
	F	0	0	0	0	0	0	0	0	0
17. OTHER TRAFFIC OFFENCES	M	0	0	430	815	2430	11111	63414	155515	39861
	F	0	0	0	0	0	446	3662	6657	2455
18. DRUG OFFENCES	M	0	0	0	0	1215	6410	24221	94139	3752
	F	0	0	0	0	1682	1785	5951	20447	0
19. FIREARM OFFENCES	M	0	0	0	0	810	855	1321	3692	469
	F	0	0	0	0	0	0	0	0	0
20. OTHER OFFENCES	M	0	0	0	1630	4050	14529	46680	121366	7034
	F	0	0	0	845	1682	4462	11902	21874	982
21. CARE AND PROTECTION APPLIC.	M	14074	4855	7309	5297	7694	5555	2642	923	0
	F	13838	6548	5345	8447	9253	9816	5493	1427	0
22. CARE AND CONTROL APPLIC.	M	582	1765	5159	6926	9314	15384	9248	5538	0
	F	204	469	891	2112	6309	14278	9155	2378	0

* The file QJORATE comprises numeric contents similar to those in this Table.

Table 4 *

Disposition Matrix

	Police Caution	Dismissed/ Withdrawn	Community Discharge Granted	Absolute and Conditional Discharge	Care and Protection	Parent Recognizance	Fine/Restitution	Community Service Order	Supervision	Care and Control	0-less than 1 months detention	1-less than 2 months detention	2-less than 3 months detention	3-less than 4 months detention	4-less than 5 months detention	5-less than 6 months detention	6-less than 9 months detention	9-less than 12 months detention	12-less than 18 months detention	18-less than 24 months detention	24-less than 36 months detention	36-less than 48 months detention	48+ months detention	TOTAL
1. HOMICIDE ETC.	0.00	18.18	0.00	18.18	0.00	0.00	0.00	0.00	18.18	18.18	0.00	0.00	9.09	0.00	0.00	0.00	0.00	0.00	0.00	9.09	9.09	0.00	0.00	100.0
2. GREVIOUS ASSAULT	0.00	3.64	0.00	34.55	0.00	0.00	3.64	0.00	9.09	7.27	16.36	9.09	9.09	3.64	1.82	0.00	1.82	0.00	0.00	0.00	0.00	0.00	0.00	100.0
3. DRIVER ASSAULT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.0
4. GENERAL ASSAULT	65.48	1.27	0.00	15.74	0.00	0.00	3.55	0.00	4.57	0.25	2.28	1.78	2.79	1.02	0.51	0.51	0.00	0.25	0.00	0.00	0.00	0.00	0.00	100.0
5. SEXUAL ASSAULTS	86.22	1.53	0.00	6.63	0.00	0.00	0.00	0.00	2.55	1.53	1.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.0
6. CARNAL KNOWLEDGE	62.50	3.13	0.00	18.75	0.00	0.00	3.13	0.00	12.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.0
7. ROBBERY AND EXTORTION	12.50	0.00	0.00	20.83	0.00	0.00	0.00	0.00	20.83	20.83	16.67	0.00	4.17	4.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.0
8. FRAUD AND MISAPPROPRIATION	85.59	0.44	0.00	9.61	0.00	0.00	0.00	0.00	1.31	3.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.0
9. U.U.M.V.	33.91	0.66	0.00	19.02	0.00	0.00	1.73	0.00	9.04	7.18	16.22	5.72	3.46	0.80	0.80	1.06	0.40	0.00	0.00	0.00	0.00	0.00	0.00	100.0
10. STEALING	88.52	0.21	0.00	5.46	0.00	0.00	0.19	0.00	1.58	1.32	1.92	0.29	0.16	0.08	0.05	0.05	0.05	0.06	0.05	0.00	0.00	0.00	0.00	100.0
11. UNLAWFUL POSSESSION	61.64	0.55	0.00	20.27	0.00	0.00	0.82	0.00	7.40	9.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.0
12. BURGLARY	54.95	0.50	0.00	19.55	0.00	0.00	0.33	0.00	9.36	9.86	3.38	0.95	0.29	0.12	0.25	0.25	0.12	0.08	0.00	0.00	0.00	0.00	0.00	100.0
13. ARSON	0.00	9.52	0.00	28.57	0.00	0.00	0.00	0.00	23.81	23.81	14.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.0
14. PROPERTY DAMAGE	80.00	0.31	0.00	5.80	0.00	0.46	0.76	0.00	4.58	1.53	3.82	1.22	1.37	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	100.0
15. DRINK DRIVING	0.00	2.53	0.00	25.32	0.00	6.00	64.56	0.00	5.06	1.27	1.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.0
16. DANGEROUS DRIVING	0.00	0.00	0.00	19.35	0.00	0.00	64.52	0.00	9.68	6.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.0
17. OTHER TRAFFIC OFFENCES	0.00	1.01	0.00	65.15	0.00	0.00	32.83	0.00	0.34	0.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.0
18. DRUG OFFENCES	52.19	1.29	0.00	32.13	0.00	0.26	3.86	0.00	5.91	2.57	1.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.0
19. FIREARM OFFENCES	0.00	8.00	0.00	60.00	0.00	0.00	8.00	0.00	12.00	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.0
20. OTHER OFFENCES	33.65	1.34	0.00	49.52	0.00	0.38	9.37	0.00	1.91	3.06	0.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.0
21. CARE AND PROTECTION APPLIC.	0.00	10.10	0.00	59.43	0.00	0.00	0.00	0.00	0.00	0.00	18.52	4.21	3.54	1.35	1.18	1.01	0.67	0.00	0.00	0.00	0.00	0.00	0.00	100.0
22. CARE AND CONTROL APPLIC.	0.00	25.00	0.00	0.38	11.74	0.38	0.76	0.00	15.91	4.55	29.17	8.33	2.65	0.38	0.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.0

* The file QJDISPP comprises the numeric contents of this Table.

APPENDIX 4

APPENDIX 4

This is an Example of File "JSCENEJ". It incorporates the Four Tend Scenario which produced the output which follows below.

```
BASE
 1 4 0 0 1 4 0 0 1 3 0 0 2 2 0 0 2 2 0 0 2 0 0 0 2 0 0 0 2 0 0 0 2 0 0 0 0 0 0 0 0
 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
.125 .000 1.00   11  300
  65  34  12   9   3   3   0   0   3   0   1   0   0   0   0   0   0   0   0   0
 JUVENILE INSTITUTION FORECASTING (JIF) MODEL
1984-2000 : TEST DATA, FOUR TREND SCENARIO, A.B.S. POPN F'CST TO YR 2000
   5   1  22   1   9   0        .04  ****** 1984 Q3 GROWTH IN NUMBERS APPEARING BEYOND POPULATION GROWTH
   5  18  18   6   9   0        .245 ****** 1984 Q4 INCREASE OF MALE &FEMALE DRUG OFFENDING RATE
   5  19  19   5   9   0        .245 ****** 1984 Q4 INCREASE IN FIREARM OFFENCES
   5   9  12   5   9   0        .024 ****** 1984 Q4 INCREASE IN PROPERTY OFFENDING BE&S ETC.
   5  22  22   5   9   0        .024 ****** 1984 Q4 INCREASE IN PROPERTY OFFENDING BE&S ETC.
   5   1  22   1   9   0        .04  ****** 1985 Q3 GROWTH IN NUMBERS APPEARING BEYOND POPULATION GROWTH
   5  18  18   6   9   0        .245 ****** 1985 Q4 INCREASE OF MALE &FEMALE DRUG OFFENDING RATE
   5  19  19   5   9   0        .245 ****** 1985 Q4 INCREASE IN FIREARM OFFENCES
   5   9  12   5   9   0        .024 ****** 1985 Q4 INCREASE IN PROPERTY OFFENDING BE&S ETC.
   5  22  22   5   9   0        .024 ****** 1985 Q4 INCREASE IN PROPERTY OFFENDING BE&S ETC.
   5  18  18   6   9   0        .245 ****** 1986 Q3 INCREASE OF MALE &FEMALE DRUG OFFENDING
   5  19  19   5   9   0        .245 ****** 1986 Q4 INCREASE IN FIREARM OFFENCES
   5   9  12   5   9   0        .024 ****** 1986 Q4 INCREASE IN PROPERTY OFFENDING BE&S ETC.
   5  22  22   5   9   0        .024 ****** 1986 Q4 INCREASE IN PROPERTY OFFENDING BE&S ETC.
   5   1  22   1   9   0        .04  ****** 1987 Q3 GROWTH IN NUMBERS APPEARING BEYOND POPULATION GROWTH
   5  18  18   6   9   0        .245 ****** 1987 Q3 INCREASE OF MALE &FEMALE DRUG OFFENDING
   5   9  12   5   9   0        .024 ****** 1987 Q4 INCREASE IN PROPERTY OFFENDING BE&S ETC.
   5  22  22   5   9   0        .024 ****** 1987 Q4 INCREASE IN PROPERTY OFFENDING BE&S ETC.
   5   1  22   1   9   0        .04  ****** 1988 Q3 GROWTH IN NUMBERS APPEARING BEYOND POPULATION GROWTH
   5  18  18   6   9   0        .24  ****** 1988 Q3 INCREASE OF MALE &FEMALE DRUG OFFENDING
   5   9  12   5   9   0        .02  ****** 1988 Q4 INCREASE IN PROPERTY OFFENDING BE&S ETC.
   5  22  22   5   9   0        .02  ****** 1988 Q4 INCREASE IN PROPERTY OFFENDING BE&S ETC.
   5   1  22   1   9   0        .04  ****** 1989 Q3 GROWTH IN NUMBERS APPEARING BEYOND POPULATION GROWTH
   5  18  18   6   9   0        .2   ****** 1989 Q3 INCREASE OF MALE &FEMALE DRUG OFFENDING
   5   1  22   1   9   0        .03  ****** 1990 Q3 GROWTH IN NUMBERS APPEARING BEYOND POPULATION GROWTH
  5-  18  18   6   9   0        .15  ****** 1990 Q3 INCREASE OF MALE &FEMALE DRUG OFFENDING
   5   1  22   1   9   0        .02  ****** 1991 Q3 GROWTH IN NUMBERS APPEARING BEYOND POPULATION GROWTH
   5  18  18   6   9   0        .13  ****** 1991 Q3 INCREASE OF MALE &FEMALE DRUG OFFENDING
   5   1  22   1   9   0        .01  ****** 1992 Q3 GROWTH IN NUMBERS APPEARING BEYOND POPULATION GROWTH
   5  18  18   6   9   0        .053 ****** 1992 Q3 INCREASE OF MALE &FEMALE DRUG OFFENDING
```

