

***THE EXCEL BUDGET MATRIX***  
***SOFTWARE APPLICATION***

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*(Version 1.2)*

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*(Version 1.3)*

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*(Version 2.0)*

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**INTRODUCTION & BACKGROUND**

The Excel Budget Matrix is a spreadsheet application of the Microsoft Excel software program, which is utilized by the N.J. Division of Mental Health Services and its funded contract Provider Agencies. This is actually a second-generation product, with the original Budget/R.O.E. Matrix having been developed in 1985 as a Lotus 1-2-3 application.

The purpose of the DMHS Budget Matrix software - both the original Lotus 1-2-3 product and now the revised Excel product - is the same, as follows:

- a) to provide a standard software format to DMHS staff and all contract provider agency staff for saving, storing, easily retrieving, and printing important budget and expenditure data; and,
- b) to automate some of the routine, but fairly extensive, calculations that are performed by DMHS staff and provider agency staff, to enable full budget line-by-line variance (change) reports to be created, which greatly facilitates the planning and monitoring aspects of our contract budget responsibilities.

The normal budget format employed by the N.J. Department of Human Services' Contract Reimbursement Manual has been adapted for use in the Excel Budget Matrix by the Division of Mental Health Services (DMHS), with customized budget templates and schedules and a menu system which allows for easy movement, data entry, and user commands. The Excel Budget Matrix program actually operates in four (4) separate worksheets in the same file (workbook). The user will develop an initial Budget; update the budget with Modifications; issue quarterly Reports of Expenditure/Income (R.O.E.s); and then compare the variances between Budget and Modification, or Budget and ROE, for further analysis. Although this program is designed to be user-friendly, a working knowledge of the Microsoft Excel software program is necessary.

The Division of Mental Health Services is one of several operating divisions of the N.J. Department of Human Services. The DMHS Contract Administration Unit is responsible for the negotiation, processing, analysis, and monitoring of service contracts with a large network of community mental health agencies. In 1984, Les Foster, a DMHS Contract Administrator, developed the Budget Matrix program in order to simplify the considerable analytical work associated with contract budgets. With assistance from Rex

O'Neal, Dan Knox and others, the Budget Matrix was adapted for general use by DMHS and its community service agencies.

The 1985 version of the Budget Matrix was an application of LOTUS 1-2-3 Version 1a, and it included two separate files (MTRX2.2 and SCHED2.2) on a single 360k diskette. The Budget Matrix program required some patience and dedication to learn, but it soon proved to be a major advancement, in both time and accuracy, over the handwritten and typed budget forms. The Budget Matrix was widely distributed to DMHS contract agencies; computer equipment and training was made available; and eventually DMHS required that all contract budgets and R.O.E.s must be submitted on diskette, per the Budget Matrix program.

After several years, it became necessary to revise the Budget Matrix program. Hardware and software advancements had been made, leading to new possibilities. Lotus 1-2-3 spreadsheet software, once the standard for the industry, had been eclipsed by Microsoft Excel, and DOS operating systems had been upgraded to Windows systems. And, Budget Matrix users offered some constructive criticism of the original product, which aided in the design of the revised Excel Budget Matrix in 2002-2003. Ron Spiessl and Dave Salewski developed the Excel Budget Matrix, which incorporated the primary functions from the original product with the enhanced features of the Microsoft Excel, Windows-based software. Version 2.0, introduced in 2006 and also developed by Ron Spiessl, contains new features which build upon the original product.

It is important to note that some of the principles employed by the Budget Matrix can be adapted for other types of spreadsheet analyses. While DMHS staff generally use the "plain vanilla" form of the Matrix, staff of some mental health agencies have converted the basic Matrix to perform other agency-specific analyses.

The Budget/R.O.E. Matrix is a copyrighted (1985; 2002; 2006) program of the N.J. Division of Mental Health Services. Staff of the DMHS Contract Administration Unit are responsible for the development, maintenance, distribution, and training associated with the Budget Matrix. Copies of the Budget Matrix program will be made available at no cost to users within the mental health and larger human services community, and other responsible persons. DMHS staff request that no modifications are to be made to the software if utilized for the N.J. DMHS contracting system; and, that proper identification and acknowledgements re: DMHS are made if the software is shared with others. The staff at DMHS welcome your comments and suggestions regarding the Budget Matrix program!

