INTRODUCTION

Correctional agencies routinely produce statistical profiles on their respective offender populations. The reporting and summarization process of such profiles may be complicated by the large amounts of offender data that a particular jurisdiction maintains. Moreover, the diverse nature of the databases that are inherent in many automated offender information systems may add further constraints whenever there is a requirement for data integration and analysis.

This paper describes the Offender Population Profile System (OPPS), a menu-driven user-friendly bilingual (English/French) software system developed by Correctional Service Canada (CSC) to: 1) standardize, 2) streamline and 3) enhance the reporting of monthly institutional and community offender population information. The OPPS system executes in SAS® software (i.e., BASE, STAT, GRAPH, AF, FSP) Version 6.06 in a VMS or OS/2 environment. The system is currently being used nationwide over an extensive micro-VAX network by the operational units of CSC.

CORRECTIONAL SERVICE'S REQUIREMENTS

1. Standardization of Offender Data and Statistics

CSC has a requirement for the standardization of offender data and statistics. This is accomplished by OPPS through the creation of a special set of data files (downloaded in ASCII), which are extracted each month from CSC's automated Offender Information System (OIS) and Parole Supervision System (PSS). These input data files contain the necessary elements (i.e., offender- and supervision-related information) to be converted into SAS datasets. After a series of range edits and cross-field validations have been completed, the SAS datasets are processed by OPPS (with up to two years of monthly history maintained) to provide the statistical information required by CSC.

2. Streamlining of Data Processing and Reporting

CSC has a requirement for the streamlining of data processing and reporting of offender information. By means of a computerized OPPS "application" for processing raw data and generating standard reports, CSC's users can select and present (i.e., on screen or printed) pre-defined tables and graphs, interactively develop and customize tables and graphs, and bypass the OPPS menuing system at any point, to work directly with the SAS code.

3. Enhancing Timeliness and Access to Offender Information

CSC has a requirement to enhance the timeliness and access of offender information. The OPPS "application" runs from a VAX-based minicomputer located at CSC's National Headquarters. OPPS will allow any CSC user (i.e., technical and non-technical) with a valid-ID to have access (about 20 active users) to a network line. The OPPS "application" can also be run on OS/2 microcomputers.
1. OPPS ARCHITECTURE

Figure 1 displays the OPPS MAIN MENU. Descriptions of the OPPS buttons follow.

![Diagram of OPPS MAIN MENU](image)

**FIGURE 1**

2. OPPS MAIN MENU: RETRIEVE

The MAIN MENU RETRIEVE button allows the OPPS user to retrieve pre-defined reports and graphs, including key indicator reports. The next screen (Figure 2) is presented to the OPPS user.

![Diagram of OPPS RETRIEVE screen](image)

**FIGURE 2**
With the RETRIEVE menu screen, the OPPS user selects the type of data (i.e., KEY INDICATORS, TIME PLOTS, POP. SUMMARIES) to be retrieved and the type of analyses (i.e., descriptive, comparative) to be performed.

The KEY INDICATORS button retrieves pre-formatted key indicator reports. The OPPS user is prompted to select the region, institution and date of interest, along with other information. After the OPPS user has made the necessary selections, a report will be presented on the screen, at which time the OPPS user will be able to print it.

The TIME PLOTS button retrieves pre-formatted graphs. The OPPS user is prompted to compare counts (e.g., number of inmates) within areas or to compare counts among areas.

The POP. SUMMARIES button retrieves pre-formatted offender population reports. The OPPS user is prompted to select an administrative level (i.e., national or regional) and population grouping (total, male, female, native, non-native). When the OPPS user has made the necessary selections, a report is presented on the screen, at which time the OPPS user may request a printout.

3. OPPS MAIN MENU: PRODUCE

The MAIN MENU PRODUCE button allows the OPPS user to produce custom reports and graphs. The next screen (Figure 3) is presented to the OPPS user.
With the PRODUCE menu screen, the OPPS user selects the type of REPORTS, TABLES, and/or GRAPHS to be produced.

The REPORTS button presents the OPPS user information about one or more variables, one variable at a time. The OPPS user is prompted to select the unit of count (on-register population, institutional population, custody admissions or releases, community supervision, population), data or date range, administrative level (national, regional or institutional), population group (gender and native status), and variables for a report.

The TABLES button allows the OPPS user to produce 2-way and 3-way crosstabulations. The OPPS user is prompted to select the unit of count, date or date range, administrative level and population group of the data for tabulation.

The GRAPHS button allows the OPPS user to graph data. The OPPS user is prompted to select the data and type of graph desired.

4. OPPS MAIN MENU: SEARCH

The MAIN MENU SEARCH button allows the OPPS user to search the contents of OPPS. The next screen (Figure 4) is presented to the OPPS user.

With the SEARCH menu screen, the OPPS user selects RECORD SEARCH or TABLE SEARCH.

The RECORD SEARCH button allows the OPPS user to search the contents of an OPPS data set one record at a time. The OPPS user is presented with the values of all variables in that data set.

The TABLE SEARCH button allows the OPPS user to search the contents of an OPPS data set several records at a time. The OPPS user is presented with the values of a subset of variables in that data set.
FUTURE DEVELOPMENTS

OPPS is designed to be easily expandable, both in terms of application features, data bases, and data elements. Presently, there are a number of enhancements to OPPS that are currently underway. These include: 1) expanding OPPS data bases (i.e., Temporary Absence data, institutional capacity, etc.), 2) giving OPPS the capacity to perform offender population forecasts, 3) augmenting OPPS's analytic capabilities with new features, and 4) developing special purpose data entry capabilities.

CONCLUSIONS

The SAS-based OPPS has been designed to provide an easy to use, and timely, way for CSC personnel to gain access to a standard source of statistical reports, graphs and tables concerning the offender population.

ACKNOWLEDGEMENTS

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