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QUICKSTAT USER'S GUIDE FOR JUSTICE ADMINISTRATION AREA (JAA) DATABASE

Canadian Centre
for Justice Statistics

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QUICKSTAT

USER'S GUIDE

For The

JUSTICE ADMINISTRATION AREA (JAA) DATABASE
Version 1.0

March, 1994

Integration and Analysis Program
Canadian Centre For Justice Statistics
Statistics Canada

Statistics Canada

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ASSISTANCE

If you have any questions about this product, or require assistance in dealing with specific database related problems, please call toll free: 1 800 387-2231.

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1. INTRODUCTION

The Canadian Centre For Justice Statistics has developed several electronic databases with the objective of giving justice data users quick and easy access to a variety of justice related information through user friendly software called XV. Together these data and software combine to become known as QUICKSTAT Justice Databases. Currently, there are four database products which integrate justice data, three different sub-provincial databases, and a time series database with provincial level data.

The sub-provincial databases include: (1) Selected Municipal Areas (SMA) which present crime and social-economic data for municipalities with a municipal police force; (2) Justice Administration Areas (JAA) which present justice and social-economic data based on the geographic jurisdiction of criminal courts; and (3) Census Metropolitan Areas (CMA) which display crime and social-economic data by Canada's 25 largest urban areas. A fourth database offers detailed annual time series justice data by province and territory from the 1977 base year.

This User's Guide is intended to provide you with the basic information needed to understand the conceptual foundation of QUICKSTAT's Justice Administration Area (JAA) sub-provincial database, and to offer a selection of tools which can be used in the exploration of the database and its various applications. Chapter 2 describes the JAA database in terms of its potential contribution to enhancing overall understanding of the crime problem, and its uses in the management of crime prevention and detection. It also outlines the basic components of the database and briefly describes the types of variables found in each. Included in the database are variables from the Uniform Crime Reporting (UCR) Survey , as well as social and economic data from the Census of Canada. The integration of information from a number of different surveys is intended to provide you with a new analytic tool suitable for a variety of administrative, planning and research applications.

Finally, while users can employ almost any software they like to explore the JAA database, Chapter 3 presents information on Statistics Canada's XV software (included as part of this database package) which is intended to help data users quickly analyze and manipulate cross classified databases. It is a user friendly (menu driven) micro computer package for use in a DOS environment. Chapter 4 presents a detailed tutorial which takes you through a sequence of XV operations and functions. In addition to demonstrating the main features of the XV software, it will also help introduce you to the database and its potential applications.

2. OVERVIEW OF THE JUSTICE ADMINISTRATION AREA DATABASE

2.1 The Rationale For Justice Administration Area Data:

Within Canada's criminal justice system, there is no single organization with overall responsibility for the administration of justice. Although police, courts, and corrections, the major components of the system, are inherently linked by the events they respond to and the people they serve, no umbrella agency exists to coordinate their actions. In addition, each province administers its own justice system, and as a result, maintains its own method of data collection. Because units of count and boundaries of reporting units vary, comparisons across databases lose some of their meaning. Further, the discrepancies between data sets also means that there has been little linkage with other non-justice data sets, except at a very general level of aggregation.

The JAA database addresses many of the difficulties associated with the present data collection procedures by providing a standard framework for the integration of justice data with relevant administrative, social and economic information. It does so in two ways. First, each JAA establishes a geographic area with at least one criminal court of record. Thus, the boundaries of each JAA are defined by the territorial jurisdiction of its criminal court or courts. (JAAs are described in a machine readable site profile which outlines their geographic make-up, and identifies the police agencies and courts located within each geography). Secondly, crime variables are reported using a Common Offence Classification scheme which helps to ensure that activities from different sectors of the justice system are all reported according to a single set of offence categories. This permits users to perform cross sectoral analysis on a more consistent conceptual foundation.

The utility of justice data are improved further by the addition of locally available statistical or administrative datasets. By examining justice data in the context of other related data, planning, analysis and program development can more easily take account of the climate in which the programs operate.

2.2 Database Applications:

Administrative Applications

In an environment of rapid social and economic change, compounded by growing fiscal restraint, it is increasingly difficult for administrators to develop effective and efficient responses to the many challenges faced by their organizations. Such conditions create the need to make a larger number of difficult choices between competing issues and problems. In this regard, the JAA database can be a very helpful tool.

Since each major component of the Canadian system of criminal justice has a degree of autonomy in the administration of policy, a coordinating database, operating at the sub-provincial level, can have beneficial affects on the administration of justice in Canada because it emphasizes the interrelationships between the components of the justice system, and can highlight formal goals which are shared by all components and jurisdictions.

From the point of view of resource allocation and performance measurement, the definition and statistical description of sub-provincial justice areas provide administrators with a variety of information that they can use to identify and understand changes in both the internal and external environment, and to respond more appropriately to these changes. As such, JAA analysis can enhance the capacity of government departments to pin point specific problem areas and to allocate scarce resources in a balanced way through effective targeting.

Further, using the JAA database makes it possible to view the justice system as an aspect of the larger social system, strongly influenced by changing conditions. Social climates vary from one area to another, giving the local operation of the criminal justice system its own particular flavour. Increased knowledge of local environments, which the JAA concept strongly promotes, is necessary to realistically set expectations for program success, and to gauge results.

Planning Applications

In criminal justice planning, it is necessary to consider the consequences of change in one part of the system for other parts of the system. This principle is firmly embodied in the four major tasks which can be identified for the criminal justice planner. These are:

- intensive analysis of the crime problem and of the capacity of the criminal justice system for coping with the consequences of crime, including workload impact, cost implications, and flow from justice sector to sector;

- analysis of the plans and programs of criminal justice agencies for the purposes of determining what the impacts are on other agencies of proposed plans and programs for each agency, including descriptions of the nature and magnitude of the impact;

- construction of a plan which takes account of and explains, as far as possible, the impact of agency actions on other agencies; and

- establishment of a mechanism to provide feedback about the results of plan implementation, which includes monitoring and evaluation, and which supports future planning efforts.

Formal and informal communication between components of the justice system means that each is usually aware of new policies implemented by other components. While they can often assess the general impact on their own operations, planning tends to be reactive in nature. To address the need for the criminal justice system to be proactive, it is necessary to target social and

economic developments, as well as long-term structural changes in philosophy, policy, and legislation. Without integrated data to evaluate the flow between components, reacting to, rather than planning for change, becomes the norm.

Sub-provincial justice data and community profiles offer an effective means to redress the lack of justice information needed for planning. Because it allows for the integration of justice and non-justice databases, the JAA database makes it easier to foresee trends in the justice area and implement proactive policies, all at a practical geographic level. For example, the impact of altering program delivery can be realistically assessed against a background of social information, flow data, and a description of the delivery of justice services by the service components.

Using the JAA database, prediction and planning exercises can be undertaken within a broader context. Planning models can be imposed more easily on the datasets for individual areas defined by JAA's, providing a measure of impact on a practical geographic level. At the same time, these models can be situated at any level of the system by rolling the local data to more general levels.

At the provincial level, JAA's facilitate comparisons between regions within the province, allowing the province to be more responsive to the needs of specific geographic areas. Crime, and the need for justice services, are not uniformly distributed throughout each province. Data at the sub-provincial level will allow administrators at both the provincial and the local levels to devise more targeted programs, and measure their effectiveness.

Research Applications

For the purposes of the present application, criminal justice research can be seen to have three objectives. These are:

- to understand crime as a social phenomenon;
- to understand the criminal justice system as a dynamic social and economic process; and
- to develop and evaluate strategies for crime prevention and offender rehabilitation.

To achieve these objectives, criminologists apply social behavioral science methods, in an effort to establish cause and effect relationships. If that is not possible, criminologists describe the extent to which crime, justice events, and non-justice events tend to co-occur. Because it is applied, criminal justice research usually does not involve strict experimental control. For example, it is rarely possible for researchers to experiment, under controlled condition, to determine if certain social elements encourage criminal behaviour. Instead, studies tend to be correlational, resulting only in support or non-support for the criminological theory which generated the research.

Recently, the correlational approach to criminal justice research has moved away from the macro level toward the local level, using more specific features of community life. This has come about because, although statistically significant empirical relationships between crime rates and a

variety of indicator variables have emerged, such as gross national product, these variables are too aggregated. They are average readings which cancel out the differences that exist among units at lower levels of aggregation. As a result, this research does little by way of prescribing specific measures that would reduce crime levels in the future.

Sub-provincial justice data encourage the contemporary local-level approach because they provide non-justice data in small geographic units. These elements can then be quantified and correlated with the corresponding justice data. Thus, operationalizing variables suggested by established criminological theories of crime causation within the JAA database can provide a broad range of research opportunities.

2.3 The Contents Of The JAA Database

The JAA database contains information from three different surveys: Uniform Crime Reporting (UCR) Survey; Police Administration Survey; and the Census of Canada. Data are provided for 1986 and 1991. Presented below is a listing of the categories of variables contained in the database.

UCR Variables

The largest part of the database is built with UCR data presented within 28 criminal offence classifications and 15 traffic categories . They include:

- 21 Criminal Code Offence Categories, by 4 Units of Count;
- 4 Federal Statute Offence Categories, by 4 Units of Count;
- 1 Summary Provincial Statute Category, by 4 Units of Count; and
- 15 Traffic Offence Categories, by 3 Units of Count.

The four units of count available for crime data are: Actual Offences; Offences Cleared; Adults Charged; and Youths Charged. The traffic data are presented by Actual Offences, Offences Cleared, and Persons Charged.

Census Data:

Since crime rates can be affected by the social climate of an area, the JAA database includes Census variables which can be used to examine the age composition of a population, the incidence of low income, unemployment rates, family composition, high school drop-out rates, and migration. These indicators combine to form the social climate within which the administration of justice operates.

See Appendix "B" for a complete listing of all the variables included in the Justice Administration Area Database.

Justice-Related Background Data

Sub-provincial justice administration areas differ appreciably from one another in the way their service components are administered. Consequently, it is suggested that users incorporate locally available data when using JAA's. The variables most important in discriminating between areas might include:

- demand for services;
- resource allocation;
- costs and expenditures;
- availability of support services;
- performance indicators.

The degree to which justice related background data are used within the JAA framework is related to their local availability and suitability as determined by individual users. Before gathering and loading them, a potentially time consuming task, the priority of this type of information needs to be carefully assessed.

2.4 Methodology Notes:

All of the data contained within this database are from the Uniform Crime Reporting UCR Survey, Police Administration Survey and the Census of Canada. To establish a broad context within which to interpret these data, please read the general descriptions pertaining to these surveys in the appropriate appendix of this user's guide. However, so that you may better understand the particular results of your analysis, several important points are highlighted below.

QUICKSTAT sub-provincial databases all use a "Common Offence Classification Scheme" to present justice variables. This common framework permits users to compare analytical results across the different databases, and to examine data from different sectors of the justice system using a single set of offence categories. Each common offence category is constructed by aggregating individual UCR offence categories into the larger common offence categories. See Appendix "C" for a list showing the correspondence between UCR offence categories and the Common Offence Classification Scheme used in this database.

As suggested earlier, each JAA establishes a court based geographic area consisting of at least one criminal court of record. Territorial jurisdiction for each JAA is thus defined by the collective boundaries of the police agencies which compel accused persons to a common court. However, some JAA's will have more than one court location. For example, many JAA's will be composed of a permanent court location and a number of satellite or circuit locations, while several others will have more than one permanent court location within their boundaries.

JAA's are described in a machine readable site profile which outlines the geographic make-up of each JAA, as well as the police agencies and court locations within the geographic area. The

use of machine readable descriptive profiles offers several advantages. In addition to allowing users to print only those profiles they will use, they permit database users to add their own locally available descriptive information to create an enhanced area profile.

Also available are electronic geographic boundary files which can be used for mapping the results of data analysis. To utilize the boundary files, users will need to have their own copy of a geography mapping software package which accepts the .ABF file format, such as Atlas Graphics.

3. INTRODUCTION TO THE XV SOFTWARE

3.1 Getting Started:

a) Place the QUICKSTAT diskette in an external drive of your micro computer. The program will run on any IBM compatible micro-computer with 640 KB RAM, and MS DOS Version 2.1 or higher with a high density floppy disk drive.

b) If you have a hard drive, create a sub-directory (using the Make Directory "MD"command) and copy all of the files from the QUICKSTAT diskette into the new sub-directory.

c) To begin data retrieval, ensure that your default sub-directory is the one where the software and data are located, and type "XVM", then press ENTER;

d) When the title screen appears, answer the language prompt by typing "E" for English or "F" for French.

e) A Licence Agreement will appear on the screen. Read the agreement carefully, and if you agree with its terms, press the "Y" key to indicate yes.

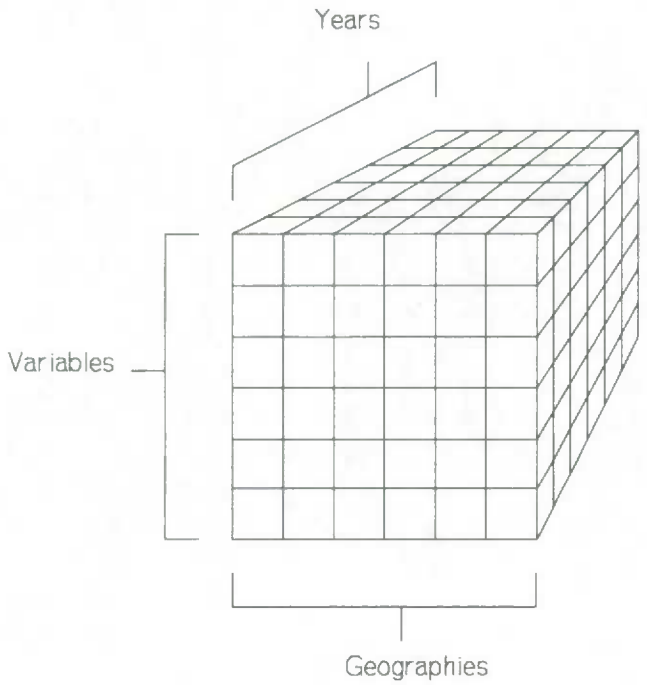
f) The MAIN MENU will appear on the screen. Basic program functions and menu item options are described below, and a tutorial which demonstrates key program operations is presented in the next chapter.