**WHAT'S NEW IN THE EXCEL BUDGET MATRIX?**

The Excel Budget Matrix, Version 2.0, operates much the same as Version 1.3 introduced in 2003. The basic functionality is the same, the menu system is the same, and the look-and-feel between versions 1.3 and 2.0 is the same. Some notable differences:

- The Excel Budget Matrix now has multiple pre-set Subtotal columns, to accommodate users with multiple human services funding sources, and the need to group funded programs together and provide a subtotal for each. As a result, the Budget Matrix is more user-friendly for the human services community, with Subtotals already established for DYFS, DCBHS, DAS, and DDD, with two additional groupings possible.
- Program-specific "clients served" and "units of service" data has been added below the Budget Summary section, along with built-in calculations for Per Client Cost and Cost Per Unit of Service. This is a useful introduction of key program statistics to the Matrix file, which will allow users to evaluate their programs according to these benchmarks, and will enhance the DMHS Contracts Database with data that had previously been collected separately.
- A total count of FTE (full-time equivalent) staff positions is established below the "Hours per Week" column in the Personnel section. By entering the Hrs/Wk for each staff position, then entering the standard number of hours in the workweek for the organization, the calculation will yield the total number of FTEs for the organization.
- The column immediately to the right of the last column in the spreadsheet (General & Admin) has been unprotected, to allow users a field to enter user notes, comments, etc. This "user memo" field will not be part of the printed hardcopies.
- A reminder message has been added to the Matrix-Add/Alter Agency Contract Info menu choice, indicating that DMHS requires a five-digit assigned contract number (not the DMHS filename), which is entered here and displayed at the upper left corner of the spreadsheet.

- Under the Matrix-Format Spreadsheet menu choice, the user now has the added choices of Hide and/or Unhide Columns. Many budget presentations are expansive, and while it is desirable to have all the information in the file, sometimes it is useful to customize the view for the work session, or the finished printout copy, to meet the user's needs.
- Also under the Matrix-Format Spreadsheet menu choice, the user can now choose the "Color Worksheets" command, which will yield different colors for each set of worksheets and tabs. Some users may prefer the colors for their working sessions, as a visual reminder of which worksheet is currently active. When done, the "White Worksheets" command restores the worksheets and tabs to their normal, default setting. Also, the Print Spreadsheet command will automatically change colored worksheets back to a white background, prior to printing.
- When adding numbers to cells in the Mod or ROE worksheets, for line items that were blank in the Budget worksheet, the actual change amount had previously shown as a "blank" in the Variance worksheet. (Subtotal and Total variances were shown correctly.) The "Dollar Change" in Version 2.0 now correctly reflects the change amount in the program column, when performing the "Mod Change from Budget \$" or "Dollars Remaining per ROE" choices for the Variance Reports.
- A third choice for allocation of General & Administrative expenses (G & A) has been added. In addition to the "Percent of Total Direct Expenses" and "Percent of Direct Salaries" methods, there is the "Agency Plan" choice in the menu system. Unlike the first two choices, which have pre-set formulas and are protected cells, the Agency Plan selection is unprotected, and requires the user to enter data in each program column. DMHS developed the Agency Plan choice to accommodate those users which have approved indirect cost plans, or which allocate G & A expenses according to a non-standard methodology. The user would provide a supplementary schedule for the approved allocation of G & A expenses; and then enter the program-specific numbers (or formulas) from the schedule onto the Budget Matrix.
- Most importantly, Dr. Spiessl has created an "upgrade" utility that will allow DMHS staff to convert all existing version 1.3 Budget Matrix files to version 2.0, without any loss of data or additional data entry.

**MENU & COMMAND STRUCTURE:**

Below is a "menu tree" diagram, listing the Excel Budget Matrix macro commands that have been created for your use. All commands are invoked from the "Matrix" menu choice in the Excel Menu Bar at the top of the screen when the Budget Matrix file is open.

- **Matrix**
  - **Clear Worksheet**
  - **Copy Budget to Mod Worksheet**
  - **Copy Mod to Budget Worksheet**
  - **Add/Alter Agency Contract Info**
    - Agency Name
    - Contract Number
    - Contract Start Date
    - Contract End Date
  - **Edit Program Element Info**
    - Select Program Code
    - Program Name
    - County of Service
    - Client Age Group
  - **Format Spreadsheet**
    - Add DMHS Program
    - Add Non-DMHS Program
    - Remove Program Column
    - Insert Rows
    - Delete Rows
    - Hide Columns
    - Unhide Columns
    - Color Worksheets and Tabs
    - White Worksheets and Tabs
  - **Variance Reports**
    - Mod Change from Budget (\$)
    - Mod Change from Budget (%)
    - Dollars Remaining per ROE
    - Interim ROE Percent Expended (%)
    - Final ROE Change from Budget (%)
  - **Print Spreadsheet**
    - Select Worksheet to Print
    - Paper Type
    - Preview (and customize) or Cancel
  - **G & A Allocation Method**
    - Total Cost method
    - Salary method
    - Agency G & A Plan

**OVERVIEW OF MATRIX COMMANDS (MACROS):****Add/Alter Agency Contract Info**

When using the Budget Matrix for the first time, this is the first command you should use after opening the Excel Budget Matrix file. Users need to identify their agency-specific information and record it on the Matrix file. Invoking this command with your mouse will open a dialog box, and you will be prompted to enter the Provider Agency Name, DMHS Contract Number (5 digits), and the Start Date and End Date for the Contract Period. When complete, click on "Enter", and your choices will be recorded in rows 2 & 3 at the top of your spreadsheet, on the left and right sides, and in all four Matrix worksheets.