Computer Output of JIF Model

The next fifteen pages are an example of the computer printed output of the JIF model. An example of the graphical output follows:

```
JUVENILE INSTITUTION FORECASTING (JIF) MODEL
1984-2000 : TEST DATA, FOUR TREND SCENARIO, A.B.S. QLD POPN FCST TO 2000


****** 1984 Q3 GROWTH IN NUMBERS APPEARING BEYOND POPULATION GROWTH

  4.00 PER CENT CHANGE IN CONVICTION RATES FOR HOMICIDE     COLUMNS  1 TO  9
  4.00 PER CENT CHANGE IN CONVICTION RATES FOR GRV. ASSAULT COLUMNS  1 TO  9
  4.00 PER CENT CHANGE IN CONVICTION RATES FOR DRV. ASSAULT COLUMNS  1 TO  9
  4.00 PER CENT CHANGE IN CONVICTION RATES FOR MIN. ASSAULT COLUMNS  1 TO  9
  4.00 PER CENT CHANGE IN CONVICTION RATES FOR SEX ASSAULT  COLUMNS  1 TO  9
  4.00 PER CENT CHANGE IN CONVICTION RATES FOR CARN KNOWLGE COLUMNS  1 TO  9
  4.00 PER CENT CHANGE IN CONVICTION RATES FOR ROB.- EXTORT COLUMNS  1 TO  9
  4.00 PER CENT CHANGE IN CONVICTION RATES FOR FRAUD-MISSAP COLUMNS  1 TO  9
  4.00 PER CENT CHANGE IN CONVICTION RATES FOR U.U.M.V.     COLUMNS  1 TO  9
  4.00 PER CENT CHANGE IN CONVICTION RATES FOR STEALING     COLUMNS  1 TO  9
  4.00 PER CENT CHANGE IN CONVICTION RATES FOR UNLAW POSSES COLUMNS  1 TO  9
  4.00 PER CENT CHANGE IN CONVICTION RATES FOR BURGLARY     COLUMNS  1 TO  9
  4.00 PER CENT CHANGE IN CONVICTION RATES FOR ARSON        COLUMNS  1 TO  9
  4.00 PER CENT CHANGE IN CONVICTION RATES FOR PROPERTY DAM COLUMNS  1 TO  9
  4.00 PER CENT CHANGE IN CONVICTION RATES FOR DRINK DRIVIN COLUMNS  1 TO  9
  4.00 PER CENT CHANGE IN CONVICTION RATES FOR DANG. DRIVIN COLUMNS  1 TO  9
  4.00 PER CENT CHANGE IN CONVICTION RATES FOR OTH. TRAFFIC COLUMNS  1 TO  9
  4.00 PER CENT CHANGE IN CONVICTION RATES FOR DRUG OFFNCES COLUMNS  1 TO  9
  4.00 PER CENT CHANGE IN CONVICTION RATES FOR FIREARM OFFS COLUMNS  1 TO  9
  4.00 PER CENT CHANGE IN CONVICTION RATES FOR OTHER OFFNCS COLUMNS  1 TO  9
  4.00 PER CENT CHANGE IN CONVICTION RATES FOR C&P APPLICAT COLUMNS  1 TO  9
  4.00 PER CENT CHANGE IN CONVICTION RATES FOR C&C APPLICAT COLUMNS  1 TO  9
```


(continued on next page)

NUMBER OF PERSONS APPEARING BY AGE, SEX AND MOST SERIOUS OFFENCE - QUEENSLAND - QTR. NO.3 1984

AGE:		5-9	10	11	12	13	14	15	16	17	TOTAL
HOMICIDE											
	M	0	0	0	0	1	0	2	3	0	6
	F	0	0	0	0	0	0	0	0	0	0
	T	0	0	0	0	1	0	2	3	0	6
GRV. ASSAULT											
	M	0	0	0	0	5	6	12	17	1	41
	F	0	0	0	0	1	1	1	3	0	6
	T	0	0	0	0	6	7	13	20	1	47
DRV. ASSAULT											
	M	0	0	0	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0	0	0	0
	T	0	0	0	0	0	0	0	0	0	0
MIN. ASSAULT											
	M	0	0	4	4	7	35	86	163	4	303
	F	0	0	0	0	7	4	33	43	0	87
	T	0	0	4	4	14	39	119	206	4	390
SEX ASSAULT											
	M	0	0	0	0	22	66	33	76	0	197
	F	0	0	0	0	0	0	0	0	0	0
	T	0	0	0	0	22	66	33	76	0	197
CARN KNOWLGE											
	M	0	0	0	0	0	4	12	12	0	28
	F	0	0	0	0	0	0	0	0	0	0
	T	0	0	0	0	0	4	12	12	0	28
ROB.- EXTORT											
	M	0	0	0	0	2	3	6	14	0	25
	F	0	0	0	0	0	0	2	3	0	5
	T	0	0	0	0	2	3	8	17	0	30
FRAUD-MISSAP											
	M	0	0	0	0	18	18	35	87	9	167
	F	0	0	0	0	8	0	8	53	0	69
	T	0	0	0	0	26	18	43	140	9	236
U.U.M.V.											
	M	0	2	5	15	66	134	203	265	10	700
	F	0	0	0	2	5	11	11	17	0	46
	T	0	2	5	17	71	145	214	282	10	746
STEALING											
	M	0	38	140	254	425	724	818	1010	45	3454
	F	0	25	50	123	516	516	883	810	25	2948
	T	0	63	190	377	941	1240	1701	1820	70	6402
UNLAW POSSES											
	M	0	3	8	17	44	57	95	89	6	319
	F	0	0	0	0	9	12	19	22	0	62
	T	0	3	8	17	53	69	114	111	6	381
BURGLARY											
	M	0	28	66	144	300	477	577	619	28	2239
	F	0	3	6	25	31	44	75	53	0	237
	T	0	31	72	169	331	521	652	672	28	2476
ARSON											
	M	0	1	0	0	2	2	3	2	1	11
	F	0	0	0	0	0	0	0	0	0	0
	T	0	1	0	0	2	2	3	2	1	11
PROPERTY DAM											
	M	0	6	11	18	69	90	171	233	18	606
	F	0	0	0	0	6	11	32	22	0	71
	T	0	6	11	18	75	91	203	255	18	677
DRINK DRIVIN											
	M	0	0	0	0	0	2	11	52	1	66
	F	0	0	0	0	0	0	0	4	0	4
	T	0	0	0	0	0	2	11	56	1	70
DANG. DRIVIN											
	M	0	0	0	0	0	1	4	21	2	28
	F	0	0	0	0	0	0	0	0	0	0
	T	0	0	0	0	0	1	4	21	2	28
OTH. TRAFFIC											
	M	0	0	1	2	6	27	150	350	88	624
	F	0	0	0	0	0	1	8	15	5	29
	T	0	0	1	2	6	28	158	365	93	653
DRUG OFFNCES											
	M	0	0	0	0	3	16	57	212	8	296
	F	0	0	0	0	4	4	14	45	0	67
	T	0	0	0	0	7	20	71	257	8	363
FIREARM OFFS											
	M	0	0	0	0	2	2	3	8	1	16
	F	0	0	0	0	0	0	0	0	0	0
	T	0	0	0	0	2	2	3	8	1	16
OTHER OFFNCS											
	M	0	0	0	4	10	35	110	274	16	449
	F	0	0	0	2	4	10	27	48	2	93
	T	0	0	0	6	14	45	137	322	18	542
C&P APPLICAT											
	M	151	11	18	14	20	14	6	2	0	236
	F	141	15	12	21	23	23	12	3	0	250
	T	292	26	30	35	43	37	18	5	0	486
C&C APPLICAT											
	M	6	4	12	18	24	37	22	12	0	135
	F	2	1	2	5	16	33	21	5	0	85
	T	8	5	14	23	40	70	43	17	0	220
TOTAL											
	M	157	93	265	490	1026	1740	2416	3521	238	9946
	F	143	44	70	178	630	670	1146	1146	32	4059
	T	300	137	335	668	1656	2410	3562	4667	270	14005

(continued on next page)

NUMBER OF JUVENILES BY MOST SERIOUS OFFENCE AND DISPOSITION - QUEENSLAND - QTR. NO.3 1984

	CAUTN	DISM	CM.PL	A-O	C-P	RCI	FINE	CSO	SUPV	C-C	-DETENTION PRIODS(MONTHS)- 0-1	1-2	2-3	3-4	4-5	5-6	6-9	9-12	12-18	18-24	24-36	36-48	48+	TOTAL
HOMICIDE	0	1	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	1	1	0	7
GRV. ASSAULT	0	2	0	16	0	0	2	0	4	3	8	4	4	2	1	0	1	0	0	0	0	0	0	47
DRV. ASSAULT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MIN. ASSAULT	255	5	0	61	0	0	14	0	18	1	9	7	11	4	2	2	0	1	0	0	0	0	0	390
SEX ASSAULT	170	3	0	13	0	0	0	0	5	3	3	0	0	0	0	0	0	0	0	0	0	0	0	197
CARN KNOWLGE	18	1	0	5	0	0	1	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29
ROB.- EXTORT	4	0	0	6	0	0	0	0	6	6	5	0	1	1	0	0	0	0	0	0	0	0	0	29
FRAUD-MISSAP	202	1	0	23	0	0	0	0	3	7	0	0	0	0	0	0	0	0	0	0	0	0	0	236
U.U.M.V.	253	5	0	142	0	0	13	0	67	54	121	43	26	6	6	8	3	0	0	0	0	0	0	747
STEALING	5667	13	0	350	0	0	12	0	101	85	123	19	10	5	3	3	3	4	3	0	0	0	0	6401
UNLAW POSSES	235	2	0	77	0	0	3	0	28	36	0	0	0	0	0	0	0	0	0	0	0	0	0	391
BURGLARY	1361	12	0	484	0	0	8	0	232	244	84	24	7	3	6	6	3	2	0	0	0	0	0	2476
ARSON	0	1	0	3	0	0	0	0	3	3	2	0	0	0	0	0	0	0	0	0	0	0	0	12
PROPERTY DAM	542	2	0	39	0	3	5	0	31	10	26	8	9	0	0	0	1	0	0	0	0	0	0	676
DRINK DRIVIN	0	2	0	18	0	0	45	0	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0	71
DANG. DRIVIN	0	0	0	5	0	0	18	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	28
OTH. TRAFFIC	0	7	0	425	0	0	214	0	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	652
DRUG OFFNCES	189	5	0	117	0	1	14	0	21	9	7	0	0	0	0	0	0	0	0	0	0	0	0	363
FIREARM OFFS	0	1	0	10	0	0	1	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	16
OTHER OFFNCS	182	7	0	268	0	2	51	0	10	17	4	0	0	0	0	0	0	0	0	0	0	0	0	541
C&P APPLICAT	0	49	0	289	0	0	0	0	0	0	98	20	17	7	6	5	3	0	0	0	0	0	0	486
C&C APPLICAT	6	55	0	1	26	1	2	0	35	10	64	18	6	1	2	0	0	0	0	0	0	0	0	221
TOTAL	9078	174	0	2353	26	7	403	0	580	498	547	143	92	29	26	24	14	7	3	0	1	1	0	14006

DETAINEES RECEIVED DURING QTR. NO.3 1984, AND DETAINEES ON HAND AT END OF QTR. - BY TIME REMAINING TO SERVE.(MONTHS)

TIME REMAINING:	0-3	3-6	6-9	9-12	12-15	15-18	18-21	21-24	24-27	27-30	30-33	33-36	36-39	39-42	42-45	45-48	48-51	51-54	54-57	57+	TOTAL
DETAINEES RECEIVED:	261	26	5	2	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	297
DETAINEES ON HAND:	67	38	14	5	4	1	0	3	0	1	1	0	0	0	0	0	0	0	0	0	134

****** 1984 Q4 INCREASE OF MALE &FEMALE DRUG OFFENDING RATE

24.50 PER CENT CHANGE IN CONVICTION RATES FOR DRUG OFFNCES COLUMNS 6 TO 9

****** 1984 Q4 INCREASE IN FIREARM OFFENCES

24.50 PER CENT CHANGE IN CONVICTION RATES FOR FIREARM OFFS COLUMNS 5 TO 9

****** 1984 Q4 INCREASE IN PROPERTY OFFENDING BE&S ETC.

2.40 PER CENT CHANGE IN CONVICTION RATES FOR U.U.M.V. COLUMNS 5 TO 9
2.40 PER CENT CHANGE IN CONVICTION RATES FOR STEALING COLUMNS 5 TO 9
2.40 PER CENT CHANGE IN CONVICTION RATES FOR UNLAW POSSES COLUMNS 5 TO 9
2.40 PER CENT CHANGE IN CONVICTION RATES FOR BURGLARY COLUMNS 5 TO 9