3.2 Basic Software Functions:

QUICKSTAT operates in a program called XV, a Statistics Canada developed software tool that simplifies the selection and screen presentation of cross classified data. This software enables you to:

- select, display and print subsets of data from a selected table,
- convert the data into a format that can be used by other software packages; and
- create new data elements from arithmetic combinations of existing data elements.

If you think of a two-dimensional table as a flat sheet of paper on which there are a variety of rows and columns, three dimensions can be visualized as a "RUBIK'S CUBE". There are a multitude of ways to re-orient the faces of the cube. For instance, the figure on the next page shows one possible configuration, with justice variables forming the "Rows", geographic areas forming the "Columns" and reference years forming "Wafers" or layers.



Once you have selected the dimensions that will be viewed on the screen as rows and columns, scrolling through the wafers (shown as years in the above diagram) requires a single keystroke, which instantly changes the contents of the screen as you move through each wafer.

All applications within XV are initiated using the Main Menu which is displayed as a highlighted bar at the top of your screen. It provides access to the four main XV functions: SELECT, RETRIEVE, EXIT and CONFIGURE. To select an option from the main menu, place the highlighted cursor bar over the desired menu item using the appropriate (→ ←) ARROW key. When a main menu item is highlighted, the associated pull down menu appears and lists available options. To select an option from a pull down menu, place the highlighted cursor bar on the desired item using the appropriate (↑ ↓) ARROW key, and press ENTER. Alternatively, you can type the highlighted letter to activate needed options.

A content sensitive HELP key (**F1**) is available at any point while you are using XV. The HELP key displays help scripts related to the command, mode or action that you are performing.

3.3 Selecting Data:

To begin the process of creating your own multi-dimensional tables, you must use the SELECT option from the Main Menu. When the SELECT option is highlighted with the cursor bar, the system will present a pull down menu with the options: "Select a Table" and "Select a View"

You start each session by activating the "Select a Table" option which lists all available data

tables along with a short description of their contents. Use the (→ ←) ARROW keys to move the highlighted cursor bar to the table you want and press ENTER. Most users will have only one available table which will be highlighted automatically.

Once you have chosen a table, you must select a "view" (perspective) of the data. From the SELECT function in the main menu, activate the "Select a View" option which will enable you to specify your table set-up. This function works in three steps, prompting you to select dimensions from the database to form "ROWS", "COLUMNS" and "WAFERS" (the third dimension). When employing the "Select a View" option, you are presented with a menu of four potential table dimensions, (0-Period; 1-Geography; 2-Variables; and 3-Quantifier). Please note that QUICKSTAT databases do not utilize the Quantifier dimension.

To respond to the first prompt, "Which dimension will form the Rows ?" place the highlighted cursor bar on the dimension that you would like to have appear as rows in your table, and press ENTER. It will change colour, and cannot be selected accidentally for other dimensions. The cursor will return to the first unmarked dimension and the prompt will ask "Which dimension will form the Columns ?". Select the desired column dimension in the same way. After the row and column dimensions have been chosen, the prompt will ask you to choose the dimension to form the Wafers. Place the highlighted cursor on the intended Wafer dimension and press ENTER.

As you will note, each category in a dimension has a KEYWORD which is displayed in the text box on the right hand side of the screen when the dimension is highlighted. To access a window with descriptions of the keywords or the categories available for a dimension, position the cursor on the dimension, and press the "+" key on the number keypad. The "-" key closes the window.

3.4 Retrieving Data:

Once you have established a view of the table, you can retrieve the data you have specified. To access the data, chose the RETRIEVE function from the Main Menu. It displays the "Retrieval Menu" which offers the following options:

Browse data
Output selected data to File
Retrieve selected data into Worksheet
Retrieve Table Description

To display your data, invoke the "Browse Data" option. XV displays a table with the rows, columns and wafers you defined in the "Select a View" menu. Use the ARROW keys to move the cursor left, right, up and down, row by row or column by column. To move in screen sized blocks, use the page up and page down keys to move vertically, the TAB key to move right, and the SHIFT + TAB keys to move left. To move directly to the end of a table, press the END key.

It is also essential to be able to scroll through the third dimension of your table, the "Wafers".

To move forward through each successive wafer, press the "+" key. This will instantly display a new screen with data for the next available wafer. To reverse the process, , use the "-" key which will move you back toward the first wafer, one wafer at a time. Use the " * " and the " / " keys on the number keypad to move directly to the last or first wafer.

The columns and rows in your table are labelled with short (8 character maximum) "Keywords". These keywords are descriptive shorthand for the variable names. In some cases they will be fully descriptive, and in other cases they might be only codes, mnemonics or abbreviations. To selectively display descriptions for keywords, place the highlighted cursor on a keyword and a more detailed description will appear at the bottom of the screen. The SHIFT and ARROW keys are used to highlight keywords, and to move along columns and rows. The SHIFT key, in combination with the F1 function key, are used to highlight keywords in the wafer dimension.

Output Selected Data To File

XV is designed to permit users to quickly and easily explore a database, and to perform a range of basic analytical operations. If you want to perform more sophisticated analysis using specialized graphic or statistical software, you must first export the data. To store your data in a file outside of the XV system, choose the "Output selected data to File" option from the Retrieval Menu. A pull down "Output Format" menu will present the following:

Return to Main Menu
Data Interchange Format (D.I.F.) File
Comma Delimited Format (.PRN) File
Output Files for TPL-Tables
.WK1 File for LOTUS
Print-Image File
.DBF File for DBase

The file format you choose depends on which software package you will use to read it. When you select one of the above output formats, XV prompts you with:

Output file name ==>

Enter any one-to-eight character name, (the three digit extension is optional) and press ENTER. Unless you specify a different drive, the system will write the file to your default directory. Next, XV prompts you to indicate the table subset to be saved. Select the desired subset and press ENTER. Once this is done, the file is saved and XV displays the Main Menu.

Creating Worksheets:

Within the "Browse Data" option, all data is read directly from the disk and written directly to the screen, and is not maintained in memory. To perform any computations or transformations on the data, it is necessary to retrieve the data from the selected view into a worksheet. The

worksheet is only two dimensional, limited to the rows and columns in the selected view.

To create a worksheet, you must activate the "Retrieve Data into Worksheet" option from the "Retrieval Menu". This will produce the "Worksheet Operation" menu which features the following options:

Return to Main Menu
Retrieve Data into Worksheet
View Worksheet
Manipulate Data in Worksheet
Write Worksheet to a File
Read a Comma-Delimited File into Worksheet
Print Worksheet
Alter Display Options
Erase all data in Worksheet

From within the "Worksheet Operations" menu, select the "Retrieve data into Worksheet" option. If you choose to retrieve only selected rows and columns, you will be presented with all the available variables, by dimension, and prompted to select those that you want. (Note: when creating worksheets, you can only select one element from the wafer dimension). Select the data that will form your table by scrolling through the list of variables and "marking" the ones you want. An item can be "marked" by highlighting it with the cursor and pressing the SPACE BAR. You can un-mark a marked item by highlighting it and pressing the SPACE BAR a second time.

You can view your newly created worksheet by activating the "View Worksheet" option from within the "Worksheet Operations" menu. Once in the worksheet, you can move around in the same way as described for the"Browse Data" option. The worksheet can be printed by activating the "Print Worksheet" option.

Worksheet Operations

Within the worksheet, selected row and column operations, or global computations can be made by pressing the F9 Function key which produces a menu of available operations. Selected column or row operations require that you highlight or mark a column or row using the SHIFT and ARROW keys.

XV performs the following worksheet operations:

Percent change - row to row or column to column;
Express entire worksheet as a percent of a highlighted row or column;
Erase zero filled rows or columns;
Sort all rows or columns based on a highlighted row or column; and
Multiply the entire worksheet by a constant.

In addition to the above, you can graph selected worksheet columns, or create your own formulas

to perform various arithmetic operations on the data. The XV tutorial in the next chapter demonstrates how to execute these worksheet functions.

Transferring Worksheets To Other Software

Exporting worksheet data to different file formats can be accomplished through the "Write Worksheet to File" option in the Worksheet Operation Menu. When activated, this option presents the following pull down menu of output formats:

Return to Worksheet Menu
.DIF file (Data Interchange Format)
Comma_Delimited Format
Output Files for TPL-TABLES
.WKS File for LOTUS

This option works in the same way as its counterpart in the "Output Selected Data to File" option described earlier. It allows you to export the contents of a worksheet, including the results of any calculations you have made, into a file outside of the XV system. It does not, however, include the "Print-Image File" format which can only be employed through the "Output Selected Data to File" menu.

3.5 Configuring the System:

XV permits you to change the format of the data when displayed on the screen or when outputted to a file. To invoke these formatting options, position the highlighted cursor bar on the CONFIGURE option in the Main Menu. The system offers the following choices:

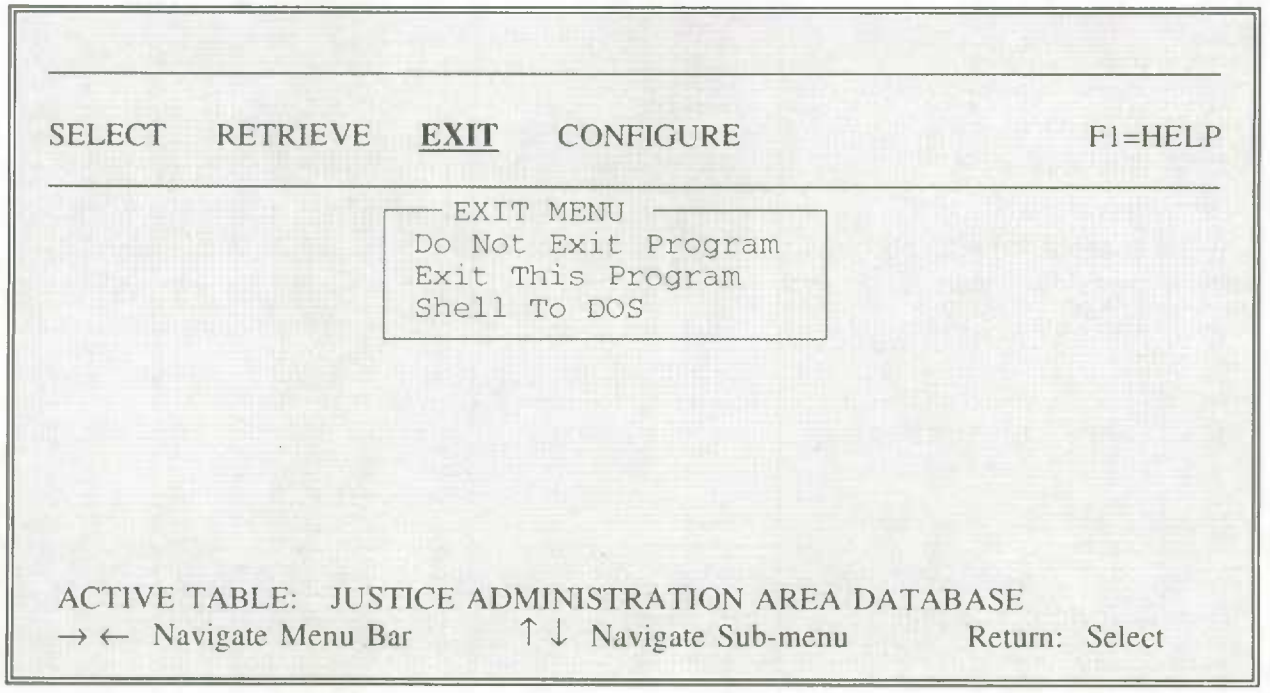
Designate a new Drive/Path for data
Change Printer Port
Change Graphics Resolution
Change # of Decimals in Displays
Change Column Width for Displays
Change Symbol used to denote N/A
Stub Width (Print-Image Output)
Make Current View the Default for (Table Name)
Save Current Options

Note that if you change the number of decimals or change the column widths for displays, the changes are in effect only for the current working session.

4. XV TUTORIAL

The following tutorial demonstrates the basic functions of the XV software by presenting a step by step description of the operations used in creating a small sample worksheet. By working through this 20 minute tutorial, you will develop a very good understanding of how the software works and should be able to apply the operations to your own applications.