Should any of this information change during the contract period, the user will need to invoke this command again and re-enter only the item(s) that are new. If the contract term is completed and you are preparing a budget for the new period, then you will need to invoke the command and change the Start Date and End Date. **No direct data entry in rows 2 & 3 are permitted, this area is protected, so all contract identification information is to be accomplished through the use of this command.**

**Format Spreadsheet**

All new users will need to modify the "blank" Budget Matrix file to the particular size and shape of their own agency's DMHS contract budget. Before invoking this command, consider how many DMHS program columns, and how many non-DMHS program columns, appear on your contract budget. [Note: Program budgets for other DHS Divisions should be included, as well as any non-DMHS program which affects the allocation of General & Administrative costs. Consult with your DMHS Contract Administrator if unclear on this point.] Also, consider how many rows (budget line items) your contract will require in the different sections, particularly the Personnel section for staff positions. The pre-set Budget Matrix file (Budget Matrix v2\_0.xls) contains enough rows for about thirty-five staff positions, and has one non-DMHS program column (coded as 8) and one DMHS program column (coded 15).

Start by editing the pre-set DMHS column to your needs. From within the Budget sheet (most commands must be issued from within this sheet), place the cursor on row 8 in the DMHS program column. Invoke the Edit Program Element Info command, and rename this program to your specifications [see next section for discussion of this command].

Next, if you have an additional DMHS contract program, invoke the Format Spreadsheet command, choose Add DMHS Program Column, and you will be presented with the same dialog box choices as the Edit Program Element Info command. Select the particular program name, code, county, and client age group, click on "OK" when completed, and the Matrix macro will create the DMHS Program, with appropriate name, code and identification, in all four worksheets. If you have additional DMHS Programs, follow the same procedure; you will need to add new programs to your spreadsheet one-at-a-time, via this command macro. Relax, it won't take long. The program-specific information is important to the DMHS Contracts Database, and this is how it is generated.

For non-DMHS programs, you can follow the same procedures outlined previously. The first non-DMHS column can be edited to your specifications by placing the cursor on row 8 of the column (Other B), and then invoking the Edit Program Element Info command and completing the prompts for data. Additional non-DMHS programs can be added, and edited, by placing the cursor in row 8 of any selected non-DMHS Subtotal, and invoking the Format Spreadsheet and Add Non-DMHS Program Column commands, and completing the data requests.

As your budget grows and additional programs are added to your DMHS contract, you now know how to add new program columns. Conversely, if it becomes necessary to eliminate a DMHS or non-DMHS program, you can accomplish this by invoking the Format Spreadsheet and Remove Program Column commands. This will remove the selected program column from all four worksheets. In order to use this command, **the cursor must be placed in any cell in the relevant column to be deleted, from within the Budget sheet.** So, consider placement of the cursor before making this change. You will be prompted that the relevant column will be deleted; if this is your intent, click "OK" to execute.

To add Rows (extra budget lines) to your spreadsheet, **move the cursor to an unprotected area of the Budget sheet** where the rows are to be inserted. If you want to add more than one row, click and hold the mouse button while "painting" several rows, then release the button with the rows selected. Then, invoke the Format Spreadsheet and Insert One or More Rows commands. The Matrix program macro will add the selected rows to all four worksheets. The Delete One or More Rows command works in the same way, just consider placement of the cursor in the Budget sheet first, before invoking the commands. Also, if you try to add or delete rows involving protected areas of the worksheet, the command macro will indicate that you will need to make another choice. **Select unused areas, stay away from pre-set rows in each section of the worksheet.**

**Edit Program Element Info**

This command choice is used to give proper identification to the various program columns within your budget. When presented with a blank Excel Budget Matrix file, you will invoke this command to add identifying information to at least one DMHS and perhaps one non-DMHS program column, and this information will be recorded in rows 2-8 at the top of the column, in each of the four worksheets.

Before clicking on this command choice, position the cursor near the top of the spreadsheet, in row 8 of the column that you are attempting to edit. If the cursor is not properly located, the macro will not operate until you get it right. You will then be prompted to enter data in a dialog box: *Select Program Code; Program Name (Optional); Select County of Service; and, Select Age Group for Clients*. The Program Code choices are set by DMHS, and you can make your choice from the drop-down menu that is available for DMHS programs. Non-DMHS program codes are determined by the placement of the cursor when the program is created (3 through 8). A further discussion on Program Codes is included in the Appendix section. The Program Name selection is primarily for the user, as a way of keeping local names attached to the budget. Examples might include "The Club", "Prospect House", "Family Resource Center", "Homestead", etc. The County of Service and Client Age Group choices must be made from drop-down menus. If the program operates in more than one county, choose "Regional", but if it operates in more than one region, choose "Statewide".