(continued on next page)

```
****** 1984 Q4 INCREASE IN PROPERTY OFFENDING BE&S ETC.

   2.40 PER CENT CHANGE IN CONVICTION RATES FOR C&C APPLICAT COLUMNS  5 TO  9



DETAINEES RECEIVED DURING QTR. NO.2  1985, AND DETAINEES ON HAND AT END OF QTR. - BY TIME REMAINING TO SERVE.(MONTHS)
TIME REMAINING:
  0-3   3-6   6-9   9-12  12-15 15-18 18-21 21-24 24-27 27-30 30-33 33-36 36-39 39-42 42-45 45-48 48-51 51-54 54-57  57+  TOTAL
DETAINEES RECEIVED:
  268    26     5     2     2     1     0     0     0     0     0     1     0     0     0     0     0     0     0     0   305
DETAINEES ON HAND:
   70    37     8     5     6     1     2     1     0     1     0     1     0     1     0     0     0     0     0     0   133


****** 1985 Q3 GROWTH IN NUMBERS APPEARING BEYOND POPULATION GROWTH

   4.00 PER CENT CHANGE IN CONVICTION RATES FOR HOMICIDE     COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR GRV. ASSAULT COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR ORV. ASSAULT COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR MIN. ASSAULT COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR SEX ASSAULT  COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR CARN KNOWLGE COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR ROB.- EXTORT COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR FRAUD-MISSAP COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR U.U.M.V.     COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR STEALING     COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR UNLAW POSSES COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR BURGLARY     COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR ARSON        COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR PROPERTY DAM COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR DRINK DRIVIN COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR DANG. DRIVIN COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR OTH. TRAFFIC COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR DRUG OFFNCES COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR FIREARM OFFS COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR OTHER OFFNCS COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR C&P APPLICAT COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR C&C APPLICAT COLUMNS  1 TO  9


****** 1985 Q4 INCREASE OF MALE &FEMALE DRUG OFFENDING RATE

  24.50 PER CENT CHANGE IN CONVICTION RATES FOR DRUG OFFNCES COLUMNS  6 TO  9


****** 1985 Q4 INCREASE IN FIREARM OFFENCES

  24.50 PER CENT CHANGE IN CONVICTION RATES FOR FIREARM OFFS COLUMNS  5 TO  9


****** 1985 Q4 INCREASE IN PROPERTY OFFENDING BE&S ETC.

   2.40 PER CENT CHANGE IN CONVICTION RATES FOR U.U.M.V.     COLUMNS  5 TO  9
   2.40 PER CENT CHANGE IN CONVICTION RATES FOR STEALING     COLUMNS  5 TO  9
   2.40 PER CENT CHANGE IN CONVICTION RATES FOR UNLAW POSSES COLUMNS  5 TO  9
   2.40 PER CENT CHANGE IN CONVICTION RATES FOR BURGLARY     COLUMNS  5 TO  9


****** 1985 Q4 INCREASE IN PROPERTY OFFENDING BE&S ETC.

   2.40 PER CENT CHANGE IN CONVICTION RATES FOR C&C APPLICAT COLUMNS  5 TO  9
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DETAINEES RECEIVED DURING QTR. NO.2  1986, AND DETAINEES ON HAND AT END OF QTR. - BY TIME REMAINING TO SERVE.(MONTHS)
TIME REMAINING:
  0-3   3-6   6-9   9-12  12-15 15-18 18-21 21-24 24-27 27-30 30-33 33-36 36-39 39-42 42-45 45-48 48-51 51-54 54-57  57+  TOTAL
DETAINEES RECEIVED:
  289    29     5     2     0     3     0     0     0     0     1     0     0     0     0     0     0     0     0     0   329
DETAINEES ON HAND:
   78    39    12     6     1     4     0     2     2     1     1     0     0     1     0     0     0     0     0     0   147


****** 1986 Q3 INCREASE OF MALE &FEMALE DRUG OFFENDING

  24.50 PER CENT CHANGE IN CONVICTION RATES FOR DRUG OFFNCES COLUMNS  6 TO  9


****** 1986 Q4 INCREASE IN FIREARM OFFENCES

  24.50 PER CENT CHANGE IN CONVICTION RATES FOR FIREARM OFFS COLUMNS  5 TO  9


****** 1986 Q4 INCREASE IN PROPERTY OFFENDING BE&S ETC.

  2.40 PER CENT CHANGE IN CONVICTION RATES FOR U.U.M.V.     COLUMNS  5 TO  9
  2.40 PER CENT CHANGE IN CONVICTION RATES FOR STEALING     COLUMNS  5 TO  9
  2.40 PER CENT CHANGE IN CONVICTION RATES FOR UNLAW POSSES COLUMNS  5 TO  9
  2.40 PER CENT CHANGE IN CONVICTION RATES FOR BURGLARY     COLUMNS  5 TO  9


****** 1986 Q4 INCREASE IN PROPERTY OFFENDING BE&S ETC.

  2.40 PER CENT CHANGE IN CONVICTION RATES FOR C&C APPLICAT COLUMNS  5 TO  9


DETAINEES RECEIVED DURING QTR. NO.2  1987, AND DETAINEES ON HAND AT END OF QTR. - BY TIME REMAINING TO SERVE.(MONTHS)
TIME REMAINING:
  0-3   3-6   6-9   9-12  12-15 15-18 18-21 21-24 24-27 27-30 30-33 33-36 36-39 39-42 42-45 45-48 48-51 51-54 54-57  57+  TOTAL
DETAINEES RECEIVED:
  295    29     5     2     0     3     0     0     0     1     0     0     0     0     0     0     0     0     0     0   335
DETAINEES ON HAND:
   74    43    10     7     2     4     1     0     1     3     1     0     0     0     0     0     0     0     0     0   146


****** 1987 Q3 GROWTH IN NUMBERS APPEARING BEYOND POPULATION GROWTH

  4.00 PER CENT CHANGE IN CONVICTION RATES FOR HOMICIDE     COLUMNS  1 TO  9
  4.00 PER CENT CHANGE IN CONVICTION RATES FOR GRV. ASSAULT COLUMNS  1 TO  9
  4.00 PER CENT CHANGE IN CONVICTION RATES FOR DRV. ASSAULT COLUMNS  1 TO  9
  4.00 PER CENT CHANGE IN CONVICTION RATES FOR MIN. ASSAULT COLUMNS  1 TO  9
  4.00 PER CENT CHANGE IN CONVICTION RATES FOR SEX ASSAULT  COLUMNS  1 TO  9
  4.00 PER CENT CHANGE IN CONVICTION RATES FOR CARN KNOWLGE COLUMNS  1 TO  9
  4.00 PER CENT CHANGE IN CONVICTION RATES FOR ROB.- EITORT COLUMNS  1 TO  9
  4.00 PER CENT CHANGE IN CONVICTION RATES FOR FRAUD-MISSAP COLUMNS  1 TO  9
  4.00 PER CENT CHANGE IN CONVICTION RATES FOR U.U.M.V.     COLUMNS  1 TO  9
  4.00 PER CENT CHANGE IN CONVICTION RATES FOR STEALING     COLUMNS  1 TO  9
  4.00 PER CENT CHANGE IN CONVICTION RATES FOR UNLAW POSSES COLUMNS  1 TO  9
  4.00 PER CENT CHANGE IN CONVICTION RATES FOR BURGLARY     COLUMNS  1 TO  9
  4.00 PER CENT CHANGE IN CONVICTION RATES FOR ARSON        COLUMNS  1 TO  9
  4.00 PER CENT CHANGE IN CONVICTION RATES FOR PROPERTY DAM COLUMNS  1 TO  9
  4.00 PER CENT CHANGE IN CONVICTION RATES FOR DRINK DRIVIN COLUMNS  1 TO  9
  4.00 PER CENT CHANGE IN CONVICTION RATES FOR DANG. DRIVIN COLUMNS  1 TO  9
  4.00 PER CENT CHANGE IN CONVICTION RATES FOR OTH. TRAFFIC COLUMNS  1 TO  9
  4.00 PER CENT CHANGE IN CONVICTION RATES FOR DRUG OFFNCES COLUMNS  1 TO  9
  4.00 PER CENT CHANGE IN CONVICTION RATES FOR FIREARM OFFS COLUMNS  1 TO  9
  4.00 PER CENT CHANGE IN CONVICTION RATES FOR OTHER OFFNCS COLUMNS  1 TO  9
  4.00 PER CENT CHANGE IN CONVICTION RATES FOR C&P APPLICAT COLUMNS  1 TO  9
  4.00 PER CENT CHANGE IN CONVICTION RATES FOR C&C APPLICAT COLUMNS  1 TO  9


****** 1987 Q3 INCREASE OF MALE &FEMALE DRUG OFFENDING

  24.50 PER CENT CHANGE IN CONVICTION RATES FOR DRUG OFFNCES COLUMNS  6 TO  9
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****** 1987 Q4 INCREASE IN PROPERTY OFFENDING BE&S ETC.

   2.40 PER CENT CHANGE IN CONVICTION RATES FOR U.U.M.V.     COLUMNS  5 TO  9
   2.40 PER CENT CHANGE IN CONVICTION RATES FOR STEALING     COLUMNS  5 TO  9
   2.40 PER CENT CHANGE IN CONVICTION RATES FOR UNLAW POSSES COLUMNS  5 TO  9
   2.40 PER CENT CHANGE IN CONVICTION RATES FOR BURGLARY     COLUMNS  5 TO  9


****** 1987 Q4 INCREASE IN PROPERTY OFFENDING BE&S ETC.

   2.40 PER CENT CHANGE IN CONVICTION RATES FOR C&C APPLICAT COLUMNS  5 TO  9



DETAINEES RECEIVED DURING QTR. NO.2  1988, AND DETAINEES ON HAND AT END OF QTR. - BY TIME REMAINING TO SERVE.(MONTHS)
TIME REMAINING:
  0-3   3-6   6-9   9-12  12-15 15-18 18-21 21-24 24-27 27-30 30-33 33-36 36-39 39-42 42-45 45-48 48-51 51-54 54-57  57+  TOTAL
DETAINEES RECEIVED:
  306    30     6     3     0     3     0     0     0     1     0     0     0     0     0     0     0     0     0     0   349
DETAINEES ON HAND:
   79    45    11     6     4     6     1     1     2     1     0     0     0     0     0     0     0     0     0     0   156