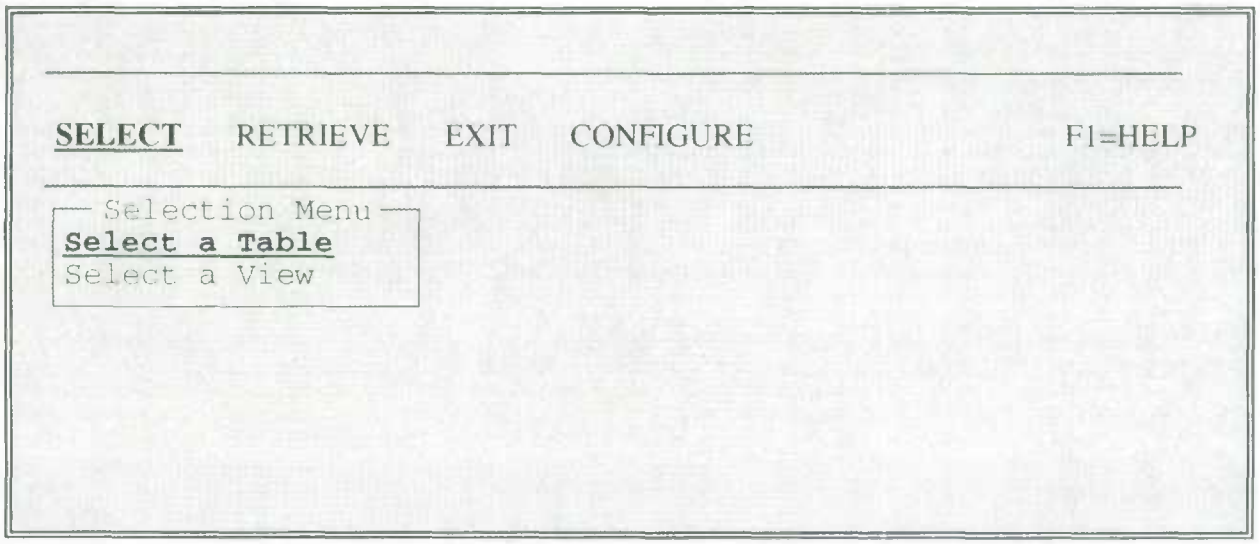
4.1 The Main Menu:



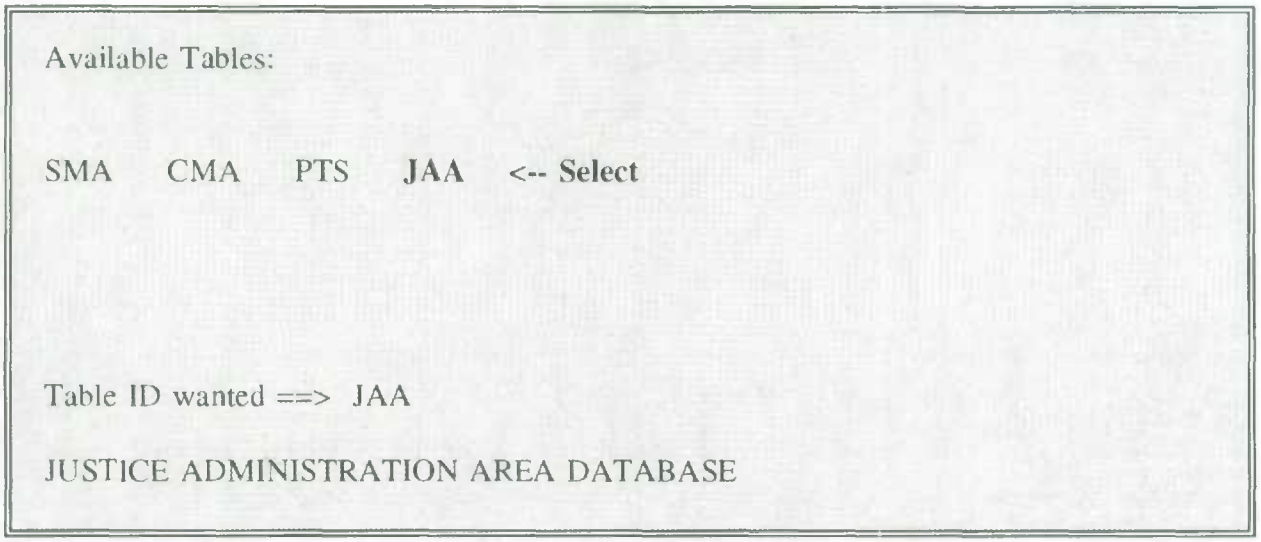
Shown above is the Main Menu. All applications within XV are initiated using the Main Menu which is displayed as a highlighted bar at the top of your screen. It provides access to the four main XV functions: SELECT, RETRIEVE, EXIT and CONFIGURE. To select an option from the main menu, place the highlighted cursor bar over the desired menu item using the appropriate (→ ←) ARROW key. In the above example, the EXIT function is highlighted. When an item is highlighted, the associated pull down menu appears and lists available options. To select an option from a pull down menu, place the highlighted cursor bar on the desired item using the appropriate (↑ ↓) ARROW key, and press ENTER. Alternatively, you can simply type the highlighted letter to activate the desired option.

At the bottom of the screen, you will see the active table name, as well as a reminder of which keys are used to navigate and select menu items. Also, a content sensitive HELP key (F1) is available at any point while you are using XV.

4.2 Select A Table:

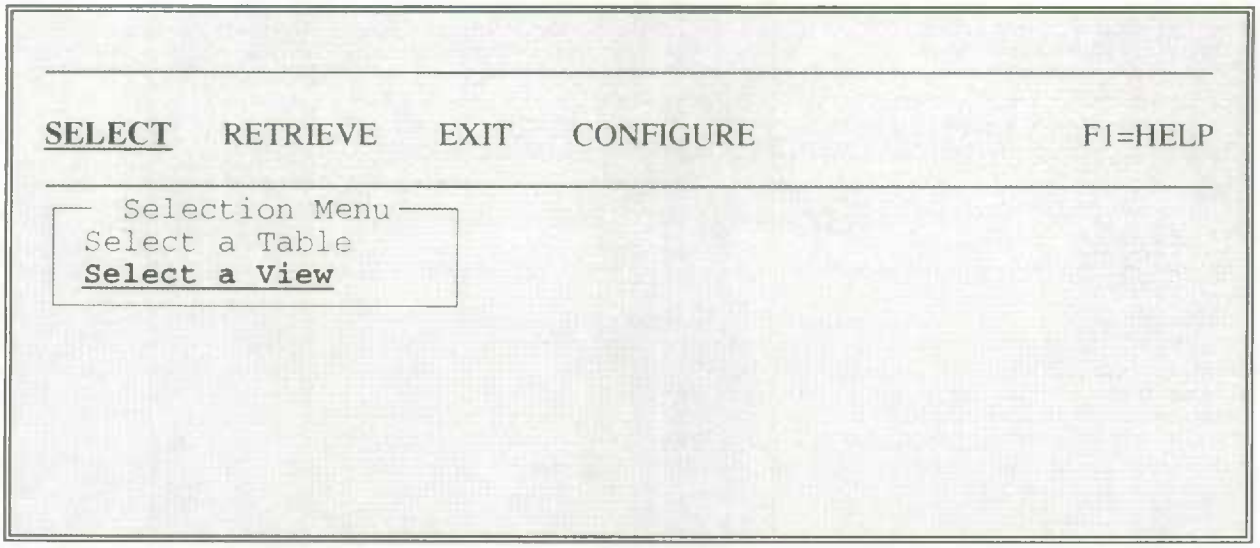


To select a table, move the highlighted cursor bar to the SELECT function in the Main Menu. XV will display the above shown "Selection Menu" with two options: "Select a Table" and "Select a View". Highlight the "Select a Table" option and press ENTER.

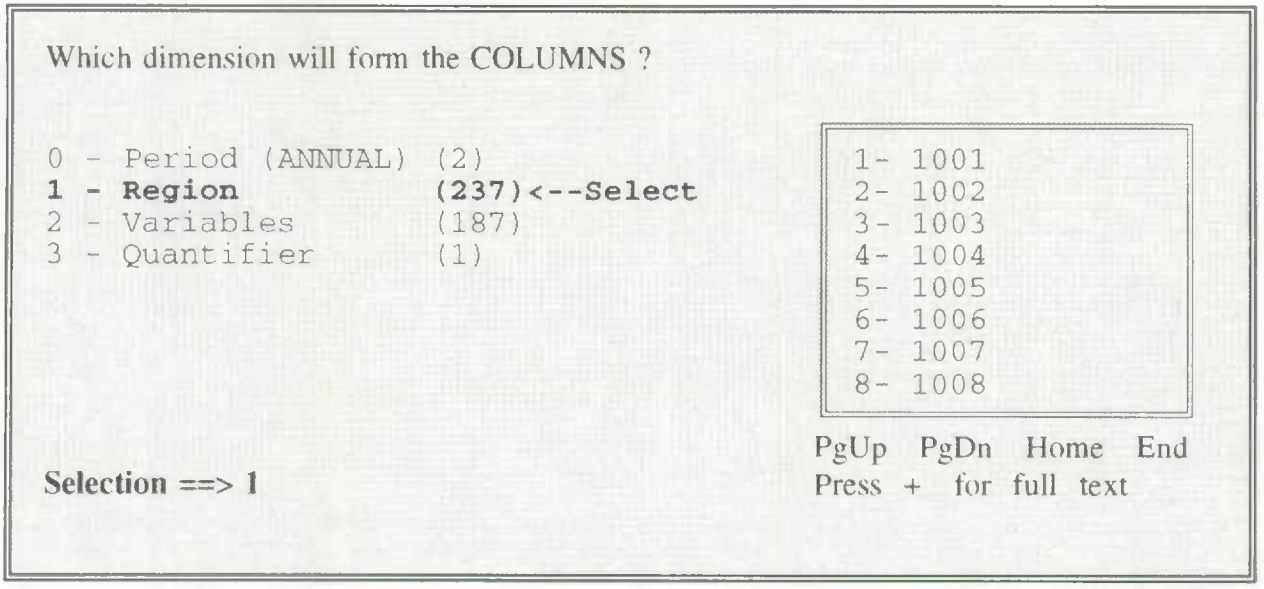


When activated, the Select a Table option will list all of the QUICKSTAT tables that you have purchased and loaded into your directory. Move the cursor bar, by using the (→ ←) ARROW keys, so that the JAA table is highlighted, and press ENTER. If you have only one table, it will be highlighted automatically.

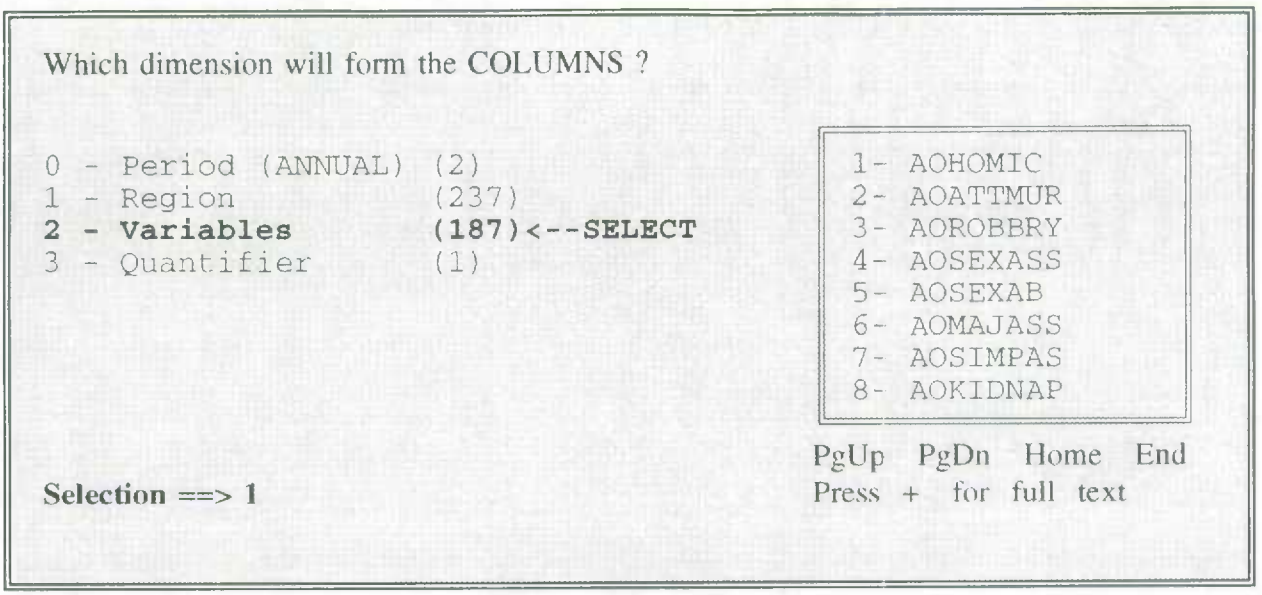
4.3 Select A View:



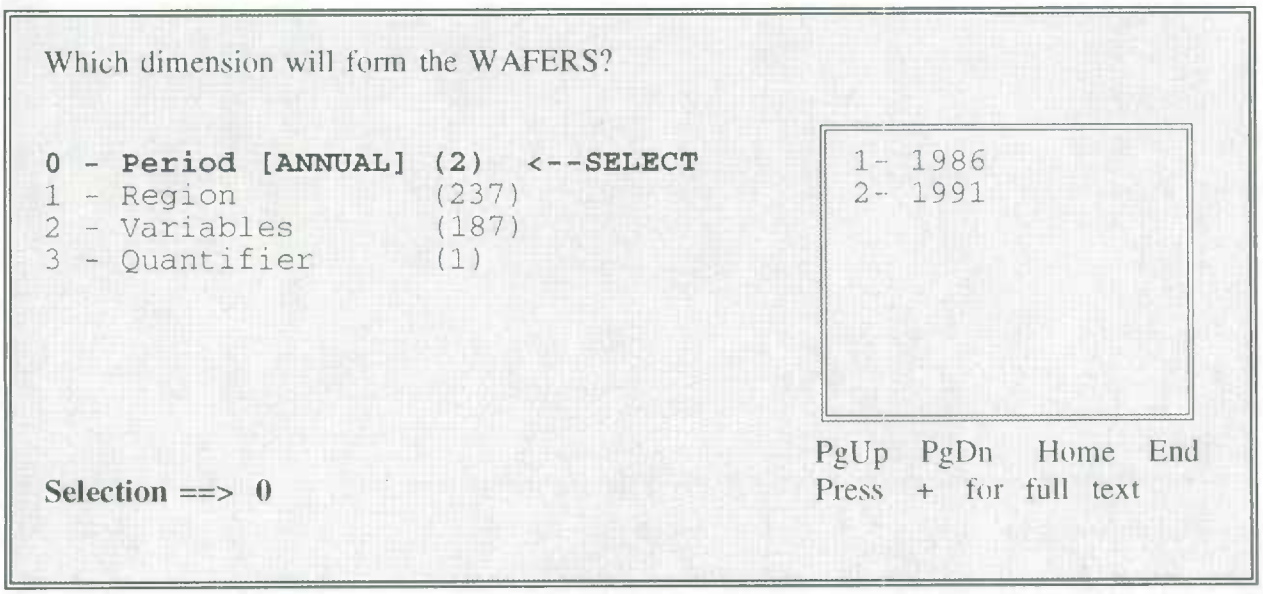
The "Select a View" option shown above is used to define the format of the data table. It asks you to specify the way in which you want to view the table in terms of Rows, Columns and Wafers. Move the cursor to "Select a View" , and press ENTER.