When your selections are made, click on "OK", and the identifying data will be transferred to all four worksheets. Your choice of code number will appear in row 8, where the cursor was placed. At the same time, the corresponding program type (pre-set by DMHS) that is associated with the code, will appear in row 5. The local Program Name (selected by the user) will appear in row 4; the County of Service will appear in row 3; and the Age Group will appear in row 2. If your agency operates a DMHS-licensed adult residential program, and you have one or more budget columns identified by "code 24", you will be prompted to complete an additional drop-down menu choice for the specific "level of care", such as A+ GH, B Apt., etc., that is associated with the program. The residential code 24 level of care information is displayed in row 6, following the user's data entry choice. This data is helpful to an analyst who may not be fully familiar with the agency or its budget, and it will be extremely important to DMHS as the data is later merged into a database and used for planning purposes. At this point, don't worry if the identifying information is not entirely visible in the column, or does not

look "finished", there will be other opportunities to format the spreadsheet prior to printing the document.

Use this command primarily to identify your first DMHS and non-DMHS program column, and to change information to a pre-existing column. When formatting your budget spreadsheet for use, and you are establishing multiple columns, you will be invoking the Format Spreadsheet command, and this command will lead into the Edit Program Element Info command choices.

**Copy Budget to Mod Worksheet**

This command macro will be utilized when you are working with a fully-loaded and approved contract budget, located in the Budget sheet, and you are attempting to modify the budget for certain changes that are planned. The primary purpose of this macro is to save valuable time, and data entry, for the user. Since it is likely that some, or even most, of the budget expense and revenue line item amounts will not change in the updated version of the budget (Modification), it is a time-saver to copy the entire Budget sheet data into the Modification sheet, for use as the starting point for preparing the Modification. That's all this macro command does. Invoking this command will open a message box advising the user that all Budget sheet data will be copied into the Mod sheet; that existing Mod sheet data will be overwritten; and prompting the user to either continue or exit, by clicking Yes or No. After clicking Yes, the user now has all Budget sheet data also in the Mod sheet, and can now review and edit data in the Mod sheet, to record how the budget will be changed.

**Copy Mod to Budget Worksheet**

Once the modified budget has been prepared, submitted to DMHS, and approved by DMHS, it is now time to reorganize the Budget Matrix file to ensure that the officially-recognized, current budget data is in the Budget sheet. **Remember, the starting point for future Modifications, and for comparisons to ROE data, is always the approved budget, and this data must always be in the Budget sheet.** Invoking this command will present the user with a reminder that all data currently in the Budget sheet will be overwritten, and the user must click "Yes" to continue or "No" to exit.

After clicking "Yes", there will still be data in the Mod sheet, so the user must also invoke the Clear Worksheet command (from within the Mod sheet), to erase the data, and set up the file for future Modifications. Don't forget to save the file again, after making these changes.

**Clear Worksheet**

This command is simple and straightforward - it erases all numbers from the worksheet that is currently on the user's screen. It does not, however, eliminate any of the line item descriptions that appear in columns A, B, and C of all four worksheets. To use this command, click on the tab for the worksheet that contains the numbers to be erased. The cursor can be positioned anywhere within the worksheet. Invoking the command presents the user with a message "You are about to clear the contents of the [Budget; Mod; ROE; Variance] worksheet; continue?" Click "Yes" to complete the command, or "No" to exit.

The Clear Worksheet command is useful at times to erase numbers that are no longer relevant, such as Modification data that has been approved and moved to the Budget sheet, or Variance data following the user's analysis. **A word of caution: the user must invoke this command from within the appropriate worksheet, since there are no "second chances"; the Excel "undo" command is not available within the Matrix program.**

### **Variance Reports**

The real utility of the Budget Matrix program is evident in this set of command macros. Invoking the command will lead to five choices, two of which involve comparisons between data from the Mod sheet and Budget sheet, and three of which involve comparisons between data from the ROE sheet and Budget sheet.

The Mod Change from Budget (\$) choice will subtract Budget sheet data from Mod sheet data, for all cells in the worksheet on a relational basis, yielding the dollar difference for the Modification on a line-by-line, cell-by-cell basis, and present the answer in the Variance sheet. The result is a full "change from budget" report, which shows precisely how the official budget will change if the Modification is submitted and approved. This type of variance analysis is useful for provider agency staff when considering the impact of changes and various "what if" scenarios, and it is important for DMHS staff when evaluating submitted Modifications for the impact of changes. The Mod Change from Budget (%) command yields the same variance comparison, from Budget to Modification, presented as a "percentage change".

When performing more than one variance comparison in succession, there is no need to use the Clear Worksheet command first, since the data in the Variance sheet will be overwritten by the new commands.

The Dollars Remaining per ROE command will reveal how many dollars are still available, in all parts of the contract budget, after subtracting the funds expended (and revenues applied) from the cumulative quarterly or final data in the ROE sheet. The Interim ROE Percent Expended (%) command will present the data in the ROE sheet as a percent of the Budget sheet (ROE divided by Budget) for each cell on a relational basis. The Final ROE Change from Budget (%) command yields the amount of change from Budget to ROE, for all cells in the spreadsheet, presented as a percentage of the approved budget. These are extremely useful analytical tools for staff of both provider agencies and DMHS.

**Print Spreadsheet**

At various times the user may need to print out one or more of the worksheets, either to review and consider a "work in progress" more closely, or to issue reports of completed tasks. The Print Spreadsheet command gives the user a quick, efficient way to do this.

