



Juvenile Data Report Version 2.0 Documentation

Office of Probation Services, Administrative Office of the Courts

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Executive Summary

The Juvenile Data Report is a monthly-produced Excel workbook with extensive macro programming to enable Vicinages/Regional Offices to better manage their caseloads, as well as enabling AOC Supervision Services and JISP staff to standardize data collection. The basic data for the report is also gathered each month in a single Access database, allowing Probation Central Office staff to generate specialty reports as needed.

Highlights

Instant access to data gathered in a single place, instead of on multiple screens or in a special order report, is the principal highlight. Some examples include:

- User-defined filters and sorts
- Special filters for Conditions of Probation and Casebook Codes to group related data for local analysis
- Dropdown-box allows selection of desired columns out of approximately 50 available
- Instantly generate a report on an individual Probationer giving details of case parameters as well as all casebook codes entered within a month.

Objectives

The objective of this report is to give Vicinage/Regional personnel access to their data in aggregate and individual formats, without going to multiple screens to do so. As personnel grow familiar with the report, they should be easily and quickly able to obtain the data they need, in seconds or minutes instead of in weeks or months.

Description of Project Design

The project involves generation of a monthly report from the DB2 database each month, processed by AOC Probation Services via Word VBA for distribution to Vicinage/Regional offices in an Excel Macro format via dedicated shares. In addition, a monthly master report is generated for AOC Probation Services, as well as monthly updates to a master database for specialized reports not requiring resort to DB2 or FOCUS. This database starts with data from January 1, 2017, and allows for queries, reports, and VBA to create month-over-month reports if necessary or desirable.

Design and maintenance skills required

Microsoft Office VBA, while referred to as a “macro” language, is actually a full-featured implementation of pre .NET Visual Basic with some improvements. Skills required for upkeep and enhancements to the system include knowledge of:

- Visual Basic / VBA
- Windows Forms design and layout
- Basic knowledge of working with Windows APIs
- Microsoft DAO 3.6
- Basic knowledge of the object model for Microsoft Word
- Basic knowledge of sizing the Internet Explorer display window
- Intermediate knowledge of Microsoft Excel and its object model for Microsoft Excel
- Intermediate knowledge of Microsoft Access and its object model, including coding to create queries and tables

- Excellent skills in using web search engines to research methods for solving bugs or creating enhancements, so as not to reinvent the wheel.
- Helpful: knowledge of VB.NET and C#.NET, and how to convert available code on the web into VBA code to speed development of enhancements

Inputs

The inputs to the program consist of a static file, JDR.XLSM, maintained on the state share for this project; and a monthly report that must be downloaded from PageCenter, PJCIM00.ALL JUVENILE ACTIVE/DISCHARGED IN PAST MONTH, which is usually generated either the 2nd calendar day or the 2nd business day of the month.

Import Process Overview

In order to avoid the Excel automation interfering with the creation of the Excel worksheets, the conversion process is written in Word VBA, contained in a file called JDR.DOCM located on the State share. When the document is opened, the title bar gives instructions on how to run the import. Depending on network traffic, it may take anywhere from fifteen minutes to an hour to run. To avoid collisions between this process and other data transport, it is recommended that no other use of the computer be made while the import is running; the import can be started before lunch or before leaving for the day, and the computer locked. The Word title bar reports on the current subprocess should the user wish to check how much the conversion process has completed.

The process creates a temporary database on the desktop of the person doing the import. Data from PJCIM00 is imported into several tables in this database, corresponding to the sections of PJCIM00. The data is then reformatted into a usable structure and inserted into the monthly State master Excel report, and is also used to update the State master Access database. The temporary database is then deleted, and the Vicinage and JISP reports are created by a filtering process and saved to county and JISP directories (similar to the process done for several years in Child Support Enforcement Services.) Upon completion, the program shuts down the Word program.

Outputs

Outputs of the import/conversion process are as follows:

- A master State Excel report is created in the State share.
- The master State Access database is updated on the State share.
- 22 files (21 counties plus JISP) are distributed to the appropriate sub-shares; state project personnel have access to all subshares, but Vicinage/JISP offices only have access to their own sub-share.

The Excel outputs are interactive, and allow filtering and sorting, with specialized filtering for items that can occur in multiple columns, as well as the ability to select specific columns such as DOB or Municipality in order to quickly filter out unneeded columns for a particular research activity. The Excel outputs also include two user forms for functions, including a specialized Help button that loads a help collection from a server specified for Probation Services HTML files. The help files can be opened by Central Office staff in Word for updates and modifications, and saved back out as web pages. This way, no local files need to be changed if the help files are augmented. There is also the ability to print out all information on a specific probationer, or save it to an Acrobat file.

Description of Project Uses

Expected users

The report is primarily targeted to the use of:

- VCPOs;
- VACPOs/Regional Coordinators;
- Vicinage Juvenile Supervision Supervisors; and
 - If desired by local management, juvenile Officers.

Central Office managers and staff may also use the reports.

Local Process Details – Output Use

Vicinages and Regions are expected to use their reports in many ways. They include:

- VCPOs, VACPOs, and supervisors (collectively: supervisors) can do comparative analysis of how their Probation Officers deal with probationers;
- Supervisors may also see patterns that may lead to changes in local operations leading to more efficient use of personnel;
- Supervisors may distribute electronic copies of the report to their probation officers so each officer can have a better overview of their cases.

Central Office Process Details – Output Use

State Supervision personnel may use the outputs for:

- Data cleanup reports based on the monthly master reports or Access database;
- Month-over-month activity analysis based on the Access database;
- Quickly generating specialized reports requested by upper management or by a Vicinage or Region;
- Other purposes that may occur as time goes by.

Interface with Vicinage/Regional Users

Primary interface with local users is the responsibility of Supervision Services management and staff liaison personnel. On occasion, such personnel may reach out to internal VBA development personnel in areas other than Supervision Services if there is a problem or a suggested enhancement.

Implementation, Maintenance, and Possible Future Enhancements

Implementation of Completed Project

VCPOs and Juvenile Managers/Regional Coordinators have been briefed on the project, and it was implemented the week of May 22, 2017, with data available back to January, 2017. Version 2.0 was written in January, 2018, for implementation with the data generated in the beginning of February, 2018.

Maintenance and Replacement

The code, forms, and layout of the Excel spreadsheet, including user-interactive code, was written by one individual who is not on the Supervision Services budget. Ideally, a position that can maintain or replace this project – and write other projects similar to this for other data, such as Adult Supervision – could be created within the planned Supervision Services research unit, or directly reporting to the head of Probation Services. At the current time, however, maintenance and/or enhancements are dependent on individuals in Probation Services outside the ambit of Supervision Services.

List of Possible Enhancements and Requirements for Implementation

Enhancements will likely be suggested by Vicinage/Regional offices as they work with the data. Implementation of enhancements will depend on staff available to modify the Word VBA and/or Excel VBA as required.

Enhancements foreseeable in the near to medium future include:

- If several Vicinages indicate, a button could be added to the Main Menu in the local Excel file to copy the report for each Officer in the County or Region. This would keep such copies to local control, in case some offices want such copies and some do not. Alternatively, if all offices express such a request, this copying could be included in the Word VBA distribution process.
- It has been indicated to the writer of this document that the long-anticipated Data Warehouse will not have a Business Intelligence dashboard, and that access – if granted at all to Probation Services personnel – will likely be limited to one or possibly two Probation Services central office personnel. Data not previously collected could be collected from the Data Warehouse, if desired, and the Word VBA process could take the output from there as an additional input for integration

Credits

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