As shown above, the first part of the table to be defined is the ROWS. Move the cursor to Menu Item 1 so that "Regions" are highlighted, and press ENTER. This will ensure that JAA's will form the ROWS of your table.

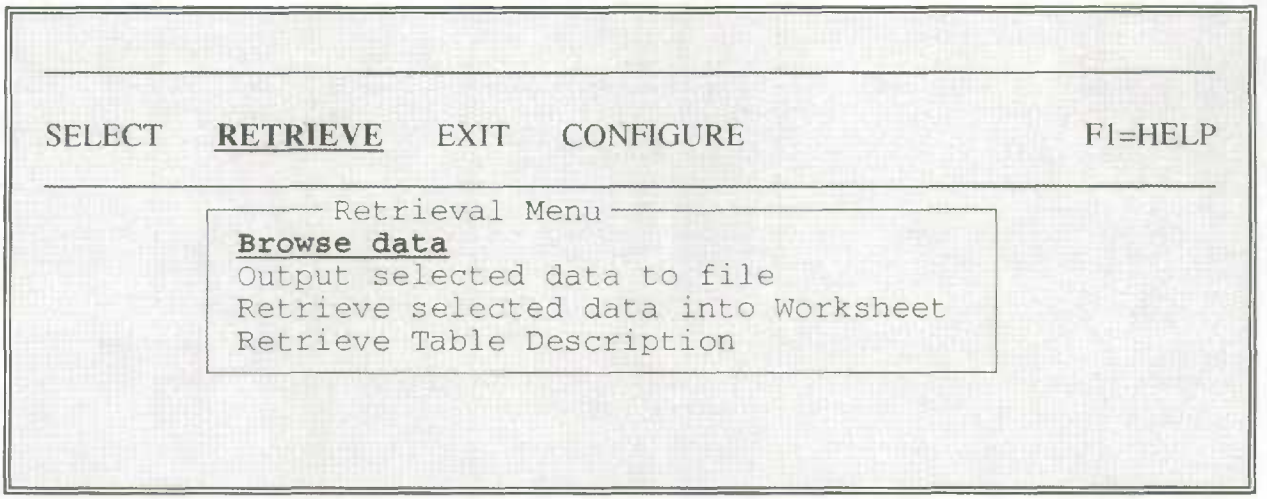


You are now asked to select the dimension which will form the table's COLUMNS. Move the cursor to Menu Item 2 so that "Variables" are highlighted (See APPENDIX B for a listing of JAA variables), and press ENTER. This selection ensures that Crime, Police Administration and Census variables will form the Columns of your table.



The above screen asks you to select which dimension will form the WAFERS of the table. Move the cursor so that Menu Item 0 "Period" is highlighted, and press ENTER. You will then be returned to the Main Menu.

4.4 Browse Through Table:



Having defined the format of the table, it is now possible to browse through the dataset and explore all aspects of interest. To do this, move the cursor to "Browse Data" in the Retrieval Menu , and press ENTER. A table similar to the one below should appear on your screen.

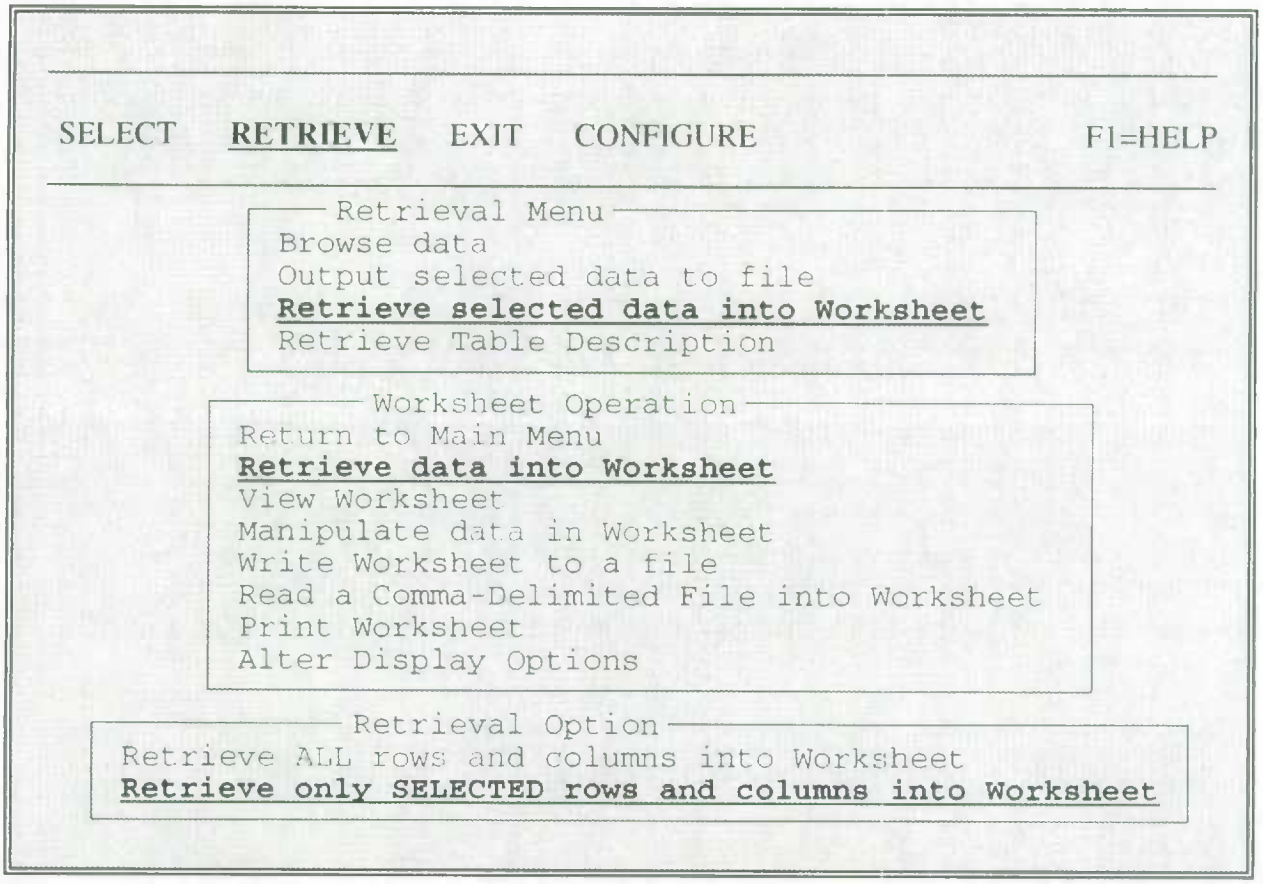
+-/PERIOD=1986 JUSTICE ADMINISTRATION AREA DATABASE

Variable→	AOHOMIC	AOATTMUR	AOROBBRY	AOSEXASS	AOSEXAB
1001	1	4	38	87	6
1002	1	0	0	19	1
1003	0	0	2	22	1
1004	0	0	2	14	4
1005	0	0	0	16	7
1006	2	2	3	72	7
1007	0	0	1	2	1
1008	0	0	0	0	1
1009	1	0	1	30	2
1010	0	0	1	46	3

↑ Region

You can view other parts of the table by using the Page-Up and Page-Down keys for vertical page movement, or by using the TAB key to page right, and the SHIFT plus TAB keys to page left. The ARROW keys will allow you to move one row or column at a time. By pressing the + key, you can move through the Wafers (Years). To move back toward the first Wafer, press the - key. By pressing the SHIFT key in combination with the ARROW keys, you can highlight individual items in both ROWS and COLUMNS. Once highlighted, the full name of the item is displayed at the bottom of the screen. To return to the Retrieval Menu, press ENTER.

4.5 Manipulating Data In A Worksheet:



The above screen illustrates the menus and options you must invoke to manipulate data in a worksheet. Begin by moving the cursor to the "Retrieve selected data into Worksheet" option in the "Retrieval Menu". This will produce the "Worksheet Operation" window from which you should select the "Retrieve data into Worksheet" option. When the "Retrieval Option" window appears, move the cursor to the "Retrieve only SELECTED rows and columns into Worksheet" option, and press ENTER.

Select categories of REGION to load as Rows

1013	Labrador City	
1014	Goose Bay	
1101	**Alberton**	<--
1102	**Summerside**	<--
1103	**Charlottetown**	<--
1104	**Souris**	<--
1105	**Georgetown**	<--
1201	Halifax City	

↑ ↓, Space to mark, Return once done

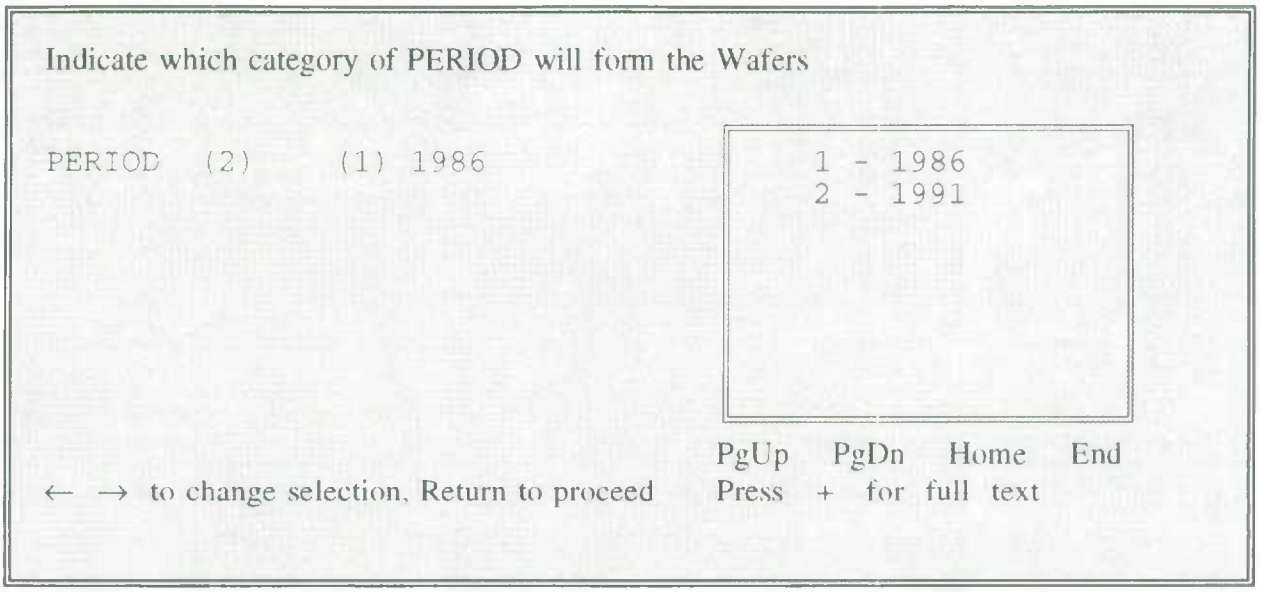
The screen above lists the Regions (JAA's) which are available in the database. To select specific JAA's, move down through the list with the down ARROW key, and press the SPACE BAR to mark the desired items. These items will form the Rows of your table. To unmark an item, move the cursor to the marked item and press the SPACE BAR a second time. For this tutorial, select 1101, 1102, 1103, 1104 and 1105. When the suggested JAA's are marked, press the ENTER key.

Select categories of VARIABLE to load as Columns

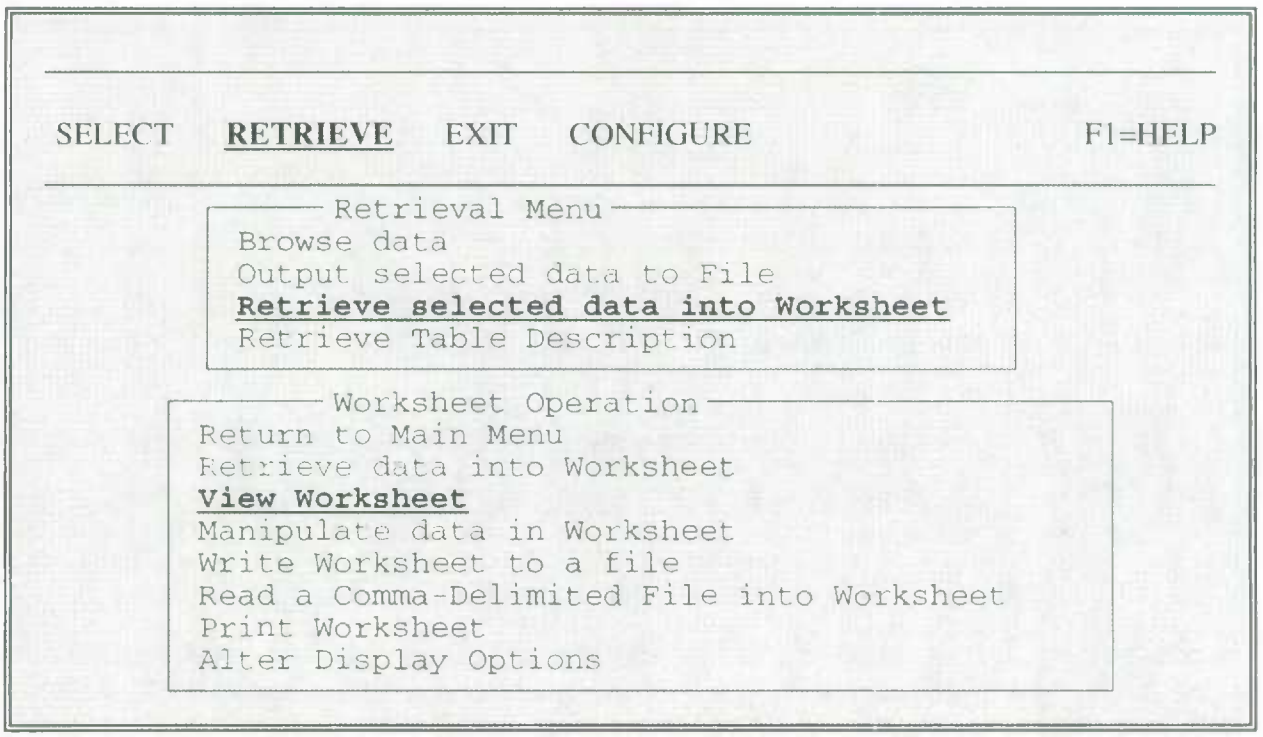
AOHOMIC	Actual Off: Homicide- 1st & 2nd degree; mansl; infanticide
AOATTMUR	Actual Off: Attempted Murder
AOROBBRY	Actual Off: Robbery- with firearms; other weapons; other
AOSEXASS	Actual Off: Sexual Assault- aggravated; with weapon; other
AOSEXAB	Actual Off: Sexual Abuse- incest; sexual exploitation; etc
AOMAJASS	Actual Off: Major Assault- aggravated; with weapon; other
AOSIMPAS	Actual Off: Simple Assault- no injuries involved
AOKIDNAP	Actual Off: Kidnapping- forcible confinement; take hostage