Prior to choosing Matrix-Print Spreadsheet, consider the size of the spreadsheet and the intended use of the printout. Do you want to see the entire worksheet, or do you want to hide one or more columns? If you need to hide columns, place the cursor in the column to be hidden (or "paint" several contiguous columns), then invoke the Matrix-Format Spreadsheet-Hide Columns command.

Invoke the Matrix-Print Spreadsheet command, which leads to a dialog box with several choices. The user must choose the appropriate Spreadsheet to Print [Budget, Mod, ROE, or Variance]; and Paper Type [legal or letter]. Then, click on the "Print Preview" box, in order to review the potential print job more closely, and perhaps tweak the print setting somewhat to obtain a better result. This choice will provide a view of the print job, and place the user within the Excel page preview commands. Clicking on other tabs, such as "Setup", and then "Page" and "Margins" will enable the user to size the spreadsheet more accurately to the paper, prior to printing. Use the various Excel menu choices to properly format your Budget or ROE to the size paper you are using, and check the results with "Print Preview" before clicking on Print. At this stage, there is no return to the Matrix Print Spreadsheet dialog box; the user must either proceed to print, or cancel, using the normal Excel commands that are presented. Also, one further caution - if the user clicks on the "Page Break Preview" tab within this menu screen, the only exit from this area is to click on the "View" menu choice (top of the screen), then click on "Normal".

**G & A Allocation Method**

General & Administrative (G & A) expenses are those which are common or shared by all components of the organization, and cannot be easily allocated to one or more programs as direct expenses. It is always preferable to directly identify expenses by program area, to the extent possible, rather than including them in the G & A cost center.

There are two methods for the allocation of General & Administrative expenses that are accepted as reasonable and appropriate for contracts with the N.J. Department of Human Services, the percentage of direct total cost method, and the percentage of direct salaries method [refer to DHS Contract Reimbursement Manual, sections 4.4 and 5.3]. If your organization is allocating G & A expenses on a basis different than these two methods, please consult with your DMHS contract administrator.

Most DMHS contractors use the **percentage of direct total cost method**. Therefore, the Excel Budget Matrix has pre-set formulas in the worksheets that will allocate G & A expenses by percentage of direct total cost. This is the "default" setting, and should work fine for the overwhelming majority of users. As you add or delete columns by Matrix commands, the G & A formulas are adjusted accordingly.

Some DMHS contractors use the **percentage of salary cost method**. This method is preferable where there is a significant amount of "pass through" or subcontract expense in the non-salary portion of the budget, which would unfairly allocate G & A expenses (which are primarily Personnel) under the direct total cost method.

If your organization utilizes an **Indirect Cost Plan**, which is typically more complex than a presentation of mental health G & A expenses, the Excel Budget Matrix can now more easily accommodate this choice. In this case you would submit a detailed Indirect Cost Plan (or supplementary schedule) to your assigned DMHS Contract Administrator for review and approval. The Indirect Cost Plan should have sufficient detail to show what the G & A expenses are for the entire company, and how they are allocated or "stepped down" to the DMHS contract.

Organizations with an approved **Indirect Cost Rate** would need to first provide the appropriate documentation (similar to an Indirect Cost Plan) to support the Rate to their assigned DMHS Contract Administrator.

Once you have determined the proper method for G & A expenses, you must invoke the Matrix menu choice G & A Allocation Method. You have three choices, Total Cost, Salary, and Agency G & A Plan. The default choice is Total Cost; if you choose Salary or Agency G & A Plan, you are then prompted to click "OK" if you want to change your allocation method, or "Cancel" to keep the current method. Once changed, the current method is indicated in Column A on the line (row) in which the allocation is performed, directly above the Revenue section of the budget. For either the Total Cost or Salary methods, the chosen G & A allocation method is calculated and applied automatically to all four sheets, and can easily be switched again by use of the Matrix menu command. For the Agency G & A Plan method, the calculations are generated by the user, and are not replicated to the other sheets, or saved for future use, unless further steps are taken (see below).

If you select Agency G & A Plan, the allocation line is unprotected, and the user must enter either whole numbers (per the Plan) or formulas that include percentages (per the Rate) in each DMHS and non-DMHS column. Subtotals are protected, they contain calculations. **Note that the user-driven allocation here must match the approved Plan or Rate, and the Total Cost column (budget code 1) must show "zero" on the G & A allocation line.** If you are using an approved Rate, you would need to write an Excel formula to generate the correct percentage, then copy it to each program column. The DMHS Contract Administrator, or an experienced Excel user, can assist a new user with this task. In order to protect the data in the Agency G & A Plan allocation from being erased (by one of the copy or clear commands) invoke **<shift> + <ctrl> + p** to save the data in the current sheet (must be done in Budget, Mod and ROE sheets separately!), or **<shift> + <ctrl> + a** to copy the data to the Modification and ROE sheets. In this way, if you change methods, then decide to change back, you haven't lost your original entries.

**SEQUENCE GUIDE FOR USERS:**

As a guide for users, DMHS lists a number of steps, or user commands, that should be followed in sequential order, in order to achieve the most satisfactory results with the Budget Matrix program. Please adhere to the following program steps, in the order given.