****** 1988 Q3 GROWTH IN NUMBERS APPEARING BEYOND POPULATION GROWTH

   4.00 PER CENT CHANGE IN CONVICTION RATES FOR HOMICIDE     COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR GRV. ASSAULT COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR DRV. ASSAULT COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR MIN. ASSAULT COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR SEX ASSAULT  COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR CARN KNOWLGE COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR ROB.- EXTORT COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR FRAUD-MISSAP COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR U.U.M.V.     COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR STEALING     COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR UNLAW POSSES COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR BURGLARY     COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR ARSON        COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR FROPERTY DAM COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR DRINK DRIVIN COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR DANG. DRIVIN COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR OTH. TRAFFIC COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR DRUG OFFNCES COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR FIREARM OFFS COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR OTHER OFFNCS COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR C&P APPLICAT COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR C&C APPLICAT COLUMNS  1 TO  9


****** 1988 Q3 INCREASE OF MALE &FEMALE DRUG OFFENDING

  24.00 PER CENT CHANGE IN CONVICTION RATES FOR DRUG OFFNCES COLUMNS  6 TO  9


****** 1988 Q4 INCREASE IN PROPERTY OFFENDING BE&S ETC.

   2.00 PER CENT CHANGE IN CONVICTION RATES FOR U.U.M.V.     COLUMNS  5 TO  9
   2.00 PER CENT CHANGE IN CONVICTION RATES FOR STEALING     COLUMNS  5 TO  9
   2.00 PER CENT CHANGE IN CONVICTION RATES FOR UNLAW POSSES COLUMNS  5 TO  9
   2.00 PER CENT CHANGE IN CONVICTION RATES FOR BURGLARY     COLUMNS  5 TO  9


****** 1988 Q4 INCREASE IN PROPERTY OFFENDING BE&S ETC.

   2.00 PER CENT CHANGE IN CONVICTION RATES FOR C&C APPLICAT COLUMNS  5 TO  9



DETAINEES RECEIVED DURING QTR. NO.2  1989, AND DETAINEES ON HAND AT END OF QTR. - BY TIME REMAINING TO SERVE.(MONTHS)
TIME REMAINING:
  0-3   3-6   6-9   9-12  12-15 15-18 18-21 21-24 24-27 27-30 30-33 33-36 36-39 39-42 42-45 45-48 48-51 51-54 54-57  57+  TOTAL
DETAINEES RECEIVED:
  314    31     6     3     0     3     0     0     1     0     0     0     0     0     1     0     0     0     0     0   359
DETAINEES ON HAND:
   83    48    13     7     3     4     0     0     3     0     1     0     0     0     1     0     0     0     0     0   163
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(continued on next page)

JIF Computer Output Example (continued)

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****** 1989 Q3 GROWTH IN NUMBERS APPEARING BEYOND POPULATION GROWTH

   4.00 PER CENT CHANGE IN CONVICTION RATES FOR HOMICIDE     COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR GRV. ASSAULT COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR ORV. ASSAULT COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR MIN. ASSAULT COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR SEX ASSAULT  COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR CARN KNOWLGE COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR ROB.- EXTORT COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR FRAUD-MISSAP COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR U.U.M.V.     COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR STEALING     COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR UNLAW POSSES COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR BURGLARY     COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR ARSON        COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR PROPERTY DAM COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR DRINK DRIVIN COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR DANG. DRIVIN COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR OTH. TRAFFIC COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR DRUG OFFNCES COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR FIREARM OFFS COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR OTHER OFFNCS COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR C&P APPLICAT COLUMNS  1 TO  9
   4.00 PER CENT CHANGE IN CONVICTION RATES FOR C&C APPLICAT COLUMNS  1 TO  9


****** 1989 Q3 INCREASE OF MALE &FEMALE DRUG OFFENDING

  20.00 PER CENT CHANGE IN CONVICTION RATES FOR DRUG OFFNCES COLUMNS  6 TO  9
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(continued on next page)

NUMBER OF PERSONS APPEARING BY AGE, SEX AND MOST SERIOUS OFFENCE - QUEENSLAND - QTR. NO.2 1990

AGE:		5-9	10	11	12	13	14	15	16	17	TOTAL
HOMICIDE											
	M	0	0	0	0	1	0	2	4	0	7
	F	0	0	0	0	0	0	0	0	0	0
	T	0	0	0	0	1	0	2	4	0	7
GRV. ASSAULT											
	M	0	0	0	0	5	7	14	20	1	47
	F	0	0	0	0	1	1	1	4	0	7
	T	0	0	0	0	6	8	15	24	1	54
DRV. ASSAULT											
	M	0	0	0	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0	0	0	0
	T	0	0	0	0	0	0	0	0	0	0
MIN. ASSAULT											
	M	0	0	4	4	7	37	98	201	5	356
	F	0	0	0	0	7	4	37	51	0	99
	T	0	0	4	4	14	41	135	252	5	455
SEX ASSAULT											
	M	0	0	0	0	21	69	38	93	0	221
	F	0	0	0	0	0	0	0	0	0	0
	T	0	0	0	0	21	69	38	93	0	221
CARN KNOWLGE											
	M	0	0	0	0	0	4	14	15	0	33
	F	0	0	0	0	0	0	0	0	0	0
	T	0	0	0	0	0	4	14	15	0	33
ROB.- EXTORT											
	M	0	0	0	0	2	3	7	17	0	29
	F	0	0	0	0	0	0	2	4	0	6
	T	0	0	0	0	2	3	9	21	0	35
FRAUD-MISSAP											
	M	0	0	0	0	17	19	40	107	12	195
	F	0	0	0	0	8	0	9	64	0	81
	T	0	0	0	0	25	19	49	171	12	276
U.U.M.V.											
	M	0	2	5	14	71	158	257	365	15	887
	F	0	0	0	2	6	13	14	22	0	57
	T	0	2	5	16	77	171	271	387	15	944
STEALING											
	M	0	40	141	245	462	853	1037	1392	65	4235
	F	0	26	49	117	558	603	1108	1890	37	3588
	T	0	66	190	362	1020	1456	2145	2482	102	7823
UNLAW POSSES											
	M	0	3	8	16	47	67	120	123	9	393
	F	0	0	0	0	10	15	23	29	0	77
	T	0	3	8	16	57	82	143	152	9	470
BURGLARY											
	M	0	29	66	138	326	563	731	853	41	2747
	F	0	3	6	24	34	51	94	71	0	283
	T	0	32	72	162	360	614	825	924	41	3030
ARSON											
	M	0	1	0	0	2	2	4	3	1	13
	F	0	0	0	0	0	0	0	0	0	0
	T	0	1	0	0	2	2	4	3	1	13
PROPERTY DAM											
	M	0	6	11	17	67	84	193	286	23	687
	F	0	0	0	0	6	12	36	26	0	80
	T	0	6	11	17	73	96	229	312	23	767
DRINK DRIVIN											
	M	0	0	0	0	0	2	13	64	1	80
	F	0	0	0	0	0	0	0	5	0	5
	T	0	0	0	0	0	2	13	69	1	85
DANG. DRIVIN											
	M	0	0	0	0	0	1	5	26	3	35
	F	0	0	0	0	0	0	0	0	0	0
	T	0	0	0	0	0	1	5	26	3	35
OTH. TRAFFIC											
	M	0	0	1	2	6	28	169	431	114	751
	F	0	0	0	0	0	1	9	17	7	34
	T	0	0	1	2	6	29	178	448	121	785
DRUG OFFNCES											
	M	0	0	0	0	3	59	231	932	38	1263
	F	0	0	0	0	4	15	54	192	0	265
	T	0	0	0	0	7	74	285	1124	38	1528
FIREARM OFFS											
	M	0	0	0	0	4	4	7	20	3	38
	F	0	0	0	0	0	0	0	0	0	0
	T	0	0	0	0	4	4	7	20	3	38
OTHER OFFNCS											
	M	0	0	0	4	10	37	125	336	20	532
	F	0	0	0	2	4	11	30	57	3	107
	T	0	0	0	6	14	48	155	393	23	639
C&P APPLICAT											
	M	178	12	18	13	19	14	7	3	0	264
	F	166	15	12	20	22	24	14	4	0	277
	T	344	27	30	33	41	38	21	7	0	541
C&C APPLICAT											
	M	7	4	13	17	26	44	28	17	0	156
	F	2	1	2	5	17	39	26	7	0	99
	T	9	5	15	22	43	83	54	24	0	255
TOTAL											
	M	185	97	267	470	1096	2055	3140	5308	351	12969
	F	168	45	69	170	677	789	1457	1643	47	5865
	T	353	142	336	640	1773	2844	4597	6951	398	18834

(continued on next page)

NUMBER OF JUVENILES BY MOST SERIOUS OFFENCE AND DISPOSITION - QUEENSLAND - QTR. NO.2 1990

	CAUTN	DISM	CM.PL	A-O	C-P	RCZ	FINE	CSO	SUPV	C-C	-DETENTION PERIODS(MONTHS)- 0-1	1-2	2-3	3-4	4-5	5-6	6-9	9-12	12-18	18-24	24-36	36-48	48+	TOTAL
HOMICIDE	0	1	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	1	1	0		7
GRV. ASSAULT	0	2	0	19	0	0	2	0	5	4	9	5	5	2	1	0	1	0	0	0	0	0	0	55
DRV. ASSAULT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MIN. ASSAULT	298	6	0	72	0	0	16	0	21	1	10	8	13	5	2	2	0	1	0	0	0	0	0	455
SEX ASSAULT	191	3	0	15	0	0	0	0	6	3	3	0	0	0	0	0	0	0	0	0	0	0	0	221
CARN KNOWLGE	21	1	0	6	0	0	1	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33
ROB.- EXTORT	4	0	0	7	0	0	0	0	7	7	6	0	1	1	0	0	0	0	0	0	0	0	0	33
FRAUD-MISSAP	236	1	0	27	0	0	0	0	4	8	0	0	0	0	0	0	0	0	0	0	0	0	0	276