↑ ↓ , Space to mark, Return once done

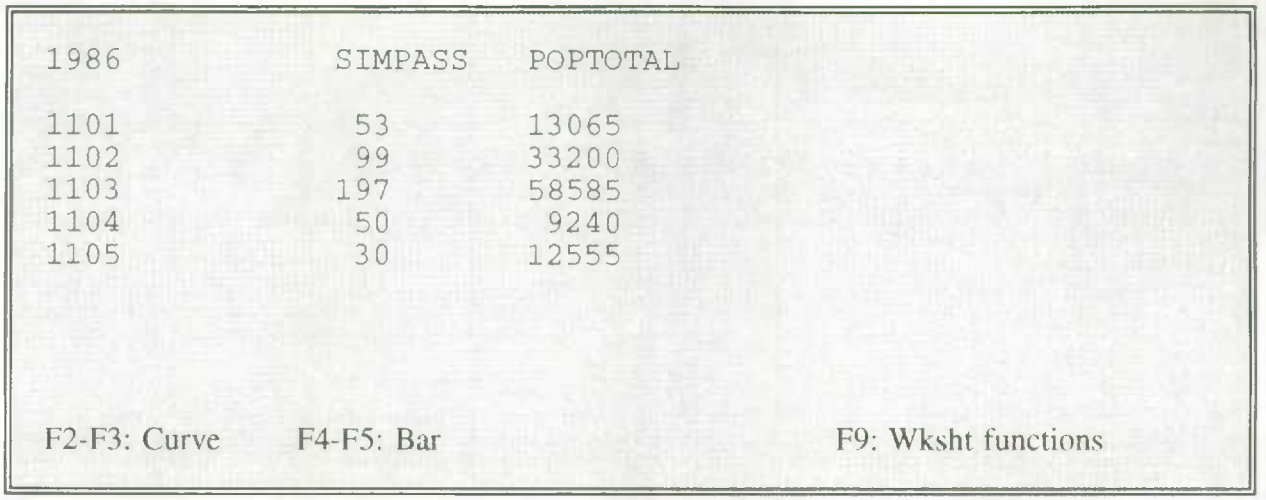
The next screen asks you to select the "Variables" which will form the Columns of the table. For this exercise, select AOSIMPAS (Actual Offences: Simple Assault) and POPTOT (Total Population). Selections are made by pressing the SPACE BAR on each desired item. To get to the POPTOT variable quickly, press the END key which will take you directly to the bottom of the variable list where the Census data are located. When you are finished selecting these variables, press the ENTER key.



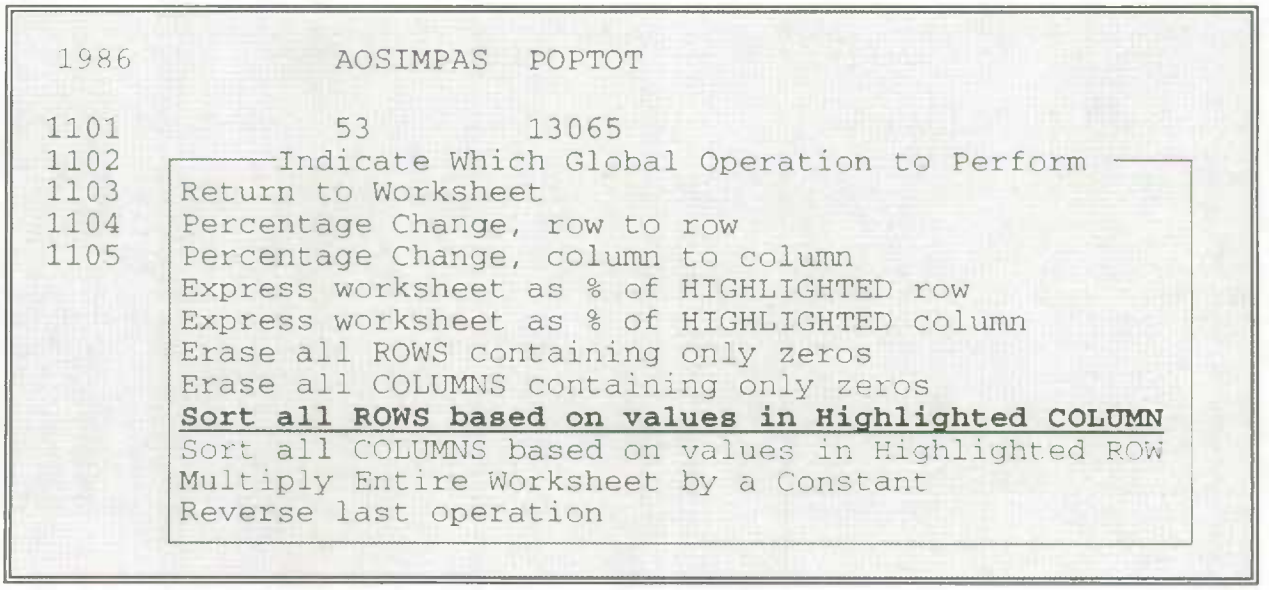
The above screen asks you to indicate which period will form the wafer of your table. Use the ARROW keys to move from one option to another. For this example, select 1986, and press ENTER to return to the "Worksheet Operations" window.



To view the new table, move the cursor to the "View Worksheet" option in the "Worksheet Operation" window displayed above, and press ENTER. This should produce a table similar to the one presented on the next page.



The table presented above contains the data that you selected. To perform global worksheet functions on these data, it is necessary to first MARK a row or column. For the purposes of this tutorial, a "Column" will be marked. To MARK a Column, use SHIFT plus the ARROW keys (→ ←) until the desired Column is highlighted, in this case "Simple Assaults" AOSIMPAS. After you have marked AOSIMPAS, press the F9 key to produce a list of "Global Operations".



The above menu allows you to invoke a variety of Global Operations. For example, move the cursor to "Sort all Rows based on values in Highlighted Column", and press ENTER. This will produce a table with all the Rows sorted based on the number of Simple Assaults.

1986	AOSIMPAS	POPTOTAL
1103	197	58585
1102	99	33200
1101	53	13065
1104	50	9204
1105	30	12555

F2-F3: Curve F4-F5: Bar F9: Wksht functions

You will note in the above table that the JAA's are now sorted based on the number of Simple Assaults. You can reverse this operation by invoking the F9 key and moving the cursor to "Reverse Last Operation", and pressing ENTER. Please execute this operation before proceeding to the next step.

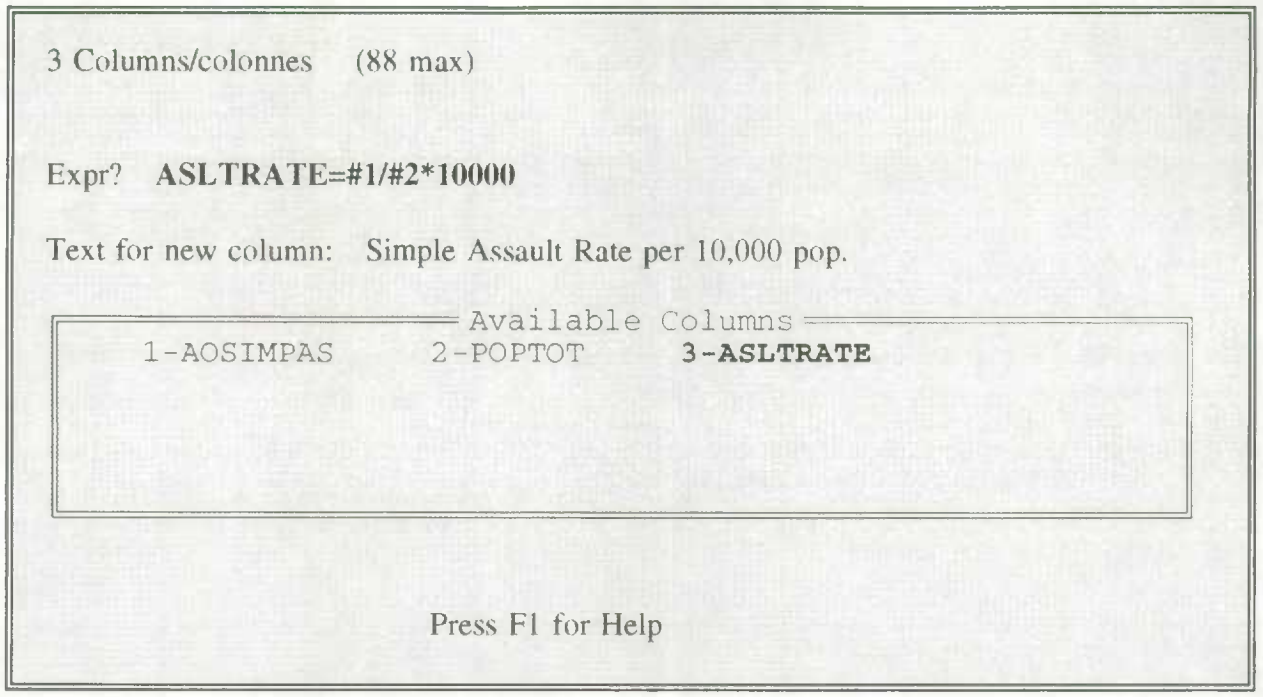
SELECT **RETRIEVE** EXIT CONFIGURE F1=HELP

Retrieval Menu
- Browse data
- Output selected data to file
- **Retrieve selected data into Worksheet**
- Retrieve Table Description

Worksheet Operation
- Return to Main Menu
- Retrieve data into Worksheet
- View Worksheet
- **Manipulate data in Worksheet**
- Write Worksheet to a file
- Read a Comma-Delimited File into Worksheet
- Print Worksheet
- Alter Display Options

Indicate Type of Manipulation
- Return to Manipulate Worksheet Menu
- Perform Row Arithmetic
- **Perform Column Arithmetic**

To manipulate data in specific rows or columns, return to the Worksheet Operation menu, and select "Manipulate data in worksheet", as shown above. This produces a sub-menu which gives you a choice between Row and Column arithmetic. Place the cursor on "Perform Column Arithmetic" and press ENTER.



The above screen allows you to perform basic arithmetic functions on rows or columns. Begin by entering the formula needed to calculate a Simple Assault rate per 10,000 population. At the **Expr?** prompt, type: **ASLTRATE=#1/#2*10000** and press ENTER. The prompt "TEXT for new column:" will then appear. Type: **Simple Assault Rate per 10,000 pop**. This will produce a column label within the table so that when the column is highlighted (SHIFT plus →), a definition of the variable will be displayed at the bottom of the screen. The new Column data will automatically be added to the worksheet, and the "Available Columns" box will be updated with the label **3-ASLTRATE**. To view the new rate data, press the ENTER key which will return you to the menu screen. Activate the "View Worksheet" option to return to your worksheet.

Arithmetic expressions must use the following format: **X = Y <opn> Z**

Where:

X is the name to be assigned to the new row or column resulting from this operation;

Y is the first Row or Column name or number (if number, must be preceded by #) selected from the list presented in the "Available Rows/ Columns" box;

<opn> the arithmetic operation to be performed: + addition, - subtraction, * multiplication, / division, \ to sum a "Range" of rows or columns;

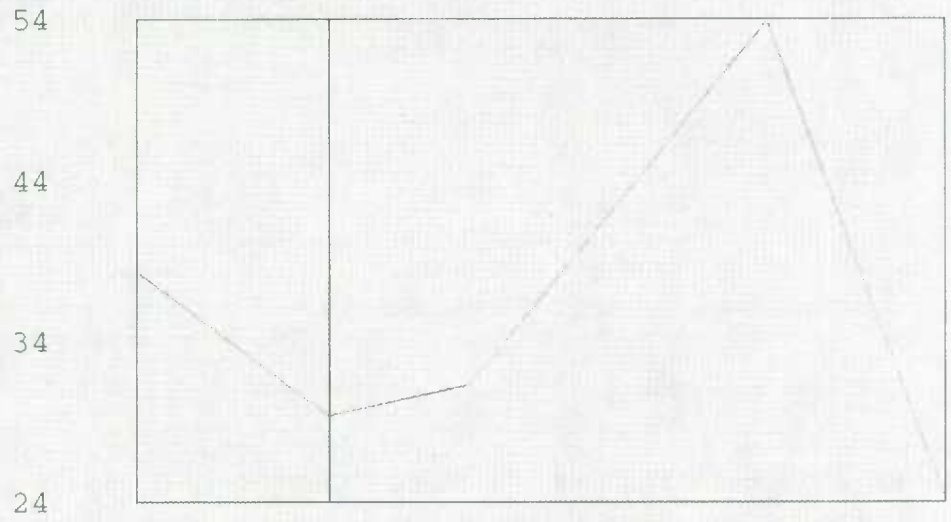
Z the second row or column name or number (if number, must be preceded by #) selected from the list presented in the "Available Rows/ Columns" box.

To delete a variable, type the variable name when prompted for the **Expr?**, then press ENTER.