**Original Contract Budget:**

<u>PROCEDURE</u>	<u>COMMANDS</u>
1. Record Agency Name, Contract Number, Contract Start & End Dates	Add/Alter Info macro
2. Set up spreadsheet to correspond to agency DMHS & non-DMHS programs; add or delete rows, to accommodate individual agency needs, especially for Personnel section.	Format Spreadsheet macro
3. Apply program names and codes	Edit Program Info macro
4. Save File, using standard DMHS file-naming scheme	[Excel command]
5. Enter budget & revenue line descriptions	[keyboard commands]
6. Enter dollar amounts to budget, and units and clients served in the section below Budget Summary, as applicable	[keyboard commands]
7. Save File, using standard DMHS file-naming scheme	[Excel command]
8. Print Budget (must have correct sheet on screen)	Matrix Print macro

**NOTE:** When saving your work for the first time, always save the file to your computer's hard drive or to a network hard drive (not the floppy disk drive). The Excel program automatically proceeds to save a duplicate file, and there isn't enough space for two Budget Matrix files on a 3.5" diskette, so the attempted "save" to the "a" drive will not work. Once the file is saved to the hard drive, you can later save to a diskette in the "a" drive, if the file size is less than 1.4 MB.

**Contract Budget Modification:**

<u>PROCEDURE</u>	<u>COMMANDS</u>
1. If there is a change in contract term, change contract End Date	Add/Alter Info macro
2. If there is the addition or deletion of agency DMHS & non-DMHS programs	Format Spreadsheet macro
3. Apply program names and codes (for any new columns)	Edit Program Info macro
4. Copy existing budget data into Modification sheet, to eliminate data re-entry for amounts that have not changed	Copy Budget to Mod macro
5. Enter dollar amounts to Modification sheet, as applicable	[keyboard commands]
6. Add rows, and line item descriptions (from Budget sheet); enter new dollar amounts to Mod sheet	Format Spreadsheet macro [keyboard commands]
7. Save File, using standard DMHS file-naming scheme	[Excel command]
8. Print Modification (must have correct sheet on screen)	Matrix Print macro
9. Calculate Modification change	Variance macro (\$,%)
10. Print Variance Report(s) (must have correct sheet on screen)	Matrix Print macro

**When DMHS has approved the Modification -**

11. Copy Modification data to Budget sheet (similar to the old "Adjust" macro); Current approved budget must always be In Budget sheet.	Copy Mod to Budget macro
12. Erase data in Modification sheet	Clear Worksheet macro
13. Save File, using standard DMHS file-naming scheme	[Excel command]

**Reports of Expenditure/Income (Quarterly & Final ROEs):**

<u>PROCEDURE</u>	<u>COMMANDS</u>
1. Enter ROE data from agency records directly onto blank ROE worksheet (note: ROE data is cumulative for the contract period)	[keyboard commands]
2. Save File, using standard DMHS file-naming scheme	[Excel command]
3. Print ROE (must have correct sheet on screen)	Matrix Print macro
4. Calculate ROE change from budget	Variance macro (\$,%)
5. Print Variance Report(s) (must have correct sheet on screen)	Matrix Print macro

**PROGRAM CODES & NAMES:**

With the implementation of the Budget Matrix, DMHS introduced a standardized coding procedure for all budget programs or cost centers (columns in your spreadsheet). These codes are necessary for the organization and retrieval of all data submitted to DMHS; the DMHS Contracts Database utilizes program codes to correctly identify data by program, which in turn permits the issuance of management reports with program-specific detail.

The program names for a Provider Agency's service programs will be entered (automatically) in row 5 of the Matrix worksheet, in the applicable columns. The names should correspond to the DMHS Program Elements listed below. Local names, which have meaning for Agency staff only, can be added by the user and will appear in row 4. (The length of the program names may need to be further adjusted, depending on the size of the spreadsheet to be printed, and user preferences.) Right-justified program names will correspond more closely to the right-justified numbers, and improve the appearance of your spreadsheet.

The program codes are an alternate method of identifying each Program Element. They are entered in row 8 of the Matrix, below the corresponding program names. Since the codes are numbers, they are automatically right-justified in the column by Excel.

When adding program columns to your file, the Excel Matrix macros automatically place the new columns in ascending sequential order from left to right, in row 8. It is permissible to have several like programs with the same program code. Some columns have a pre-set, fixed program code; examples are Total Cost (1), DMHS Subtotal (9), Unallowable (42), and General & Administrative (43). The full set of DMHS program codes, with corresponding program names, is listed on the following page.

As a Matrix user, it is important for you to list out the program names and codes that you will be using, prior to running the Budget Matrix application. In this way, you will be prepared to set up the Matrix for the specific programs sponsored by your agency. The Matrix commands will enable you to establish the correct layout of DMHS and non-DMHS program columns, and to apply the correct program names and codes.