U.U.M.V.	320	6	0	100	0	0	16	0	85	68	153	54	33	8	8	10	4	0	0	0	0	0	0	945
STEALING	6925	16	0	427	0	0	15	0	124	103	150	23	13	6	4	4	4	5	4	0	0	0	0	7823
UNLAW POSSES	290	3	0	95	0	0	4	0	35	44	0	0	0	0	0	0	0	0	0	0	0	0	0	471
BURGLARY	1665	15	0	592	0	0	10	0	284	299	102	29	9	4	8	8	4	2	0	0	0	0	0	3031
ARSON	0	1	0	4	0	0	0	0	3	3	2	0	0	0	0	0	0	0	0	0	0	0	0	13
PROPERTY DAM	614	2	0	44	0	4	6	0	35	12	29	9	11	0	0	0	1	0	0	0	0	0	0	767
DRINK DRIVIN	0	2	0	22	0	0	55	0	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0	85
DANG. DRIVIN	0	0	0	7	0	0	23	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	35
OTH. TRAFFIC	0	8	0	511	0	0	258	0	3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	785
DRUG OFFNCES	797	20	0	491	0	4	59	0	90	39	20	0	0	0	0	0	0	0	0	0	0	0	0	1520
FIREARM OFFS	0	3	0	23	0	0	3	6	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	39
OTHER OFFNCS	215	9	0	316	0	2	60	0	12	20	5	0	0	0	0	0	0	0	0	0	0	0	0	639
C&P APPLICAT	0	55	0	322	0	0	0	0	0	0	100	23	19	7	6	5	4	0	0	0	0	0	0	541
C&C APPLICAT	0	64	0	1	30	1	2	0	41	12	74	21	7	1	2	0	0	0	0	0	0	0	0	256
TOTAL	11576	218	0	3182	30	11	530	0	772	637	672	172	112	34	31	29	18	8	4	9	1	1	0	18038

****** 1990 Q3 GROWTH IN NUMBERS APPEARING BEYOND POPULATION GROWTH

3.00 PER CENT CHANGE IN CONVICTION RATES FOR HOMICIDE COLUMNS 1 TO 9
3.00 PER CENT CHANGE IN CONVICTION RATES FOR GRV. ASSAULT COLUMNS 1 TO 9
3.00 PER CENT CHANGE IN CONVICTION RATES FOR DRV. ASSAULT COLUMNS 1 TO 9
3.00 PER CENT CHANGE IN CONVICTION RATES FOR MIN. ASSAULT COLUMNS 1 TO 9
3.00 PER CENT CHANGE IN CONVICTION RATES FOR SEX ASSAULT COLUMNS 1 TO 9
3.00 PER CENT CHANGE IN CONVICTION RATES FOR CARN KNOWLGE COLUMNS 1 TO 9
3.00 PER CENT CHANGE IN CONVICTION RATES FOR ROB.- EXTORT COLUMNS 1 TO 9
3.00 PER CENT CHANGE IN CONVICTION RATES FOR FRAUD-MISSAP COLUMNS 1 TO 9
3.00 PER CENT CHANGE IN CONVICTION RATES FOR U.U.M.V. COLUMNS 1 TO 9
3.00 PER CENT CHANGE IN CONVICTION RATES FOR STEALING COLUMNS 1 TO 9
3.00 PER CENT CHANGE IN CONVICTION RATES FOR UNLAW POSSES COLUMNS 1 TO 9
3.00 PER CENT CHANGE IN CONVICTION RATES FOR BURGLARY COLUMNS 1 TO 9
3.00 PER CENT CHANGE IN CONVICTION RATES FOR ARSON COLUMNS 1 TO 9
3.00 PER CENT CHANGE IN CONVICTION RATES FOR PROPERTY DAM COLUMNS 1 TO 9
3.00 PER CENT CHANGE IN CONVICTION RATES FOR DRINK DRIVIN COLUMNS 1 TO 9
3.00 PER CENT CHANGE IN CONVICTION RATES FOR DANG. DRIVIN COLUMNS 1 TO 9
3.00 PER CENT CHANGE IN CONVICTION RATES FOR OTH. TRAFFIC COLUMNS 1 TO 9
3.00 PER CENT CHANGE IN CONVICTION RATES FOR DRUG OFFNCES COLUMNS 1 TO 9
3.00 PER CENT CHANGE IN CONVICTION RATES FOR FIREARM OFFS COLUMNS 1 TO 9
3.00 PER CENT CHANGE IN CONVICTION RATES FOR OTHER OFFNCS COLUMNS 1 TO 9
3.00 PER CENT CHANGE IN CONVICTION RATES FOR C&P APPLICAT COLUMNS 1 TO 9
3.00 PER CENT CHANGE IN CONVICTION RATES FOR C&C APPLICAT COLUMNS 1 TO 9

****** 1990 Q3 INCREASE OF MALE &FEMALE DRUG OFFENDING

15.00 PER CENT CHANGE IN CONVICTION RATES FOR DRUG OFFNCES COLUMNS 6 TO 9

(continued on next page)

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****** 1991 Q3 GROWTH IN NUMBERS APPEARING BEYOND POPULATION GROWTH

   2.00 PER CENT CHANGE IN CONVICTION RATES FOR HOMICIDE     COLUMNS  1 TO  9
   2.00 PER CENT CHANGE IN CONVICTION RATES FOR GRV. ASSAULT COLUMNS  1 TO  9
   2.00 PER CENT CHANGE IN CONVICTION RATES FOR DRV. ASSAULT COLUMNS  1 TO  9
   2.00 PER CENT CHANGE IN CONVICTION RATES FOR MIN. ASSAULT COLUMNS  1 TO  9
   2.00 PER CENT CHANGE IN CONVICTION RATES FOR SEX ASSAULT  COLUMNS  1 TO  9
   2.00 PER CENT CHANGE IN CONVICTION RATES FOR CARN KNOWLGE COLUMNS  1 TO  9
   2.00 PER CENT CHANGE IN CONVICTION RATES FOR ROB.- EXTORT COLUMNS  1 TO  9
   2.00 PER CENT CHANGE IN CONVICTION RATES FOR FRAUD-MISSAP COLUMNS  1 TO  9
   2.00 PER CENT CHANGE IN CONVICTION RATES FOR U.U.M.V.     COLUMNS  1 TO  9
   2.00 PER CENT CHANGE IN CONVICTION RATES FOR STEALING     COLUMNS  1 TO  9
   2.00 PER CENT CHANGE IN CONVICTION RATES FOR UNLAW POSSES COLUMNS  1 TO  9
   2.00 PER CENT CHANGE IN CONVICTION RATES FOR BURGLARY     COLUMNS  1 TO  9
   2.00 PER CENT CHANGE IN CONVICTION RATES FOR ARSON        COLUMNS  1 TO  9
   2.00 PER CENT CHANGE IN CONVICTION RATES FOR PROPERTY DAM COLUMNS  1 TO  9
   2.00 PER CENT CHANGE IN CONVICTION RATES FOR DRINK DRIVIN COLUMNS  1 TO  9
   2.00 PER CENT CHANGE IN CONVICTION RATES FOR DANG. DRIVIN COLUMNS  1 TO  9
   2.00 PER CENT CHANGE IN CONVICTION RATES FOR OTH. TRAFFIC COLUMNS  1 TO  9
   2.00 PER CENT CHANGE IN CONVICTION RATES FOR DRUG OFFNCES COLUMNS  1 TO  9
   2.00 PER CENT CHANGE IN CONVICTION RATES FOR FIREARM OFFS COLUMNS  1 TO  9
   2.00 PER CENT CHANGE IN CONVICTION RATES FOR OTHER OFFNCS COLUMNS  1 TO  9
   2.00 PER CENT CHANGE IN CONVICTION RATES FOR C&P APPLICAT COLUMNS  1 TO  9
   2.00 PER CENT CHANGE IN CONVICTION RATES FOR C&C APPLICAT COLUMNS  1 TO  9


****** 1991 Q3 INCREASE OF MALE &FEMALE DRUG OFFENDING

  13.00 PER CENT CHANGE IN CONVICTION RATES FOR DRUG OFFNCES COLUMNS  6 TO  9


****** 1992 Q3 GROWTH IN NUMBERS APPEARING BEYOND POPULATION GROWTH

   1.00 PER CENT CHANGE IN CONVICTION RATES FOR HOMICIDE     COLUMNS  1 TO  9
   1.00 PER CENT CHANGE IN CONVICTION RATES FOR GRV. ASSAULT COLUMNS  1 TO  9
   1.00 PER CENT CHANGE IN CONVICTION RATES FOR DRV. ASSAULT COLUMNS  1 TO  9
   1.00 PER CENT CHANGE IN CONVICTION RATES FOR MIN. ASSAULT COLUMNS  1 TO  9
   1.00 PER CENT CHANGE IN CONVICTION RATES FOR SEX ASSAULT  COLUMNS  1 TO  9
   1.00 PER CENT CHANGE IN CONVICTION RATES FOR CARN KNOWLGE COLUMNS  1 TO  9
   1.00 PER CENT CHANGE IN CONVICTION RATES FOR ROB.- EXTORT COLUMNS  1 TO  9
   1.00 PER CENT CHANGE IN CONVICTION RATES FOR FRAUD-MISSAP COLUMNS  1 TO  9
   1.00 PER CENT CHANGE IN CONVICTION RATES FOR U.U.M.V.     COLUMNS  1 TO  9
   1.00 PER CENT CHANGE IN CONVICTION RATES FOR STEALING     COLUMNS  1 TO  9
   1.00 PER CENT CHANGE IN CONVICTION RATES FOR UNLAW POSSES COLUMNS  1 TO  9
   1.00 PER CENT CHANGE IN CONVICTION RATES FOR BURGLARY     COLUMNS  1 TO  9
   1.00 PER CENT CHANGE IN CONVICTION RATES FOR ARSON        COLUMNS  1 TO  9
   1.00 PER CENT CHANGE IN CONVICTION RATES FOR PROPERTY DAM COLUMNS  1 TO  9
   1.00 PER CENT CHANGE IN CONVICTION RATES FOR DRINK DRIVIN COLUMNS  1 TO  9
   1.00 PER CENT CHANGE IN CONVICTION RATES FOR DANG. DRIVIN COLUMNS  1 TO  9
   1.00 PER CENT CHANGE IN CONVICTION RATES FOR OTH. TRAFFIC COLUMNS  1 TO  9
   1.00 PER CENT CHANGE IN CONVICTION RATES FOR DRUG OFFNCES COLUMNS  1 TO  9
   1.00 PER CENT CHANGE IN CONVICTION RATES FOR FIREARM OFFS COLUMNS  1 TO  9
   1.00 PER CENT CHANGE IN CONVICTION RATES FOR OTHER OFFNCS COLUMNS  1 TO  9
   1.00 PER CENT CHANGE IN CONVICTION RATES FOR C&P APPLICAT COLUMNS  1 TO  9
   1.00 PER CENT CHANGE IN CONVICTION RATES FOR C&C APPLICAT COLUMNS  1 TO  9


****** 1992 Q3 INCREASE OF MALE &FEMALE DRUG OFFENDING

   5.30 PER CENT CHANGE IN CONVICTION RATES FOR DRUG OFFNCES COLUMNS  6 TO  9
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(continued on next page)

JIF Computer Output Example (continued)

NUMBER OF PERSONS APPEARING BY AGE, SEX AND MOST SERIOUS OFFENCE - QUEENSLAND - QTR. NO.2 1995

	AGE:	5-9	10	11	12	13	14	15	16	17	TOTAL
HOMICIDE											
	M	0	0	0	0	1	0	2	4	0	7
	F	0	0	0	0	0	0	0	0	0	0
	T	0	0	0	0	1	0	2	4	0	7
GRV. ASSAULT											
	M	0	0	0	0	5	7	14	19	1	46
	F	0	0	0	0	1	1	1	3	0	6
	T	0	0	0	0	6	8	15	22	1	52
DRV. ASSAULT											
	M	0	0	0	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0	0	0	0
	T	0	0	0	0	0	0	0	0	0	0
MIN. ASSAULT											
	M	0	0	5	4	7	38	94	186	5	339
	F	0	0	0	0	7	4	35	48	0	94
	T	0	0	5	4	14	42	129	234	5	433
SEX ASSAULT											
	M	0	0	0	0	22	70	36	87	0	215
	F	0	0	0	0	0	0	0	0	0	0
	T	0	0	0	0	22	70	36	87	0	215
CARN KNOWLGE											
	M	0	0	0	0	0	4	14	14	0	32
	F	0	0	0	0	0	0	0	0	0	0
	T	0	0	0	0	0	4	14	14	0	32
ROB.- EXTORT											
	M	0	0	0	0	2	3	7	15	0	27
	F	0	0	0	0	0	0	2	3	0	5
	T	0	0	0	0	2	3	9	18	0	32
FRAUD-MISSAP											
	M	0	0	0	0	18	19	38	100	11	186
	F	0	0	0	0	8	0	9	59	0	76
	T	0	0	0	0	26	19	47	159	11	262
U.U.M.V.											
	M	0	2	6	16	76	161	248	339	14	862
	F	0	0	0	2	6	14	14	21	0	57
	T	0	2	6	18	82	175	262	360	14	919
STEALING											
	M	0	45	156	273	491	868	999	1291	59	4182
	F	0	29	54	128	585	610	1055	1018	33	3512
	T	0	74	210	401	1076	1478	2054	2309	92	7694
UNLAW POSSES											
	M	0	4	9	18	50	69	116	114	8	388
	F	0	0	0	0	11	15	22	27	0	75