1986	AOSIMPAS	POPTOT	**ASLTRATE**
1101	53	13065	41
1102	99	33200	30
1103	197	58585	34
1104	50	9240	54
1105	30	12555	24

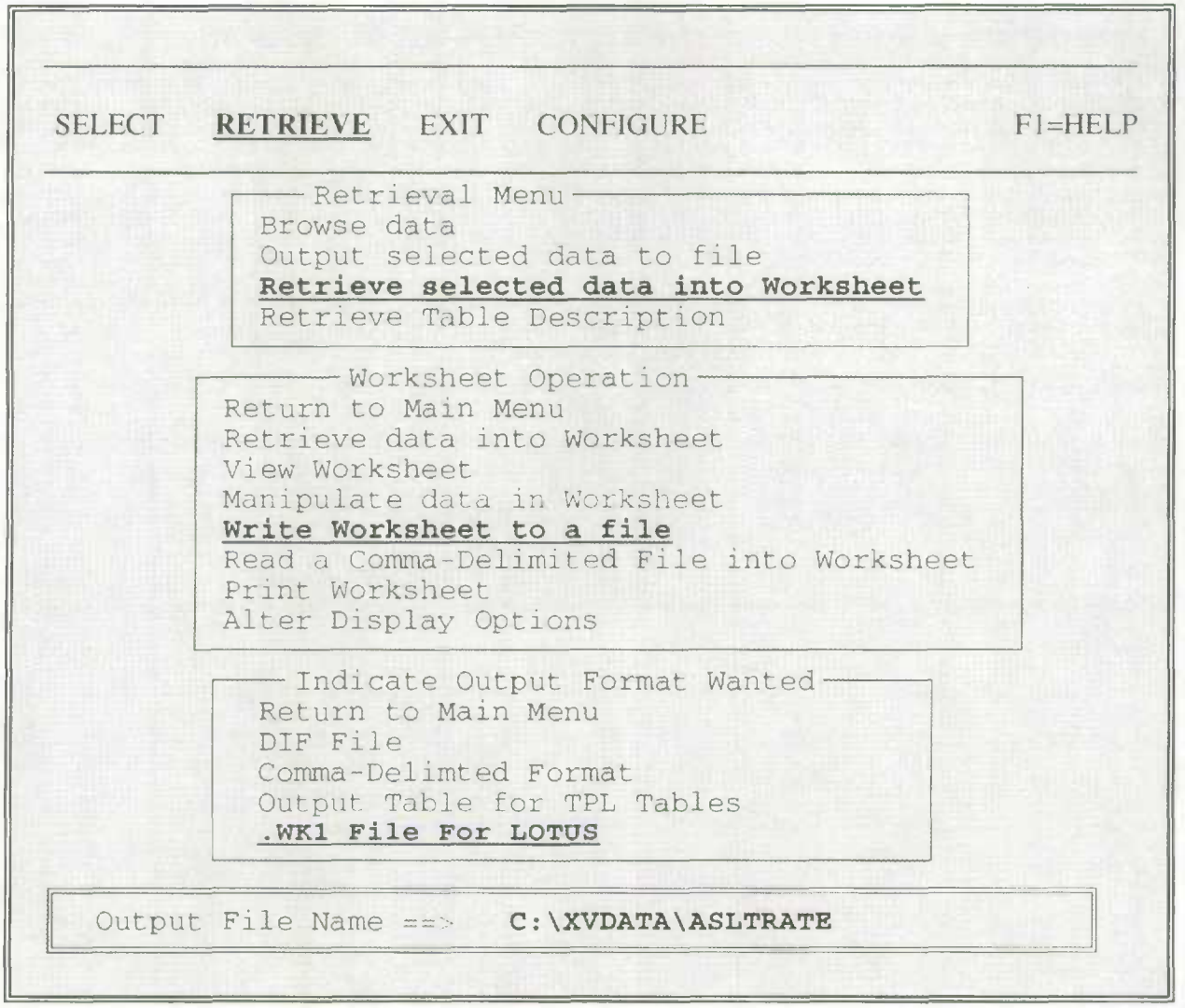
F2-F3: Curve F4-F5: Bar F9: Wksht functions

As you will note above, the rate for Simple Assault Offences (ASLTRATE) has been added to your table. If you wish to view this variable in graphic form, highlight the column using the SHIFT plus → ARROW key. Once the column is highlighted, press the F2 key to see your graph.



Highlighting the ASLTRATE column and pressing F2 will produce the above line graph showing the different rates of Simple Assault offences for the selected JAA's. If you want to examine two variables on the same graph, you would simply graph one variable, as above, press ENTER and highlight a second variable, then press the F3 key. The F4 and F5 keys provide the same functions, but for bar charts. To see values for each JAA, scroll through the graph using the ARROW keys. Note that "Rows" cannot be graphed, and XV graphs cannot be printed or saved.

4.6 Exporting Data



To export your worksheet to another software package, go to the "Worksheet Operation" window and select "Write Worksheet to a File". This should produce the "Output Format" window, from which you can select a variety of file formats. For this demonstration, select the ".WK1 File for LOTUS" option.

You will be prompted for the **OUTPUT FILE NAME.** Let us suppose that you would like to save your Simple Assault Offence data to your XVDATA directory on your hard drive. To do this, type: **C:\XVDATA\ASLTRATE.WK1.** This will save your worksheet to C Drive, on your hard drive, in a format which will allow you to retrieve it using your LOTUS software program.

You have now mastered the basics of the XV software, and can return to the main menu to select your own dataset. Remember to use the HELP screen (F1) whenever you have questions about how the software works.

APPENDICES

APPENDIX A

ABOUT THE DATA

The Measurement of Crime

The crime data contained in this database are the product of the Uniform Crime Reporting (UCR) system. This data collection system became operational in 1962 after development by Statistics Canada with the cooperation and assistance of the Canadian Association of Chiefs of Police, through their Police Information and Statistics Committee.

The Uniform Crime Reporting system was designed to produce an indicator of incidence of crime in Canadian society. There are a number of ways of measuring the incidence of crime and each method will yield a different result. The characteristics of the counting process will affect the count which is obtained. Different data collection systems will produce different figures for the same series of events since the count of events is a reflection of the definitions which are used and the manner in which the data are gathered.

The process of measuring the incidence of crime is complicated by the great diversity of human behaviours which are considered to be criminal. One can conceive of a very wide spectrum of criminal human behaviours from the most trivial to the most serious. It is unlikely that a single data collection system could be designed to deal with this broad diversity of events. Different data collection methods will be sensitive to different parts of the spectrum.

The Uniform Crime Reporting project was designed to have the local law enforcement agencies as respondents. This characteristic has very significant ramifications for the correct interpretation of UCR crime data. It means that the UCR project can contain at most, information on only those crimes which come to the attention of police. The UCR crime data, therefore, do not contain a count of all crimes in Canada since some crimes are never detected, and some which are detected are never brought to the attention of the police and thus these criminal events can never be recorded by the UCR project.

The fact that UCR data are based on a count of those criminal events which are known to the police means that the crimes that are known to the police means that the crimes that are counted by the UCR system are a subset of all crimes in Canada. But this characteristic also means that all the crimes which are included in the UCR data system have successfully passed a basic criterion - each of the crimes which is counted in the UCR system was thought by someone (a citizen or a law enforcement officer), to require the attention of the police who would take the appropriate action.

Census Data Collection

The Census is a large and complex undertaking and, while considerable effort is taken to ensure high standards throughout all collection and processing operations, the resulting estimates are inevitably subject to a certain degree of error. Users of census data should be aware such error exists, and have some appreciation of its main components, so that they can assess the usefulness of census data for their purposes and the risks involved in basing conclusions or decisions on these data.

Errors can arise at virtually any stage of the census process from the preparation of materials, through the listing of dwellings and data collection to processing. Some errors occur more or less at random, and when the individual responses are aggregated for a sufficiently large group, such errors tend to cancel out. There are some errors, however, which might occur more systematically, and which result in "biased" estimates. Because the bias from such errors is persistent no matter how large the group for which responses are aggregated, and because bias is particularly difficult to measure, systematic errors are a more serious problem for most data users than the random errors referred to previously.

For census data in general, the principal types of error are as follows:

Coverage Errors which occur when dwellings and/or individuals are missed (producing undercoverage), or incorrectly included or double counted (producing overcoverage);

Non Response Errors result when responses can not be obtained for some households or individuals;

Response Errors occur when a respondent misunderstands a census question, and records an incorrect response;

Processing Errors can occur at various steps including: coding, data capture and imputation;

Sampling Errors which apply only to long form data asked of a 1/5 sample of households.

Various studies are carried out to evaluate the quality of the responses obtained by the census. For each question, response rates and edit failures have been calculated. Also, tabulations from each census are compared to previous censuses, sample surveys, and various administrative records. In addition to these aggregate-level comparisons, some micromatch studies are conducted in which census responses are compared with another source of information at the individual record level.

Also note that on some Indian reserves, enumeration was not permitted, or was not interrupted before it could be completed, or the quality of the collected data was considered inadequate. These geographic ares are called incompletely enumerated Indian reserves and are not included in the database.

APPENDIX B

JAA VARIABLES

Acronym	Actual Offences
1 AOHOMIC	Actual Off: Homicide- 1st & 2nd degree; mansl; infanticide
2 AOATTMUR	Actual Off: Attempted Murder
3 AOROBBRY	Actual Off: Robbery- with firearms; other weapons; other
4 AOSEXASS	Actual Off: Sexual Assault- aggravated; with weapon; other
5 AOSEXAB	Actual Off: Sexual Abuse- incest; sexual exploitation; etc
6 AOMAJASS	Actual Off: Major Assault- aggravated; with weapon; other
7 AOSIMPAS	Actual Off: Simple Assault- no injuries involved
8 AOKIDNAP	Actual Off: Kidnapping- forcible confinement; take hostage
9 AOABDUCT	Actual Off: Abduction- under 14,16; no CO; contravene CO
10 AOARSON	Actual Off: Arson
11 AOWEAPON	Actual Off: Weapons and Explosives
12 AOBRKENT	Actual Off: Break & Enter - business; residence; other
13 AOFRAUD	Actual Off: Fraud- cheques; credit cards; counterfeiting
14 AOTHEFT	Actual Off: Theft- over & under; m.v.; shoplifting; other
15 AOPSTOL	Actual Off: Possession of Stolen Property
16 AOMISCH	Actual Off: Mischief, Property Damage < $1000; > $1000
17 AOMORGAM	Actual Off: Morals- Gaming & Betting
18 AOMORSEX	Actual Off: Morals- Sexual; prostitution; pub. morals; etc
19 AOPUBORD	Actual Off: Public Order Offences - disturb peace; other
20 AOADMJUS	Actual Off: Off. Against the Administration of Justice
21 AOOTHCCC	Actual Off: Other Criminal Code Offences
22 AOTOTCC	Actual Off: Total Criminal Code Offences (excl. traffic)
23 AODRUGTR	Actual Off: Trafficking, Importing Drugs (Federal Stat.)
24 AODRUGPO	Actual Off: Possession of Drugs (Federal Statutes)
25 AOOTHFS	Actual Off: Other Fed. Stat.- customs; immig; UI; etc
26 AOTOTFS	Actual Off: Total Federal Statute (FS) Offences
27 AOTOTPS	Actual Off: Total Prov. Stat. Offences (excl. traffic)
28 AOTOTAL	Actual Off: Total Offences - CC; FS; PS; (excl. traffic)

Acronym	Offences Cleared
29 OCHOMIC	Off Cleared: Homicide- 1st & 2nd degree;mansl;infanticide
30 OCATTMUR	Off Cleared: Attempted Murder
31 OCROBBRY	Off Cleared: Robbery- with firearms; other weapons; other
32 OCSEXASS	Off Cleared: Sexual Assault- aggravated; with weapon; other
33 OCSEXAB	Off Cleared: Sexual Abuse- incest; sexual exploit.; etc
34 OCMAJASS	Off Cleared: Major Assault- aggravated; with weapon; other
35 OCSIMPAS	Off Cleared: Simple Assault - no injuries involved

36 OCKIDNAP	Off Cleared: Kidnapping- forcible confinement;take hostage
37 OCABDUCT	Off Cleared: Abduction- under 14,16; no CO; contravene CO
38 OCARSON	Off Cleared: Arson
39 OCWEAPON	Off Cleared: Weapons and Explosives
40 OCBRKENT	Off Cleared: Break & Enter - business; residence; other
41 OCFRAUD	Off Cleared: Fraud- cheques; credit cards; counterfeiting
42 OCTHEFT	Off Cleared: Theft- over & under; m.v.; shoplifting; other
43 OCPSTOL	Off Cleared: Possession of Stolen Property
44 OCMISCH	Off Cleared: Mischief, Property Damage < $1000; > $1000
45 OCMORGAM	Off Cleared: Morals- Gaming & Betting
46 OCSEXAB	Off Cleared: Morals- Sexual; prostitution; pub. morals;etc
47 OCPUBORD	Off Cleared: Public Order Offences - disturb peace; other
48 OCADMJUS	Off Cleared: Off. Against the Administration of Justice
49 OCOTHCCC	Off Cleared: Other Criminal Code Offences
50 OCTOTCC	Off Cleared: Total Criminal Code Offences (excl. traffic)
51 OCDRUGTR	Off Cleared: Trafficking, Importing Drugs (Federal Stat.)
52 OCDRUGPO	Off Cleared: Possession of Drugs (Federal Statutes)
53 OCOTHFS	Off Cleared: Other Fed. Stat.- customs; immig; UI; etc
54 OCTOTFS	Off Cleared: Total Federal Statute (FS) Offences
55 OCTOTPS	Off Cleared: Total Prov. Stat. Offences (excl. traffic)
56 OCTOTAL	Off Cleared: Total Offences - CC; FS; PS; (excl. traffic)