The full set of DMHS program codes, with corresponding program names, is listed below:

1	Total Cost
2	unused
3	DYFS contract program
4	DDD contract program
5	DAS contract program
6	DCBHS contract program
7	non-DMHS program
8	non-DMHS program
9	DMHS Subtotal
10	unused
11	unused (formerly Consultation & Education)
12	unused (formerly Youth Case Management)
13	Designated Screening Center
14	unused (formerly E/S Child)
15	Emergency Services (Adult & Child)
16	unused (formerly Adult Liaison Services)
17	unused (formerly Child Liaison Services)
18	Outpatient Services (Adult & Child)
19	unused (formerly Outpatient-Child)
20	Outpatient Services (Other)
21	Partial Care (Adult)
22	unused (formerly Partial Care-Child)
23	Partial Care (Other)
24	Residential Services (Adult, DMHS Licensed)
25	unused (formerly Residential-Child)
26	Residential Services (Licensed by DCA, DHSS, or others)
27	Residential Support & Supportive Housing
28	Systems Advocacy
29	Other DMHS program
30	Other DMHS program
31	P.A.C.T. Team Services
32	Integrated Case Management Services (Adults)
33	P.A.T.H. - Services for the Homeless
34	Supported Employment
35	Intensive Family Support Services
36	Self-Help Centers
37	Welfare To Work (for GA & TANF clients)
38	Criminal Justice and Jail Diversion programs
39	unused
40	unused
41	unused
42	Unallowable
43	General & Administrative

**DEFINITIONS**

The following definitions may prove helpful for newer users, as you seek to become proficient in the use of the DMHS Excel Budget Matrix:

**Excel Budget/R.O.E. Matrix:**

A spreadsheet application of the Microsoft Excel software program, designed and supported by DMHS, which allows users to store, analyze, and print budget and expenditure data in an automated format.

**Cell:**

The intersection of a row and a column; the unit of a worksheet in which data is stored. Each cell has a unique address, indicated by a letter (column) and number (row).

**Column:**

Any vertical block of cells in the worksheet (similar to a database "field"). In the Matrix application, a column generally refers to a Program or Cost Center.

**Command:**

An instruction that you give to the computer program. Within Lotus 1-2-3, the "/" or forward slash activates the main menu of commands. The Excel Matrix application's main menu is activated by clicking the mouse on the "Matrix" choice in the Excel Command Menu at the top of the screen. Additional command choices are available in the drop-down menu choices under the Matrix command.

**Default Setting:**

A setting or command choice that the program automatically assigns, unless you specify another setting.

**File:**

A named collection of data, stored on a disk for future retrieval. For Microsoft Excel software, a file is also known as a workbook.

**Format:**

- 1) A DOS command which "initializes" or prepares a disk for writing files to the sectors of the disk.
- 2) An Excel command choice which allows the user to specify different ways to display or present the same numbers and/or text data in the spreadsheet.
- 3) A Budget Matrix command choice which allows the user to specify the number of program columns to be displayed in the Budget, Modification, and ROE.

**G & A:**

Abbreviation for General & Administrative, a budget term which refers to common or shared expense items which cannot be assigned as direct program expenses.

**Label:**

Any cell entry that starts with a letter, or a label prefix (' , " , ^ , or \).

**Macro:**

A set of consecutive instructions which is interpreted by the software program and which speeds up repetitive, routine or complex operations. Macros are used by programmers to assist less-experienced users in performing tasks.

**Menu:**

A series of command choices that appear, usually in the top control panel or within a drop-down menu tree, when invoked by menu command. The user can invoke the menu by clicking on the desired choice with the mouse, or by typing the proper keys (usually "alt" or "ctrl" plus a letter), then using arrow keys and pressing "enter" to make the selection.

**Program:**

Within the Budget Matrix application, a program refers to a mental health (DMHS) or non-mental health cost center. Each program is displayed in a separate column.

**Program Codes:**

Numbers which have been assigned by DMHS to identify certain programs. These Codes appear on row 8 of the Budget Matrix, and are also used on the DMHS Annex A & QCMR forms. Adherence to the DMHS program-coding scheme is necessary to ensure that data submitted to DMHS can be properly entered into the Contracts Database.

**Row:**

A horizontal series of cells in the worksheet, which correspond to budget line items. In a database program, a row is known as a record.

**Worksheet:**

A grid made up of rows and columns, which is used to enter and manipulate spreadsheet data. The term worksheet commonly refers to the data file or application which is currently being viewed on your computer screen. The Microsoft Excel software is designed to accommodate many worksheets within the same file (workbook), and the Excel Budget Matrix features four separate worksheets in the application that users will see and use.

**HARDWARE & SOFTWARE REQUIREMENTS**

The Excel Budget Matrix is written to operate properly when using Microsoft's Excel 97, Excel 2000, or Excel XP (2002, 2003). The specific hardware requirements will be the same as those for the version of Excel that you are using. As with most large applications, additional random-access memory and processing speed will help the Budget Matrix operate more quickly.

The operating systems for which the Budget Matrix application have been tested include Windows 95, Windows 98, Windows NT, and Windows XP, both single-user and network versions.