	T	0	4	9	18	61	84	138	141	8	463
BURGLARY											
	M	0	33	73	154	346	572	704	791	37	2710
	F	0	4	7	26	35	52	89	67	0	280
	T	0	37	80	180	381	624	793	858	37	2990
ARSON											
	M	0	1	0	0	2	2	3	2	1	11
	F	0	0	0	0	0	0	0	0	0	0
	T	0	1	0	0	2	2	3	2	1	11
PROPERTY DAM											
	M	0	7	13	19	71	86	186	266	21	669
	F	0	0	0	0	6	12	34	24	0	76
	T	0	7	13	19	77	98	220	290	21	745
DRINK DRIVIN											
	M	0	0	0	0	0	2	12	59	1	74
	F	0	0	0	0	0	0	0	5	0	5
	T	0	0	0	0	0	2	12	64	1	79
DANG. DRIVIN											
	M	0	0	0	0	0	1	5	24	2	32
	F	0	0	0	0	0	0	0	0	0	0
	T	0	0	0	0	0	1	5	24	2	32
OTH. TRAFFIC											
	M	0	0	1	2	6	29	163	400	104	705
	F	0	0	0	0	0	1	9	16	6	32
	T	0	0	1	2	6	30	172	416	110	737
DRUG OFFNCES											
	M	0	0	0	0	3	82	305	1103	48	1621
	F	0	0	0	0	4	21	70	245	0	340
	T	0	0	0	0	7	103	375	1428	48	1961
FIREARM OFFS											
	M	0	0	0	0	4	4	7	18	2	35
	F	0	0	0	0	0	0	0	0	0	0
	T	0	0	0	0	4	4	7	18	2	35
OTHER OFFNCS											
	M	0	0	0	4	11	38	120	312	18	503
	F	0	0	0	2	4	11	29	54	2	102
	T	0	0	0	6	15	49	149	366	20	605
C&P APPLICAT											
	M	196	13	20	15	20	14	7	2	0	287
	F	183	17	14	22	23	24	13	3	0	299
	T	379	30	34	37	43	38	20	5	0	586
C&C APPLICAT											
	M	8	5	14	19	28	45	27	16	0	162
	F	3	1	2	5	18	39	25	7	0	100
	T	11	6	16	24	46	84	52	23	0	262
TOTAL											
	M	204	110	297	524	1163	2114	3107	5242	332	13093
	F	186	51	77	185	708	804	1407	1600	41	5059
	T	390	161	374	709	1871	2918	4514	6842	373	18152

(continued on next page)

JIF Computer Output Example (continued)

NUMBER OF JUVENILES BY MOST SERIOUS OFFENCE AND DISPOSITION - QUEENSLAND - QTR. NO.2 1995

	CAUTN	DISM	CN.PL	A-O	C-P	RCZ	FINE	CSO	SUPV	C-C	DETENTION PRIODS(MONTHS) 0-1	1-2	2-3	3-4	4-5	5-6	6-9	9-12	12-18	18-24	24-36	36-48	48+	TOTAL
HOMICIDE	0	1	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	1	1	0	7
GRV. ASSAULT	0	2	0	10	0	0	2	0	5	4	9	5	5	2	1	0	1	0	0	0	0	0	0	54
DRV. ASSAULT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MIN. ASSAULT	264	5	0	68	0	0	15	0	26	1	10	8	12	4	2	2	0	1	0	0	0	0	0	432
SEX ASSAULT	105	3	0	14	0	0	0	0	5	3	3	0	0	0	0	0	0	0	0	0	0	0	0	213
CARN KNOWLGE	20	1	0	6	0	0	1	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32
ROB.- EXTORT	4	0	0	7	0	0	0	0	7	7	5	0	1	1	0	0	0	0	0	0	0	0	0	32
FRAUD-MISSAP	224	1	0	25	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	261
U.U.M.V.	312	6	0	175	0	0	16	0	83	66	149	53	32	7	7	10	4	0	0	0	0	0	0	920
STEALING	6811	16	0	420	0	0	15	0	122	102	148	22	12	6	4	4	4	5	4	0	0	0	0	7695
UNLAW POSSES	285	3	0	94	0	0	4	0	34	43	0	0	0	0	0	0	0	0	0	0	0	0	0	463
BURGLARY	1643	15	0	585	0	0	10	0	280	295	101	28	9	4	3	7	4	2	0	0	0	0	0	2990
ARSON	0	1	0	3	0	0	0	0	3	3	2	0	0	0	0	0	0	0	0	0	0	0	0	12
PROPERTY DAM	596	2	0	43	0	3	6	0	34	11	28	9	10	0	0	0	1	0	0	0	0	0	0	743
DRINK DRIVIN	8	2	0	20	0	0	51	0	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0	79
DANG. DRIVIN	0	0	0	6	0	0	21	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	32
OTH. TRAFFIC	0	7	0	480	0	0	242	0	3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	737
DRUG OFFNCES	1023	25	0	630	0	5	76	0	116	50	35	0	0	0	0	0	0	0	0	0	0	0	0	1960
FIREARM OFFS	0	3	0	21	0	0	3	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	35
OTHER OFFNCS	204	8	0	300	0	2	57	0	12	19	5	0	0	0	0	0	0	0	0	0	0	0	0	607
C&P APPLICAT	0	59	0	348	0	0	0	0	0	0	109	25	21	8	7	6	4	0	0	0	0	0	0	587
C&C APPLICAT	0	66	0	1	31	1	2	0	42	12	76	22	7	1	2	0	0	0	0	0	0	0	0	263
TOTAL	11591	226	0	3265	31	11	521	0	785	637	681	172	110	33	30	29	18	8	4	0	1	1	0	18154

(continued on next page)

NUMBER OF PERSONS APPEARING BY AGE, SEX AND MOST SERIOUS OFFENCE - QUEENSLAND - QTR. NO.2 2000

AGE:		5-9	10	11	12	13	14	15	16	17	TOTAL
HOMICIDE	M	0	0	0	0	1	0	2	4	0	7
	F	0	0	0	0	0	0	0	0	0	0
	T	0	0	0	0	1	0	2	4	0	7
GRV. ASSAULT	M	0	0	0	0	6	7	14	28	1	48
	F	0	0	0	0	1	1	1	4	0	7
	T	0	0	0	0	7	8	15	24	1	55
DRV. ASSAULT	M	0	0	0	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0	0	0	0
	T	0	0	0	0	0	0	0	0	0	0
MIN. ASSAULT	M	0	0	5	5	8	40	100	195	5	358
	F	0	0	0	0	8	5	38	50	0	101
	T	0	0	5	5	16	45	138	245	5	459
SEX ASSAULT	M	0	0	0	0	24	75	39	91	0	229
	F	0	0	0	0	0	0	0	0	0	0
	T	0	0	0	0	24	75	39	91	0	229
CARN KNOWLGE	M	0	0	0	0	0	5	14	15	0	34
	F	0	0	0	0	0	0	0	0	0	0
	T	0	0	0	0	0	5	14	15	0	34
ROB.- EXTORT	M	0	0	0	0	2	4	7	16	0	29
	F	0	0	0	0	0	0	2	4	0	6
	T	0	0	0	0	2	4	9	20	0	35
FRAUD-MISSAP	M	0	0	0	0	19	20	41	104	12	196
	F	0	0	0	0	9	0	10	62	0	81
	T	0	0	0	0	28	20	51	166	12	277
U.U.M.V.	M	0	2	6	16	80	171	264	355	14	908
	F	0	0	0	2	6	15	15	22	0	60
	T	0	2	6	18	86	186	279	377	14	968
STEALING	M	0	46	162	277	517	925	1065	1352	62	4406
	F	0	30	57	132	618	655	1135	1055	34	3716
	T	0	76	219	409	1135	1580	2200	2407	96	8122
UNLAW POSSES	M	0	4	10	18	53	73	123	120	9	410
	F	0	0	0	0	11	16	24	28	0	79
	T	0	4	10	18	64	89	147	148	9	489
BURGLARY	M	0	33	76	157	364	618	751	828	39	2858
	F	0	4	7	27	37	55	96	69	0	295
	T	0	37	83	184	401	665	847	897	39	3153
ARSON	M	0	1	0	0	2	2	4	2	1	12
	F	0	0	0	0	0	0	0	0	0	0
	T	0	1	0	0	2	2	4	2	1	12
PROPERTY DAM	M	0	7	13	19	74	91	198	278	22	702
	F	0	0	0	0	7	13	37	25	0	82
	T	0	7	13	19	81	104	235	303	22	784
DRINK DRIVIN	M	0	0	0	0	0	2	13	62	1	78
	F	0	0	0	0	0	0	0	5	0	5
	T	0	0	0	0	0	2	13	67	1	83
DANG. DRIVIN	M	0	0	0	0	0	1	5	25	3	34
	F	0	0	0	0	0	0	0	0	0	0
	T	0	0	0	0	0	1	5	25	3	34
OTH. TRAFFIC	M	0	0	1	2	7	31	174	418	109	742
	F	0	0	0	0	0	1	10	17	6	34
	T	0	0	1	2	7	32	184	435	115	776
DRUG OFFNCES	M	0	0	0	0	3	87	325	1239	50	1704
	F	0	0	0	0	4	23	76	254	0	357
	T	0	0	0	0	7	110	401	1493	50	2061
FIREARM OFFS	M	0	0	0	0	4	5	7	19	2	37
	F	0	0	0	0	0	0	0	0	0	0
	T	0	0	0	0	4	5	7	19	2	37
OTHER OFFNCS	M	0	0	0	5	11	40	128	327	19	530
	F	0	0	0	2	4	12	31	56	3	108
	T	0	0	0	7	15	52	159	383	22	638
CAP APPLICAT	M	199	14	20	15	21	15	7	2	0	293
	F	187	17	14	22	24	26	14	4	0	308
	T	386	31	34	37	45	41	21	6	0	601
CAC APPLICAT	M	0	5	14	19	29	48	28	17	0	160
	F	3	1	2	6	19	42	27	7	0	107
	T	11	6	16	25	48	90	55	24	0	275
TOTAL	M	207	112	307	533	1225	2252	3399	5489	349	13783
	F	190	52	80	191	748	864	1516	1662	43	5346
	T	397	164	387	724	1973	3116	4825	7151	392	19129

(continued on next page)

JIF Computer Output Example (continued)

NUMBER OF JUVENILES BY MOST SERIOUS OFFENCE AND DISPOSITION - QUEENSLAND - DTR. NO.2 2000

	CAUTN	DISM	CM.PL	A-D	C-P	RCZ	FINE	CSO	SUPV	C-C	DETENTION PRIODS(MONTHS) 0-1	1-2	2-3	3-4	4-5	5-6	6-9	9-12	12-18	18-24	24-36	36-48	48+	TOTAL
HOMICIDE	0	1	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	1	1	0	7
GRV. ASSAULT	0	2	0	19	0	0	2	0	5	4	9	5	5	2	1	0	1	0	0	0	0	0	0	55
DRV. ASSAULT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MIN. ASSAULT	301	6	0	72	0	0	16	0	21	1	10	8	13	5	2	2	0	1	0	0	0	0	0	458
SEX ASSAULT	197	4	0	15	0	0	0	0	6	4	4	0	0	0	0	0	0	0	0	0	0	0	0	230
CARN KNOWLGE	21	1	0	6	0	0	1	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33
ROB.- EXTORT	4	0	0	7	0	0	0	0	7	7	6	0	1	1	0	0	0	0	0	0	0	0	0	33
FRAUD-MISSAP	237	1	0	27	0	0	0	0	4	8	0	0	0	0	0	0	0	0	0	0	0	0	0	277
U.U.M.V.	328	6	0	184	0	0	17	0	88	70	157	55	33	8	8	10	4	0	0	0	0	0	0	968
STEALING	7190	17	0	443	0	0	15	0	128	107	156	24	13	6	4	4	4	5	4	0	0	0	0	8120
UNLAW POSSES	301	3	0	99	0	0	4	0	36	46	0	0	0	0	0	0	0	0	0	0	0	0	0	489
BURGLARY	1733	16	0	616	0	0	10	0	295	311	107	30	9	4	0	0	4	3	0	0	0	0	0	3154
ARSON	0	1	0	3	0	0	0	0	3	3	2	0	0	0	0	0	0	0	0	0	0	0	0	12
PROPERTY DAM	627	2	0	45	0	4	6	0	36	12	30	10	11	0	0	0	1	0	0	0	0	0	0	784
DRINK DRIVIN	0	2	0	21	0	0	54	0	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0	83
DANG. DRIVIN	0	0	0	7	0	0	22	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	34
OTH. TRAFFIC	0	8	0	506	0	0	255	0	3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	777
DRUG OFFNCES	1076	27	0	662	0	5	90	0	122	53	37	0	0	0	0	0	0	0	0	0	0	0	0	2062
FIREARM OFFS	0	3	0	22	0	0	3	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	36
OTHER OFFNCS	215	9	0	316	0	2	60	0	12	20	5	0	0	0	0	0	0	0	0	0	0	0	0	639
C&P APPLICAT	0	61	0	357	0	0	0	0	0	0	111	25	21	8	7	6	4	0	0	0	0	0	0	600
C&C APPLICAT	0	69	0	1	32	1	2	0	44	13	80	23	7	1	2	0	0	0	0	0	0	0	0	275
TOTAL	12230	239	0	3429	32	12	547	0	826	672	715	180	114	35	32	30	18	9	4	0	1	1	0	19126

(continued on next page)

JIF Computer Output Example (continued)

SUMMARY OF DETAINEES RECEIVED DURING THE QTR. BY TIME REMAINING TO SERVE - 1984-2000 REMAINING:

DETAINEES RECEIVED: YEAR	QTR.	0-3	3-6	6-9	9-12	12-15	15-18	18-21	21-24	24-27	27-30	30-33	33-36	36-39	39-42	42-45	45-48	48-51	51-54	54-57	57+	TOTAL
1984	3	261	26	5	2	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	297