Acronym	Adults Charged
57 ACHOMIC	Adults Chrg: Homicide- 1st & 2nd degree; mansl; infanticide
58 ACATTMUR	Adults Chrg: Attempted Murder
59 ACROBBRY	Adults Chrg: Robbery- with firearms; other weapons; other
60 ACSEXASS	Adults Chrg: Sexual Assault- aggravated; with weapon; other
61 ACSEXAB	Adults Chrg: Sexual Abuse- incest; sexual exploit.; etc
62 ACMAJASS	Adults Chrg: Major Assault- aggravated; with weapon; other
63 ACSIMPAS	Adults Chrg: Simple Assault- no injuries involved
64 ACKIDNAP	Adults Chrg: Kidnapping- forcible confine; take hostage
65 ACABDUCT	Adults Chrg: Abduction- under 14,16; no CO; contravene CO
66 ACARSON	Adults Chrg: Arson
67 ACWEAPON	Adults Chrg: Weapons and Explosives
68 ACBRKENT	Adults Chrg: Break & Enter - business; residence; other
69 ACFRAUD	Adults Chrg: Fraud- cheques; credit cards; counterfeiting
70 ACTHEFT	Adults Chrg: Theft- over & under; m.v.; shoplifting; other
71 ACPSTOL	Adults Chrg: Possession of Stolen Property
72 ACMISCH	Adults Chrg: Mischief, Property Damage < $1000; > $1000
73 ACMORGAM	Adults Chrg: Morals - Gaming & Betting
74 ACMORSEX	Adults Chrg: Morals- Sexual; prostitution; pub.morals; etc
75 ACPUBORD	Adults Chrg: Public Order Offences - disturb peace; other
76 ACADMJUS	Adults Chrg: Off. Against the Administration of Justice
77 ACOTHCCC	Adults Chrg: Other Criminal Code Offences
78 ACTOTCC	Adults Chrg: Total Criminal Code Offences (excl. traffic)

79	ACDRUGTR	Adults Chrg: Trafficking, Importing Drugs (Fed. Statutes)
80	ACDRUGPO	Adults Chrg: Possession of Drugs (Federal Statutes)
81	ACOTHFS	Adults Chrg: Other Fed. Stat.- customs; immig; UI; etc
82	ACTOTFS	Adults Chrg: Total Federal Statute (FS) Offences
83	ACTOTPS	Adults Chrg: Total Prov. Stat. Offences (excl. traffic)
84	ACTOTAL	Adults Chrg: Total Offences- CC; FS; PS; (excl. traffic)

Acronym		Youths Charged
85	YCHOMIC	Youths Chrg: Homicide- 1st & 2nd degree; mansl; infanticide
86	YCATTMUR	Youths Chrg: Attempted Murder
87	YCROBBRY	Youths Chrg: Robbery- with firearms; other weapons; other
88	YCSEXASS	Youths Chrg: Sexual Assault- aggravated; with weapon; other
89	YCSEXAB	Youths Chrg: Sexual Abuse- incest; sexual exploit.; etc
90	YCMAJASS	Youths Chrg: Major Assault- aggravated; with weapon; other
91	YCSIMPAS	Youths Chrg: Simple Assault- no injuries involved
92	YCKIDNAP	Youths Chrg: Kidnapping- forcible confinement; take hostage
93	YCABDUCT	Youths Chrg: Abduction- under 14,16; no CO; contravene CO
94	YCARSON	Youths Chrg: Arson
95	YCWEAPON	Youths Chrg: Weapons and Explosives
96	YCBRKENT	Youths Chrg: Break & Enter - business; residence; other
97	YCFRAUD	Youths Chrg: Fraud- cheques; credit cards; counterfeiting
98	YCTHEFT	Youths Chrg: Theft- over & under; m.v.; shoplifting; other
99	YCPSTOL	Youths Chrg: Possession of Stolen Property
100	YCMISCH	Youths Chrg: Mischief, Property Damage < $1000; > $1000
101	YCMORGAM	Youths Chrg: Morals- Gaming & Betting
102	YCMORSEX	Youths Chrg: Morals- Sexual; prostitution; pub.morals; etc
103	YCPUBORD	Youths Chrg: Public Order Offences - disturb peace; other
104	YCADMJUS	Youths Chrg: Off. Against the Administration of Justice
105	YCOTHCCC	Youths Chrg: Other Criminal Code Offences
106	YCTOTCC	Youths Chrg: Total Criminal Code Offences (excl. traffic)
107	YCDRUGTR	Youths Chrg: Trafficking, Importing Drugs (Fed. Statutes)
108	YCDRUGPO	Youths Chrg: Possession of Drugs (Federal Statutes)
109	YCOTHFS	Youths Chrg: Other Fed. Stat.- customs; immig; UI; etc
110	YCTOTFS	Youths Chrg: Total Federal Statute (FS) Offences
111	YCTOTPS	Youths Chrg: Total Prov. Stat. Offences (excl. traffic)
112	YCTOTAL	Youths Chrg: Total Offences - CC; FS; PS; (excl. traffic)

Acronym		Traffic - Actual Offences
113	TAODGOPD	Traffic Actual Off: CC Dangerous oper. causing death
114	TAODGOPB	Traffic Actual Off: CC Dangerous oper. causing bodily harm
115	TAODGOP	Traffic Actual Off: CC Dangerous operation
116	TAOFSTOP	Traffic Actual Off: CC Fail to stop or remain at scene
117	TAOIMPD	Traffic Actual Off: CC Impaired oper. causing death
118	TAOIMPBH	Traffic Actual Off: CC Impaired oper. causing b-harm

119 TAOIMP08	Traffic Actual Off: CC Impaired oper. GT .08
120 TAOFSAMP	Traffic Actual Off: CC Fail or refuse to provide sample
121 TAOOPPRH	Traffic Actual Off: CC Operating vehicle while prohibited
122 TAOTOTCC	Traffic Actual Off: Total Criminal Code Traffic
123 TAOFREM	Traffic Actual Off: PS Fail to remain or report
124 TAOCAREL	Traffic Actual Off: PS Careless driving-without due care
125 TAOSUSP	Traffic Actual Off: PS Operate vehicle while suspended
126 TAOPSTOT	Traffic Actual Off: Total Provincial Statute Traffic
127 TAOTOTTR	Traffic Actual Off: Total CC & Prov. Statute Traffic

Acronym	Traffic - Offences Cleared
128 TOCDGOPD	Traffic Off Cleared: CC Dangerous oper. causing death
129 TOCDGOPB	Traffic Off Cleared: CC Dangerous op. causing bodily harm
130 TOCDGOP	Traffic Off Cleared: CC Dangerous operation
131 TOCFSTOP	Traffic Off Cleared: CC Fail to stop or remain at scene
132 TOCIMPD	Traffic Off Cleared: CC Impaired op. causing death
133 TOCIMPBH	Traffic Off Cleared: CC Impaired op. causing bodily harm
134 TOCIMP08	Traffic Off Cleared: CC Impaired oper. GT.08
135 TOCFSAMP	Traffic Off Cleared: CC Fail or refuse to provide sample
136 TOCOPPRH	Traffic Off Cleared: CC Operating vehicle while prohibited
137 TOCTOTCC	Traffic Off Cleared: Total Criminal Code Traffic
138 TOCFREM	Traffic Off Cleared: PS Fail to remain or report
139 TOCCAREL	Traffic Off Cleared: PS Careless driving-without due care
140 TOCSUSP	Traffic Off Cleared: PS Operate vehicle while suspended
141 TOCPSTOT	Traffic Off Cleared: Total Provincial Statute Traffic
142 TOCTOTTR	Traffic Off Cleared: Total CC & Prov. Statute Traffic

Acronym	Traffic - Persons Charged
143 TPCDGOPD	Traffic Persons Chrg: CC Dangerous oper. causing death
144 TPCDGOPB	Traffic Persons Chrg: CC Dangerous oper. causing bod. harm
145 TPCDGOP	Traffic Persons Chrg: CC Dangerous operation
146 TPCFSTOP	Traffic Persons Chrg: CC Fail to stop or remain at scene
147 TPCIMPD	Traffic Persons Chrg: CC Impaired oper. causing death
148 TPCIMPBH	Traffic Persons Chrg: CC Impaired oper. causing bod. harm
149 TPCIMP08	Traffic Persons Chrg: CC Impaired oper. GT .08
150 TPCFSAMP	Traffic Persons Chrg: CC Fail or refuse to provide sample
151 TPCOPPRH	Traffic Persons Chrg: CC Oper. vehicle while prohibited
152 TPCTOTCC	Traffic Persons Chrg: Total Criminal Code Traffic
153 TPCFREM	Traffic Persons Chrg: PS Fail to remain or report
154 TPCCAREL	Traffic Persons Chrg: PS Careless driving-without due care
155 TPCSUSP	Traffic Persons Chrg: PS Operate vehicle while suspended
156 TPCPSTOT	Traffic Persons Chrg: Total Provincial Statute Traffic
157 TPCTOTTR	Traffic Persons Chrg: Total CC & Prov. Statute Traffic

Acronym	Census Data
158 POPTOT	Total Population
159 POP011	Population 0 to 11
160 POP12	Population 12 years
161 POP13	Population 13 years
162 POP14	Population 14 years
163 POP15	Population 15 years
164 POP16	Population 16 years
165 POP17	Population 17 years
166 POPYOUTH	Total Youth Population (12-17)
167 POP1824	Population 18 to 24
168 POP2534	Population 25 to 34
169 POP3564	Population 35 to 64
170 POP65P	Poulation 65 plus
171 POPADULT	Total Adult Population
172 POP15P	Population 15 years and over
173 OCCDWELL	Total occupied private dwellings
174 DWELOWN	Number of occupied private dwellings - owned
175 DWELRENT	Number of occupied private dwellings - rented
176 DWELRESV	Number of occupied private dwellings - on reserves
177 SCHOOL	Schooling: Persons without secondary school certificate
178 EMPMALES	Employment: Employed males
179 UNEMPMAL	Employment: Unemployed males
180 EMPFEMAL	Employment: Employed females
181 UNEMPFEM	Employment: Unemployed females
182 CENFAM	Total number of census families
183 LONEPAR	Number of lone parent census families
184 ECONFAM	Total number of economic families
185 LOWINC	Number of low income economic families
186 ABORIGIN	Number of aboriginal peoples
187 MOBILITY	Mobility Status: Number of Movers (one year)

APPENDIX C

OFFENCE CATEGORIES BY UCR CODES

COMMON OFFENCE CATEGORY	UCR CODE
1. Homicide	
first degree murder	002
second degree murder	003
manslaughter	004
infanticide	005
2. Attempted Murder	
attempted murder	006
3. Robbery	
firearms	019
other offensive weapon	020
other robbery	021
4. Sexual Assault	
aggravated sexual assault	202
sexual assault with weapon etc	203
other sexual assault	204
5. Sexual Abuse	
other sexual offences	213
6. Major Assault	
assault w. weapon level 2	206
assault level 3	207
unlawfully causing bodily harm	208
discharge w. intent	209
police	210
other peace/public officer	211
other assaults	212
7. Simple Assault	
assault level 1	205
8. Kidnapping	
kidnapping / forcible confinement	066

9. Abduction

person <14	215
person <16	216
contravening custody order	217
no custody order	218

10. Arson

arson	060

11. Weapons and Explosives

explosives	055
prohibited weapons	056
restricted weapons	057
other offensive weapons	058

12. Break and Enter

business	023
residence	024
other	025

13. Fraud and Related

cheques	043
credit card	044
other frauds	045
counterfeiting	062

14. Theft

bicycles > $1000	032
from motor vehicles > $1000	033
shoplifting > $1000	034
other thefts > $1000	035
bicycles < $1000	037
from motor vehicles < $1000	038
shoplifting< $1000	039
other theft < $1000	040
automobiles	027
trucks	028
motorcycles	029
other motor vehicles	030

15. Possession Stolen Property

have stolen goods	041

16. Property Damage / Mischief

mischief > $1000	071
mischief < $1000	072

17. Morals - Gaming and Betting

betting house	051
gaming house	052
other gaming/betting	053

18. Morals - Sexual

bawdy house	047
procuring	048
other prostitution	049
indecent acts	065
public morals	067

19. Public Order Offences

disturb the peace	063
obstruct public/peace officer	068
trespass at night	070

20. Offences Against the Administration of Justice

[YOA - Fail to Comply with a Disposition]

bail violations (fail to appear)	061
escape custody	064
prisoner unlawfully at large	069
breach probation/wilful non-compliance	
parole violation-federal	
parole violation-provincial	

21. Other Criminal Code Offences **073**

22. Total Criminal Code Offences - Excl Traffic

23. Trafficking/Importing Drugs

heroin trafficking	076
heroin importation	077
cocaine trafficking	080
cocaine importation	081
other drugs trafficking	084
other drugs importation	085
cannabis trafficking	088
cannabis importation	089
cannabis cultivation	090
restricted drugs trafficking	094

24. Possession of Drugs

heroin	075
cocaine	079
other drugs	083

cannabis	087
restricted drugs	093

25. Other Federal Statutes

Bankruptcy Act	096
Canada Shipping Act	097
Customs Act	098
Excise Act	099
Immigration Act	100
Other Federal Statutes	102

26. Total Federal Statutes

27. Total Provincial Offences - Excluding Traffic

liquor	104
securities	105
other provincial statutes	106
municipal by-laws	107

28. Total Offences - Excluding Traffic

Traffic Offences

1.	Dangerous operation MV & Other causing death	701/702
2.	Dangerous oper. MV & Other causing bodily harm	703/704
3.	Dangerous operation MV & Other	705/706
4.	Fail to stop / remain	715
5.	Impaired operation MV & Other causing death	707/708
6.	Impaired oper. M/V & Other causing bodily harm	709/710
7.	Impaired operation MV & Other >.08 mg	711/712
8.	Fail/refuse to provide sample	713/714
9.	Operating vehicle while prohibited	716
10.	Total Criminal Code Offences - Traffic	
11.	Fail to stop / remain	717
12.	Dangerous driving	718
13.	Operating a vehicle while disqualified/suspended	719
14.	Total Provincial Statute Offences - Traffic	
15.	Total CC. & Prov. Statute Offences - Traffic	

APPENDIX D

DEFINITION OF MSO AND UNITS OF COUNT

Most Serious Offence (MSO)

The UCR survey classifies incidents according to the most serious offence in the incident, generally the offence which carries the longest maximum sentence under the Criminal Code of Canada. In categorizing incidents, violent offences always take precedence over non-violent offences. For example, incidents involving both a breaking and entering offence and an assault are counted as assault incidents. As a result of the most serious offence scoring rule, less serious offences are under-counted by the UCR survey. The most serious offence rule is necessary to avoid exaggerating the occurrence of crime that would result if all violations of the law associated with a single incident were counted.