When opening an Excel Budget Matrix file, you will be advised that the file contains macros, and you are prompted to either Disable or Enable the macros. You must choose "Enable" for the Budget Matrix file to operate properly. However, if you cannot open the file at this point, after choosing "Enable", then you will need to re-set the security settings for your version of Microsoft Excel. If your Excel security level is set at "high" or "very high", the macros in the Excel Matrix will be automatically disabled. From the Excel menu bar, select Tools - Options - Security - Macro Security, then choose the "medium" security level. (Different versions of Excel may have a slightly different menu path.) Once you have finished your Excel Budget Matrix session, you can re-set your security level, if necessary.

**A WORD ABOUT FRINGE BENEFIT EXPENSES**

Employee fringe benefits are usually calculated on either a percentage (of salary & wages) basis, or the direct identification basis (benefit calculations for each individual employee, as aggregated). The direct identification of fringe benefits is the preferred method, particularly for Final ROE data, since it represents precise cost data. The Excel Budget Matrix is pre-set for users to add fringe benefit expense data in each relevant cell, per the direct identification method. However, we understand that for budgeting purposes, and interim ROE submissions, allocating fringe benefit expenses on a percentage basis is an acceptable practice. Should you wish to use the percentage basis for allocation, you will need to write the appropriate formulas in the fringe benefit area of the Budget sheet, and then make sure that the formulas are copied to the Modification and ROE sheets, when they are used. Please seek additional help from an experienced Excel user or your DMHS contract administrator.

**BUDGET SCHEDULES & OTHER DMHS FORMS**

There are several schedules, or attachments, that may be necessary to more fully explain or record a subset of data that supports the amounts in the Budget or ROE file. Examples include schedules for Depreciation expenses; Interest expenses; Equipment purchases; client Housing; Space & Equipment Rentals; Related Organizations; and Allocation Bases. These schedules are provided as distinct "sheets" in a separate Excel file, for your use. They are essentially templates for entering, storing, printing, or submitting the required data that supports the Budget or ROE amounts. **There are no linked cells or formulas that relate the schedules data to the budget matrix data; the user must enter the relevant total contract expense data from the schedules onto the Excel Matrix file manually.**

DMHS is also making other frequently-used forms and documents available to provider agencies, in Microsoft Excel or Microsoft Word files. Examples include the Contract Modification signature page; the Contract Modification dollar change summary pages (2 grid pages for before/after analysis); and the ROE Quarterly Summary & Signature page. Contact your assigned DMHS Contract Administrator for electronic copies of these files.

**OTHER USER ISSUES - POINTS TO REMEMBER**

Do not attempt to disable the file (workbook) protection that exists in certain areas; this is necessary to ensure the integrity of the data presented. Always seek assistance from an experienced user, or DMHS Contract Administrator, to overcome perceived problems.

**Do not use the Excel "cut and paste" menu commands**, when working with an Excel Matrix file. The results can wreak havoc with your file, since cutting & pasting will transfer cell references to the new location. The data in comparative analyses (as in Variance Reports) will be scrambled, rendering them useless. You can successfully use the Excel "copy and paste" commands without jeopardizing your work, however, DMHS discourages this practice except for building the original budget file.

**When using the Excel Matrix, there should be no need to utilize Excel Menu choices other than the "Matrix" command, and the various submenu commands. Under "Print Spreadsheet", the user will "preview" and finalize the print options from the standard Excel Menu choices, but this is the only deviation from the Matrix command set.**

**TIPS ON GOOD DATA MANAGEMENT:**

- 1) Set up a new folder or directory on your computer hard drive, or on a network drive, for all your Excel Matrix work files. Save your files to this hard drive folder first.
- 2) Make it a habit to save your current work file periodically, every 10-15 minutes for example. This will prevent the loss of your important data, in the event of a power failure or inadvertent commands that cause your current file to disappear.
- 3) For important work files, such as your Excel Budget Matrix, it is good practice to make a "backup" copy on a removable 3.5" diskette, thumb drive, or Compact Disc (CD), in addition to your main hard drive copy. Always maintain several new, formatted diskettes or CDs for ready use.
- 4) Diskettes should be handled with care. Writing on diskette labels should be done with felt-tip pens; don't bend diskettes or use paper clips on them; and, avoid placing 3.5" diskettes near magnets, as they can render your data files useless. Note: telephone instruments contain magnets.
- 5) It is a good habit to always record the date as part of your work files. If your computer has a functional clock that is set to the appropriate date, your Matrix data files are "dated" each time you print them.
- 6) Select filenames for your data files that are meaningful or descriptive of your work, so that future attempts to retrieve data files will be easier. Also, it is a good idea to always include the filename on the printed hardcopy or report, again to avoid confusion when trying locate one file among many.
- 7) Develop an agency-wide or office-wide procedure to periodically (weekly? monthly?) backup your most important computer files on diskette, compact disc, or tape media, and keep such backup copies off-site at an alternate location. This practice will ensure that your most critical work is secure, in the event of destruction by fire or vandalism at your regular work site.