1984	4	266	26	5	2	0	2	0	0	1	0	0	0	0	0	0	1	0	0	0	0	303
1985	1	267	26	5	2	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	303
1985	2	268	26	5	2	2	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	305
1985	3	282	28	5	2	2	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	321
1985	4	287	29	5	2	2	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	327
1986	1	288	29	5	2	2	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	329
1986	2	289	29	5	2	0	3	0	0	0	0	1	0	0	0	0	0	0	0	0	0	329
1986	3	291	29	5	2	3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	331
1986	4	295	29	5	2	3	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	335
1987	1	294	29	5	2	3	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	334
1987	2	295	29	5	2	0	3	0	0	0	0	1	0	0	0	0	0	0	0	0	0	335
1987	3	308	30	6	3	2	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	351
1987	4	310	30	6	3	0	3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	353
1988	1	309	30	6	3	0	3	0	0	0	0	1	0	0	0	0	0	0	0	0	0	352
1988	2	306	30	6	3	0	3	0	0	0	0	1	0	0	0	0	0	0	0	0	0	349
1988	3	318	31	6	3	2	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	362
1988	4	319	31	6	3	2	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	363
1989	1	316	31	6	3	2	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	360
1989	2	314	31	6	3	0	3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	359
1989	3	325	31	6	3	0	3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	369
1989	4	323	31	6	3	2	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	367
1990	1	321	31	6	3	2	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	365
1990	2	319	31	6	3	0	3	0	0	0	0	0	1	0	0	0	0	0	0	0	0	363
1990	3	327	32	6	3	3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	372
1990	4	328	32	6	3	3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	373
1991	1	329	32	6	3	3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	374
1991	2	330	33	6	3	2	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	376
1991	3	339	34	6	3	3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	386
1991	4	335	33	6	3	2	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	381
1992	1	330	33	6	3	2	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	376
1992	2	325	32	6	3	2	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	370
1992	3	324	32	6	3	3	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	369
1992	4	323	32	6	3	3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	368
1993	1	323	32	6	3	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	369
1993	2	322	32	6	3	3	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	367
1993	3	321	31	6	3	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	366
1993	4	321	31	6	3	3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	365
1994	1	321	31	6	3	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	365
1994	2	321	31	6	3	3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	365
1994	3	320	31	6	3	3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	364
1994	4	321	31	6	3	3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	365
1995	1	321	31	6	3	3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	365
1995	2	321	31	6	3	2	1	0	0	1	0	0	0	0	0	1	0	0	0	0	0	366
1995	3	321	31	6	3	3	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	365
1995	4	322	31	6	3	3	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	366
1996	1	323	31	6	3	2	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	367
1996	2	323	31	6	3	3	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	367
1996	3	324	31	6	3	3	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	369
1996	4	325	31	6	3	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	369
1997	1	327	32	6	3	2	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	372
1997	2	327	32	6	3	2	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	372
1997	3	329	32	6	3	2	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	374
1997	4	329	32	6	3	2	1	0	0	1	0	0	0	0	0	0	1	0	0	0	0	375
1998	1	330	32	6	3	0	3	0	0	0	0	1	0	0	0	0	0	0	0	0	0	375
1998	2	332	32	6	3	3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	377
1998	3	333	32	6	3	2	1	0	0	1	0	0	0	0	0	1	0	0	0	0	0	379
1998	4	334	32	6	3	3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	379
1999	1	334	32	6	3	3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	379
1999	2	335	32	6	3	2	1	0	0	1	0	0	0	1	0	0	0	0	0	0	0	381
1999	3	338	33	6	3	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	384
1999	4	336	32	6	3	3	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	381
2000	1	337	32	6	3	3	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	382
2000	2	336	32	6	3	0	3	0	0	1	0	0	0	1	0	0	0	0	0	0	0	382
2000	3	336	33	6	3	2	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	382
2000	4	338	33	6	3	0	3	0	0	1	0	0	0	0	0	0	1	0	0	0	0	385

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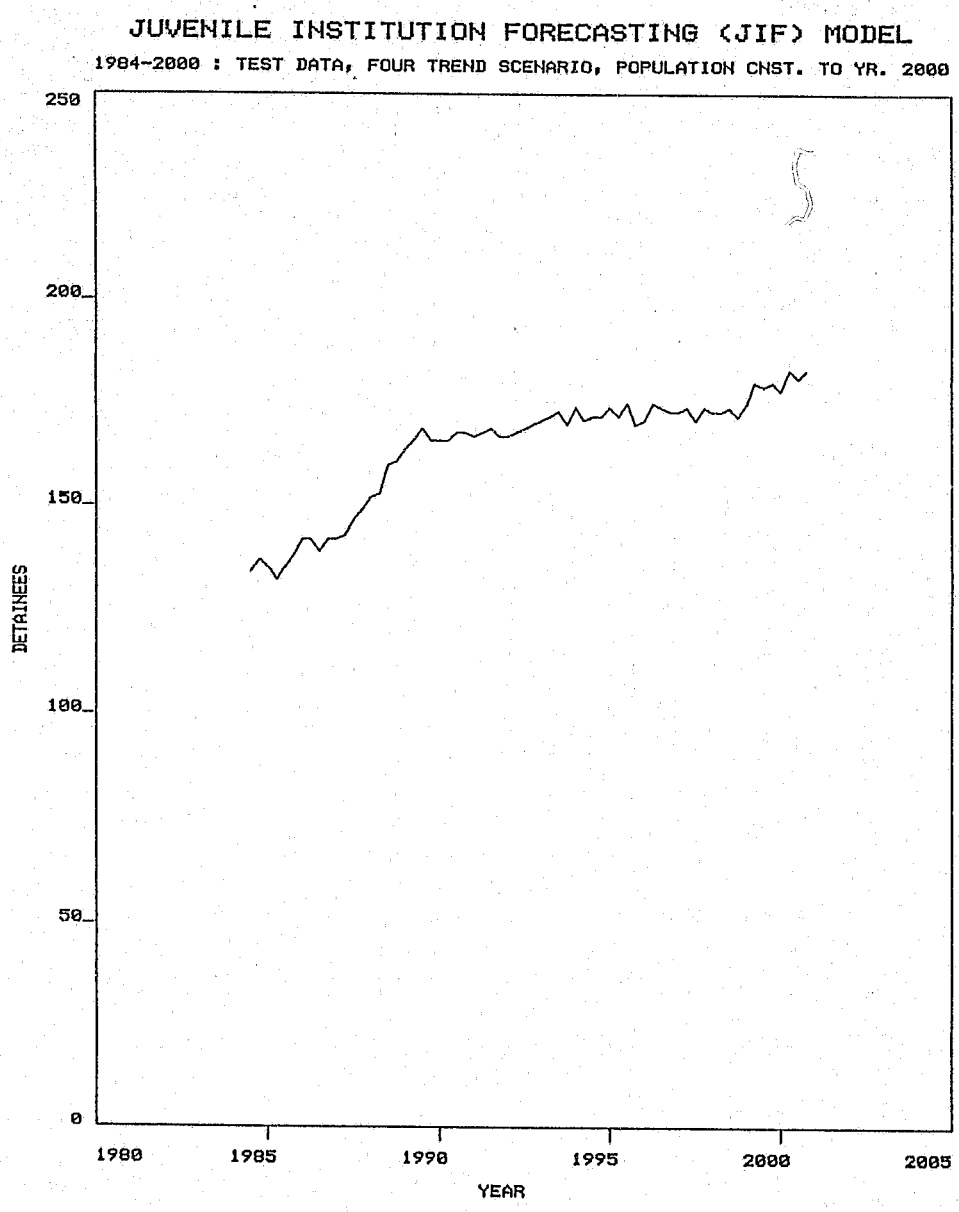
SUMMARY OF DETAINEES ON HAND AT THE END OF THE QTR. BY TIME REMAINING TO SERVE - 1984-2000 REMAINING:

DETAINEES ON HAND: YEAR	QTR.	0-3	3-6	6-9	9-12	12-15	15-18	18-21	21-24	24-27	27-30	30-33	33-36	36-39	39-42	42-45	45-48	48-51	51-54	54-57	57+	TOTAL
1984	3	67	38	14	5	4	1	0	3	0	1	1	0	0	0	0	0	0	0	0	0	134
1984	4	71	40	10	6	1	2	3	0	2	1	0	0	0	0	0	1	0	0	0	0	137
1985	1	73	36	11	3	3	4	0	2	1	0	1	0	0	0	1	0	0	0	0	0	135
1985	2	70	37	8	5	6	1	2	1	0	1	0	1	0	1	0	0	0	0	0	0	133
1985	3	72	36	10	8	3	3	1	0	1	0	1	1	1	0	0	0	0	0	0	0	137
1985	4	72	39	13	5	5	2	0	1	0	1	2	1	0	0	0	0	0	0	0	0	141
1986	1	75	42	10	7	4	1	1	0	2	2	1	0	0	0	1	0	0	0	0	0	146
1986	2	78	39	12	6	1	4	0	2	2	1	1	0	0	1	0	0	0	0	0	0	147
1986	3	75	41	11	3	7	0	2	2	1	0	1	1	0	0	0	0	0	0	0	0	145
1986	4	78	40	8	9	3	2	2	1	1	0	1	2	0	0	0	0	0	0	0	0	147
1987	1	77	37	14	5	5	2	1	1	0	1	2	1	0	0	0	0	0	0	0	0	146
1987	2	74	43	10	7	2	4	1	0	1	3	1	0	0	0	0	0	0	0	0	0	146
1987	3	82	40	13	5	6	2	0	1	3	1	0	1	0	0	0	0	0	0	0	0	156
1987	4	79	43	11	9	2	3	1	3	1	1	1	0	0	0	0	0	0	0	0	0	154
1988	1	82	41	15	5	3	4	3	1	1	2	0	0	0	0	0	0	0	0	0	0	157
1988	2	79	45	11	6	4	6	1	1	2	1	0	0	0	0	0	0	0	0	0	0	156
1988	3	85	42	12	7	8	2	1	2	1	0	0	1	0	0	0	0	0	0	0	0	161
1988	4	82	43	13	11	4	2	2	1	0	0	2	0	0	0	0	0	0	0	0	0	160
1989	1	83	44	17	7	4	3	1	0	0	2	0	1	0	0	0	0	0	0	0	0	162
1989	2	83	48	13	7	3	4	0	0	3	0	1	0	0	0	1	0	0	0	0	0	163
1989	3	89	44	13	6	4	3	0	3	0	1	0	1	0	1	0	0	0	0	0	0	165
1989	4	84	44	12	7	5	1	3	0	1	0	2	0	1	0	0	0	0	0	0	0	160
1990	1	84	43	13	8	3	4	0	1	0	3	0	1	0	0	0	0	0	0	0	0	160
1990	2	83	44	14	6	4	3	1	0	3	0	2	0	0	0	0	0	0	0	0	0	160
1990	3	85	46	12	7	6	1	0	3	0	2	0	1	0	0	0	0	0	0	0	0	163
1990	4	87	44	13	9	4	0	3	0	2	0	1	1	0	0	0	0	0	0	0	0	164
1991	1	85	45	15	7	3	3	0	2	0	1	2	0	0	0	0	0	0	0	0	0	163
1991	2	86	48	13	6	5	1	2	0	1	3	0	0	0	0	0	0	0	0	0	0	165
1991	3	90	47	12	8	4	2	0	1	3	0	1	0	0	0	0	0	0	0	0	0	168
1991	4	89	45	14	7	4	1	1	3	0	1	0	1	0	0	0	0	0	0	0	0	166
1992	1	86	47	13	7	3	2	3	0	1	0	1	1	0	0	0	0	0	0	0	0	164
1992	2	88	45	13	6	4	4	0	1	0	1	1	1	0	0	0	0	0	0	0	0	164
1992	3	86	45	12	7	7	0	1	0	1	2	1	0	0	0	0	0	0	0	0	0	164
1992	4	85	44	13	10	0	4	0	1	2	1	0	1	0	0	0	0	0	0	0	0	162
1993	1	84	45	16	3	7	0	1	2	2	0	1	0	0	0	0	0	0	0	0	0	161
1993	2	85	48	9	10	3	1	2	2	0	2	0	0	0	0	0	1	0	0	0	0	162
1993	3	88	48	16	6	4	2	2	0	3	0	0	0	0	0	1	0	0	0	0	0	163
1993	4	88	47	12	7	2	5	0	3	0	0	0	1	1	0	1	0	0	0	0	0	159
1994	1	87	43	13	5	7	1	3	0	0	1	1	1	0	1	0	0	0	0	0	0	163
1994	2	83	44	11	10	1	6	0	0	1	1	1	1	1	0	0	0	0	0	0	0	160
1994	3	84	42	16	4	9	0	0	1	1	1	2	0	0	0	0	0	0	0	0	0	161
1994	4	82	47	10	12	3	0	1	1	1	1	2	1	0	0	0	0	0	0	0	0	161
1995	1	87	41	18	6	0	4	1	1	1	2	2	0	0	0	6	0	0	0	0	0	163
1995	2	81	49	12	3	6	2	1	1	3	2	0	0	0	1	0	0	0	0	0	0	161
1995	3	89	43	9	9	5	1	1	3	2	0	1	0	1	0	0	0	0	0	0	0	164
1995	4	83	40	15	8	4	1	3	2	0	1	1	1	0	0	0	0	0	0	0	0	159
1996	1	80	46	14	7	3	4	2	0	1	1	2	0	0	0	0	0	0	0	0	0	160
1996	2	86	45	13	6	7	2	0	1	1	3	0	0	0	0	0	0	0	0	0	0	164
1996	3	86	44	12	10	2	3	1	1	4	0	0	0	0	0	1	0	0	0	0	0	164
1996	4	85	43	16	5	5	2	1	4	0	1	0	0	0	0	1	0	0	0	0	0	163
1997	1	84	48	11	8	4	2	4	0	1	0	1	0	0	1	0	0	0	0	0	0	164
1997	2	89	43	14	7	4	5	0	1	0	1	1	0	1	0	0	0	0	0	0	0	166
1997	3	84	46	13	7	7	1	1	0	1	1	1	1	0	0	0	0	0	0	0	0	163
1997	4	87	45	13	10	3	2	0	1	2	1	1	0	0	0	1	0	0	0	0	0	166
1998	1	86	45	16	6	2	3	1	2	1	1	1	0	0	1	0	0	0	0	0	0	165
1998	2	87	48	12	5	6	1	2	1	1	1	0	1	1	0	0	0	0	0	0	0	166
1998	3	90	44	11	9	3	3	1	1	2	0	1	1	0	1	0	0	0	0	0	0	167
1998	4	86	43	15	6	6	1	1	2	0	1	1	1	0	0	0	0	0	0	0	0	164