The UCR survey scores violent incidents differently from other types of crime. For violent crime, a separate incident is recorded for each victim. (If one person assaults three people, then three incidents are recorded. If three people assault one person, only one incident is recorded.) For non-violent crimes, one incident (categorized according to the most serious offence) is counted for every distinct or separate occurrence.

Robbery is the one exception to the above scoring rules. Robbery is categorized as a violent offence. Unlike all other violent offences, one occurrence of robbery is equal to one incident, regardless of the number of victims. The reason for this exception is that robbery can involve many people who could all be considered victims. In a bank robbery with 5 tellers and 20 customers present, 25 incidents of robbery would be counted if the normal scoring rule for violent incidents were applied. This would seriously overstate the occurrence of robbery.

Thus, the total number of incidents recorded by the UCR survey is not a census of all violations of the law that come to the attention of police. Rather, the total number of incidents is equal to the number of victims of violent crimes (other than robberies) plus the number of separate occurrences of non-violent crimes (and robberies).

Reported and Actual Incidents

When a crime is reported to the police, the incident is recorded as a "reported" incident. Police then conduct a preliminary investigation to determine the validity of the report. Occasionally, crimes reported to the police prove to be unfounded. Unfounded incidents are subtracted from the number of reported incidents to produce the number of "actual incidents." The levels and rates of crime reported in this publication are calculated on the basis of "actual incidents" (categorized according to the most serious offence in each incident).

Clearance of Actual Incidents

When a police investigation leads to the identification of at least one suspect, an "information" is laid against that person (i.e., the person is formally charged with at least one offence). From a statistical point of view, the laying of an information means that at least one actual incident can be "cleared by charge." An incident can be cleared by charge even if the police have not apprehended the accused person, provided that person has been identified and there is sufficient evidence to lay a charge.

Incidents can also be "cleared otherwise." In some cases, police cannot lay an information even if they have identified a suspect and have enough evidence to support the laying of an information. Examples include cases of diplomatic immunity, instances where the complainant declines to proceed with charges against the accused, or cases where the alleged offender dies before he or she can be formally charged. Such incidents are considered "cleared otherwise," that is, other than by the laying of a charge.

The UCR survey is an aggregate survey because the data collected are monthly totals of police activity. An incident is recorded on the UCR survey for the month in which it came to the attention of police, regardless of when the incident actually took place. Because the process of solving crime is often time-consuming, a criminal incident may be solved months or even years after it was reported to police and recorded on the UCR survey. Therefore, there is no direct relationship between the number of "actual incidents" and the number of "incidents cleared." This is why it is possible for the number of incidents cleared to be greater than the number of actual incidents. Nevertheless, the analysis in Chapter 2 does make use of clearance rates. Although there is no necessarily link between actual incidents and incidents cleared, clearance rates provide a good indicator of the proportions of different types of incidents that are cleared by charge or otherwise.

Persons Charged

The UCR survey also records the number of persons charged in association with cleared incidents. For incidents cleared, the UCR survey collects the number of adults charged (male and female) as well as the number of youths charged (male and female). The "persons charged" category includes the number of people charged or recommended for charges by police, *not* the number of charges laid or recommended against those people. A person who is simultaneously charged with more than one offence is counted according to the most serious offence, even if the offences occurred in more than one incident. In addition, persons may be counted more than once in a year; individuals are counted on each occasion that they are charged by police.

"Persons charged" refers to persons who were charged in connection with the incidents shown. These persons, however, may have been charged later with a lesser offence. For example, a person who commits a breaking and entering offence may end up being charged with possession of stolen goods if, for instance, the police have better evidence on the latter offence. Both the "actual incident" and the "person charged" are counted under breaking and entering, even though the person was actually charged with possession of stolen goods.

APPENDIX E

JAA NAMES AND NUMBERS

NEWFOUNDLAND

1001	St John's
1002	Placentia
1003	Grand Bank
1004	Harbour Grace
1005	Clarenville
1006	Gander
1007	Grand Falls
1008	Springdale
1009	Channel Port Aux Basques
1010	Stephenville
1011	Cornerbrook
1012	Woody Point
1013	Goose Bay
1014	Labrador City

PRINCE EDWARD ISLAND

1101	Alberton
1102	Summerside
1103	Charlottetown
1104	Souris
1105	Georgetown

NOVA SCOTIA

1201	Halifax City
1202	Halifax County
1203	Dartmouth
1204	Cumberland
1205	Kings
1206	Lunenberg
1207	Antigonish
1208	Pictou
1209	Cape Breton
1210	Colchester
1211	Guysborough
1212	Inverness
1213	Yarmouth-Shelburne
1214	Annapolis
1215	Queens

NEW BRUNSWICK

1301	Moncton
1302	Hampton
1303	Saint John
1304	St. Stephen
1305	Fredericton
1306	Woodstock
1307	Richibucto
1308	Newcastle
1309	Grand Falls
1310	Tracadie
1311	Bathurst
1312	Campbellton
1313	Edmundston

QUEBEC

2401	Gaspé
2402	Bonaventure
2403	Mingan
2404	Rimouski
2405	Kamouraska
2406	Baie-Comeau
2407	Montmagny
2408	Charlevoix
2409	Québec
2410	Beauce
2411	Mégantic
2412	Frontenac
2413	Saint-François
2414	Arthabaska
2415	Bedford
2416	Saint-Hyacinthe
2417	Drummond-Richelieu
2418	Longueuil-Iberville
2419	Trois-Rivières
2420	Saint-Maurice
2421	Beauharnois
2422	Montréal-Laval
2423	Joliette
2424	Roberval-Chicoutimi
2425	Alma
2426	Terrebonne
2427	Hull
2428	Labelle
2429	Pontiac
2430	Témiscamingue
2431	Abitibi
2432	Rouyn-Noranda

ONTARIO

3501	Stormont, Dundas, and Glengarry
3502	Prescott and Russell
3503	Ottawa-Carleton Region
3504	Leeds and Grenville
3505	Lanark
3506	Frontenac
3507	Lennox and Addington
3508	Hastings
3509	Prince Edward
3510	Northumberland
3511	Peterborough
3512	Victoria-Haliburton
3513	Durham Region
3514	York Region
3515	Toronto (Metro)
3516	Peel Region
3517	Dufferin
3518	Wellington
3519	Halton Region
3520	Hamilton-Wentworth Region
3521	Niagara Region (North and South)
3522	Haldimand-Norfolk Region
3523	Brant
3524	Waterloo
3525	Perth
3526	Oxford
3527	Elgin
3528	Kent
3529	Essex
3530	Lambton
3531	Middlesex
3532	Huron
3533	Bruce
3534	Grey
3535	Simcoe
3536	Muskoka
3537	Renfrew
3538	Nipissing
3539	Parry Sound
3540	Manitoulin
3541	Sudbury District
3542	Sudbury Regional Municipality
3543	Timiskaming
3544	Cochrane
3545	Algoma
3546	Thunder Bay
3547	Rainy River
3548	Kenora

MANITOBA

4601	Steinbach
4602	Winnipeg South
4603	Morden
4604	Killarney
4605	Virden
4606	Brandon
4607	Winnipeg
4608	Selkirk
4609	Beausejour
4610	Portage
4611	Minnedosa
4612	Russell
4613	Winnipeg North
4614	Dauphin
4615	Swan River
4616	The Pas
4617	Flin Flon
4618	Thompson

SASKATCHEWAN

4701	Weyburn/Estevan
4702	Moose Jaw
4703	Swift Current
4704	Melville
4705	Regina
4706	Yorkton
4707	Wynyard
4708	Saskatoon
4709	Kerrobert
4710	North Battleford
4711	Melfort
4712	Prince Albert
4713	Lloydminster
4714	Meadow Lake
4715	La Ronge

ALBERTA

4801	Fort MacLeod
4802	Lethbridge
4803	Medicine Hat
4804	Canmore
4805	Calgary
4806	Drumheller
4807	Red Deer
4808	Hinton
4809	Stony Plain
4810	Leduc
4811	Wetaskiwin
4812	Camrose
4813	Edmonton

4814 Sherwood Park
4815 Vegreville
4816 Vermilion
4817 Grande Prairie
4818 High Prairie
4819 St. Albert
4820 Fort Saskatchewan
4821 St. Paul
4822 Peace River
4823 Fort McMurray
4824 High Level

BRITISH COLUMBIA

5901 Cranbrook
5902 Nelson
5903 Rossland
5904 Vernon
5905 Kelowna
5906 Penticton
5907 Chilliwack
5908 Matsqui
5909 Langley
5910 Maple Ridge
5911 Coquitlam
5912 Surrey
5913 Delta
5914 New Westminster
5915 Burnaby
5916 Richmond
5917 Vancouver
5918 North Vancouver
5919 Salmon Arm
5920 Kamloops
5921 Squamish
5922 Sechelt
5923 Powell River
5924 Prince George
5925 Williams Lake
5926 Quesnel
5927 Dawson Creek
5928 Vanderhoof
5929 Smithers
5930 Terrace
5931 Prince Rupert
5932 Fort St John
5933 Sidney
5934 Victoria
5935 Western Communities
5936 Duncan
5937 Nanaimo
5938 Parksville
5939 Port Alberni
5940 Courtenay
5941 Campbell River
5942 Port Hardy

YUKON

6001 Yukon East
6002 Yukon Center
6003 Yukon West
6004 Yukon North

NORTHWEST TERRITORIES

6101 Fort Smith
6102 Saktu
6103 Delta
6104 Yellowknife
6105 Bathurst
6106 Baker Lake
6107 Iqaluit

APPENDIX F

DATA QUALIFIERS

Uniform Crime Reporting Survey

In 1992, Metropolitan Toronto Police converted to the Revised Uniform Crime Reporting (UCR) Survey. The Metropolitan Toronto Police had historically reported crime data to the UCR Survey according to a "multiple offence" scoring rule. Therefore, caution should be used when comparing 1992 data to data from previous years for Toronto, Ontario and Canada.

For British Columbia municipal police departments; Camrose and Lacombe Alberta, Moncton and Dieppe New Brunswick, and St John's Newfoundland, crime occurring within the jurisdiction of a municipal police department but handled by the RCMP have been attributed to the municipality in question.

UCR crime data should not be used to measure the complete workload of police departments since "crime fighting" accounts for only a part of total policing.

Inter-municipal differences and also changes in enforcement practices of police can result in quite important changes in the numbers of police reported offences. Certain crimes (i.e., drug offences and the so-called "victimless" crimes of prostitution and gambling) are very sensitive to changes in enforcement practices.

Amendments to the Criminal Code of Canada, treating arson as a more serious offence, became law in July 1990. Canada's new arson laws also broaden the scope of the crime. For example, many incidents that now fall within the arson provisions, such as mischief fires, were formally dealt with under other sections of the Criminal Code. As a result, arson offence rates have increased significantly in recent years, and the proportionate involvement of youth has grown.

APPENDIX G

SUGGESTED FORMULAS FOR SELECTED RATES

Offence Rate Per 10,000 Population = offence / population * 10000

Violent Off. Rate = (Homicide + Attempted Murder + Robbery + Sexual Assault + Sexual Abuse + Major Assault + Simple Assault + Abduction) / population * 10000

Property Off Rate = (Break & Enter + Fraud + Theft + Possession of Stolen Property) / population * 10000

Population Density = Population/Square Kilometres

Unemployment Rate = Unemployed Persons/(Unemployed Persons+Employed Persons)*100

Participation Rate = (Unemployed+Employed Persons)/Population 15 years & Over*100

Home Ownership Rate = Occupied Dwellings Owned/Total Occupied Dwellings*100

Dwelling Rental Rate = Occupied Dwellings Rented/Total Occupied Dwellings*100

Low Income Family Rate = Low Income Families/Total Economic Families*100

Lone Parent Family Rate = Lone Parent Families/Total Census Families*100

High School Drop-Out Rate = Persons Without Secondary School/Population 15 & Over*100

APPENDIX H

Justice Administration Area Database - Product Evaluation Questionnaire

The primary objective of this product evaluation questionnaire is to obtain user feedback on the utility and quality of the Justice Administration Area Database. Your comments and advice regarding the JAA database will be used to improve and refine future versions of the product. After you have used the database and are comfortable with its features, please complete and return this questionnaire.

PART 1: Please rate the various product components listed below by circling the appropriate rating.

1. The utility of the JAA as a geographic unit of analysis.

Very Good	Good	Fair	Poor	Very Poor

2. The utility of the core crime and social-economic variables.

Very Good	Good	Fair	Poor	Very Poor

3. The utility of the User's Guide.

Very Good	Good	Fair	Poor	Very Poor

4. The quality and user friendliness of the XV software.

Very Good	Good	Fair	Poor	Very Poor

5. The utility of the Justice Administration Area - Site Profiles.

Very Good	Good	Fair	Poor	Very Poor

6. The quality of service received when buying or inquiring about the product.

Very Good	Good	Fair	Poor	Very Poor

7. The overall utility and quality of the JAA database and supporting materials.

Very Good	Good	Fair	Poor	Very Poor

PART 2: Please answer the following questions as completely as possible. If you need more writing space, attach additional pages.

1. In your opinion, what are the most useful functions of the JAA database.

2. Please describe any specific difficulties that you encountered, or any weaknesses that you found with the product.

   a) With the database;

   b) With the XV softwar;

3. For what applications did you use the JAA database? For example, planning, research, administrative applications. Give specific examples if possible.

4. Are there any variables (crime, socio-economic, other) which you would like to see in future versions of this product. List as many as like.

5. Are there any changes or improvements that you would recommend for future versions of the JAA database. Eg. Variables, JAA's, Documentation, XV software applications and standard reports.

6. Please make any other comments, observations or recommendations not covered by the above questions.

Thank you very much for your participation in the product improvement process.

Please forward your responses to this questionnaire to:

QUICKSTAT Project Manager
Integration And Analysis Program
Canadian Centre For Justice Statistics
25 th Floor, R.H. Coats Building
Ottawa, Ontario K1A 0T6

FAX (613) 951-6615

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