1999	1	85	47	12	9	1	4	2	0	1	1	2	1	0	0	0	0	0	0	0	0	165
1999	2	89	44	15	4	6	3	0	1	2	2	1	0	1	0	0	0	0	0	0	0	168
1999	3	86	48	10	9	3	3	1	2	2	2	0	1	0	0	0	0	0	0	0	0	167
1999	4	90	42	15	6	6	1	2	2	2	0	2	0	0	0	0	0	0	0	0	0	168
2000	1	84	47	12	9	4	2	2	2	0	3	0	0	0	0	0	0	0	0	0	0	165
2000	2	89	44	15	7	2	5	2	0	4	0	0	0	0	1	0	0	0	0	0	0	169
2000	3	86	48	13	5	7	3	0	4	0	0	0	2	0	0	0	0	0	0	0	0	168
2000	4	90	46	11	10	3	3	4	0	1	0	2	0	0	0	0	1	0	0	0	0	171

(End of JIF printed output - Graphical output on next page)

Example of JIF Graphical Output using a Four Trend Scenario



APPENDIX 5

APPENDIX 5

Twenty-two category JIF Offence Classification derived from the A.B.S. Uniform Offence Classification - Queensland

1. HOMICIDE ETC.

111 Murder
121 Attempted murder
131 Manslaughter (excluding driving)
141 Manslaughter (driving)
142 Dangerous driving causing death
151 Conspiracy to murder

2. GREVIOUS ASSAULT

211 Grievous bodily harm, bodily harm, and unlawful

3. DRIVER ASSAULT

212 Dangerous driving causing bodily harm

4. GENERAL ASSAULT

221 Common assault (unlawful and indecent also)
222 Aggravated assault
223 Resisting arrest and other obstructions (under criminal code)
224 Other resisting and distructing (Police Act)
229 Other minor assaults

5. SEXUAL ASSAULTS

231 Rape and attempted rape
242 Incest
243 Indecently dealing with a female
244 Indecently dealing with a male
245 Wilful exposure (intent to insult) (Section 227(2) of the Criminal Code)
246 Unnatural offences and attempts (carnal knowledge against the order of nature)

6. CARNAL KNOWLEDGE

241 Unlawful carnal knowledge

7. ROBBERY AND EXTORTION

311 Robbery with major assault (Section 412 of the Criminal Code) (steal with act of violence in company)
312 Robbery with minor assault (Section 413 of the Criminal Code)
313 Robbery, armed (Section 410 of the Criminal Code)
314 Robbery, other and unspecified (Sections 409 and 414 of the Criminal Code)
321 Extortion and blackmail

8. FRAUD AND MISAPPROPRIATION

411 Embezzlement by employee (stealing as an employee)
412 Embezzlement by trustee, partner, etc.
421 Currency offences (forgery and uttering)
422 Valueless cheques (forgery and uttering)
423 Bankcard and credit card (forgery and uttering)
424 False pretences
425 Forgery and uttering n.e.c. (imposition)
420 Leaving a hotel etc. without paying (Section 6 of the Regulatory Offences Act)
429 Fraud, n.e.c.

9. U.U.M.V.

511 Unlawfully using a motor vehicle (including boats)

10. STEALING

521 Stealing from the person (pickpocketting)
531 Stealing livestock (including unlawful use)
532 Shoplifting
533 Shoplifting (Section 5 of the Regulatory Offence Act)
539 Other stealing

11. UNLAWFUL POSSESSION

541 Unlawful possession of livestock (including branding, killing for private gain, etc.)
542 Other unlawful possession of property (Steal in other State and bring to Qld.)
551 Receiving stolen property

12. BURGLARY

561 Burglary and housebreaking (break, enter, and steal) - dwelling
562 Breaking and entering a dwelling with intent
571 Breaking, entering, and stealing - other buildings
572 Breaking and entering other building with intent

13. ARSON

611 Arson

(continued on next page)

Twenty-two category JIF Offence classification (continued)

14. PROPERTY DAMAGE

621 Wilful damage or destruction
622 Wounding or killing animals
623 Wilful damage (Section 7 of the Regulatory Offence Act)
629 Other (obstructing railways not causing loss of life or damage to any person)

15. DRINK DRIVING

711 Drink driving or drink driver in charge of a motor vehicle (<0.15)
712 Breath alcohol content (0.02 to 0.15)
713 Failure to supply a breath test

16. DANGEROUS DRIVING

721 Dangerous driving
722 Driving without due care and attention

17. OTHER TRAFFIC OFFENCES

731 Driving under suspension
732 Driving under disqualification
733 Unlicensed driving
739 Other licence offences (including forgery)
791 Other traffic offences
792 Transport Act offence relating to driving and traffic
793 Main Roads Act offences
799 Other driving offences (including parking, local government, etc) (Disobey direction of police) (take part in unlawful procession)

18. DRUG OFFENCES

811 Possession of drugs, use (including attempts)
812 Supply drugs (including attempts)
819 Other drug offences (utensils)

19. FIREARM OFFENCES

861 Unlawful possession of firearms
862 Unlicensed firearms (Br. Firearms Act)
869 Other firearm offences
(excluding going armed in public)

20. OTHER OFFENCES

291 Kidnapping and forcible abduction
292 Ill-treatment of children
299 Other (including other abduction, abortion, accessory before the fact to and threats of violence to persons, and attempted violence)
821 Drunkenness
822 Abusive or obscene or insulting language
823 Indecent or offensive behaviour
824 Disorderly conduct
829 Other offensive behaviour offences (Br. Telecom)
831 Prostitution and related offences
841 Trespassing
842 Insufficient lawful means
849 Other trespass/vagrancy related offences (including consorting)
851 Breach of maintenance orders
871 Pollution etc. affecting health
872 Other environmental pollution
873 Protection of animals, birds, flora, and fauna
874 Other natural resources protection (e.g. Stock Act)
879 Other environmental offences (e.g. noise abatement) (littering)
881 Liquor Act (breach of licence)
889 Liquor Act (other)
891 Gambling - premises
892 Illegal bookmaking
899 Other gambling offences
911 Escape from custody
912 Breach of probation or recognizance
913 Breach of parole
914 Breach of Community Service Order
919 Other offences against enforcement of order (including accessory after the fact, conspiracy not endangering life, bigamy, Bail Act, contempt of court, Mail Act, and possession of house breaking implements)
921 Arbitration, conciliation, apprenticeship, etc.
922 Workers' compensation
929 Other Industrial offences
931 Prohibited imports (not drugs, flora, and fauna)
939 Other customs, smuggling etc. offences
991 Education and welfare offences
992 Other health offences (not drugs or environment)
993 Electoral and parliamentary offences
994 Other local authority offences (not parking or environment)
995 Other transport offences (not driving or traffic)
Other (please specify)

(continued on next page)

Twenty-two category JIF Offence classification (continued)

21. CARE AND PROTECTION APPLICATION

011 Begging in public place
012 Abandoned, loitering, insufficient lawful means, no set place of abode
021 Exposed to mental danger
022 Falling in with bad associates
023 Likely to fall into a life of vice or crime
024 In household where member convicted of incest
025 In betting shop, billiard room, bar or beer garden
026 Served with intoxicating liquor in premises mentioned in 025
031 In custody of unfit person
032 Neglected child
033 Exposed to physical danger
034 Guardian guilty of endangering life
035 Living with unfit person
036 Deserted by parents, in care of another
037 Kept from school by guardian
038 In need of assistance due to poverty

22. CARE AND CONTROL APPLICATION.

041 Child in care not to leave state
042 Absconding child
051 Breach of supervising order
061 Child regularly absents himself from school
071 Uncontrolable child
081 Falling into life of vice or crime
082 Exposed to mental danger
083 Commits an offence when under 10 years
091 Under school leaving age, unlawfully engages in street trading
092 Performs in public without a permit
099 Other
Revoke an order

APPENDIX 6

APPENDIX 6

The Trend Record Form below, was found to be useful in analysing and quantifying various aspects of the hypothesised trends in a structured interview situations with persons advising on trends.

TREND RECORD FORM

OFFICER NAME ______________________________________ DATE _________

TREND DESCRIPTION _

DATE OF COMMENCEMENT _ _ _ _ _ _ _ YEARS OF CONTINUANCE _ _ _ _ _ _ _

TAPER OFF OF TREND ? _ _ _ _ _ _ _ OVER WHAT PERIOD ? _ _ _ _ _ _ _ _ _

OFFENCE CATEGORIES INVOLVED _

AGE RANGES INVOLVED _ _ _ _ _ _ _ _ _ M & F ? _ _ _ _ _ _ _ _ _ _ _ _

NUMBERS/PERCENT INVOLVED ? _

BACKGROUND STATISTICS SUPPORT OF TREND ? _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

OTHER DETAILS _

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