

**USER'S
REFERENCE
GUIDE**

**MINNESOTA LOCAL
WORKLOAD ANALYTIC TOOL**

PREPARED FOR:

**MINNESOTA
DEPARTMENT OF
HUMAN SERVICES**

By:

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For additional assistance using this tool please contact:
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In 2009, Hornby Zeller Associates, Inc. (HZA) completed a workload study for the Child Safety and Permanency Division of the Minnesota Department of Human Services (MDHS). The resulting report provided standards, expressed in terms of the number of hours required to handle a workgroup, for workgroups of various types. Time caseworkers have available to devote to workgroups was also provided, offering the state and its counties the two key elements needed to measure staffing need.

HZA has developed a Workload Analytic Tool for counties to use, on an ongoing basis, to determine whether sufficient staffing resources exist. The automated tool, constructed using MS Excel, calculates resource need and workloads for workgroups managed by child welfare and children's mental health caseworkers, at the county level by unit or staff person for small counties, from point of intake through to closure. The tool also gives county administrators the ability to assess the impact of workloads in achieving successful outcomes and satisfying process standards.

Since single measurements may be affected by seasonality or by random variations in caseload, counties are recommended to use the analytic tool repeatedly to identify patterns, showing not only whether there are sufficient staffing resources within the agency as a whole, but also whether the distribution of staff across workgroup types is appropriate. The tool has been constructed with sufficient flexibility to allow counties to continue to predict staffing need as future changes in policy and practice are implemented.

Recognizing the availability of resources can impact a county's ability to achieve safety, permanency and well-being for children and families, the tool, originally released in 2009, has been expanded; it now provides counties the ability to correlate staffing need with the achievement of improved outcomes and the satisfaction of practice standards.

The *User's Reference Guide* provides general user information and instructions for staff to follow as they navigate the Workload Analytic Tool and use the reports to assess resource need and the effect workload has on performance.

TOOL SUMMARY

The Workload Analytic Tool is comprised of two Excel workbooks: *Analytic Tool* and *Measures*. The first workbook or file, *Analytic Tool*, provides answers to questions such as, “How many staff are needed to manage a caseload in a quality manner?” and “To what extent did an increase in staff help to improve outcomes for children and families served?” The second file, *Measures*, provides a structured means for using outcome and performance reports available to administrators, managers and supervisors in SSIS in measuring resource impact.

The two Excel workbooks may be stored anywhere on the user’s computer, but they must be placed in the same folder (e.g., Workload Analytic Tool). Saving the files in a subfolder as they are used, identifying the date or month, will help users track trends over time (e.g., WAT051510 or WAT0510 or WATMay2010).

Each workbook is made up of a series of worksheets. Some require user input; others are for information purposes only showing the results of calculations of the time needed to handle workgroups, projected workload need, outcome measures and satisfaction in achieving process standards. Worksheet tabs and their contents have been highlighted in a variety of colors to guide the user in identifying which worksheets and cells are intended for data entry purposes, which are view-only and which can be modified.

USE OF COLOR FOR EASE OF NAVIGATION

Each workbook includes a number of worksheets, each with a unique name as listed on the tabs across the bottom of the screen. Colors are used to identify a worksheet’s purpose. Columns, rows and cells are also highlighted in a variety of colors to guide the user in identifying which cells are intended for data entry purposes, which are view-only and which can be modified.

Tab Colors

White	Data entry is needed, at least in part.
Blue	Calculations are generated and their results reported.
Green	Tool management.

Cell Colors

The use of color also alerts the user to which cells are “unprotected” and those which are “protected.”

Unprotected

White Cells which are not highlighted, i.e., the cells which are white, are used for data entry. Users will input data in the white cells to record staff and case counts as well as to identify the hours which workers are to work in the average work week. They will also be used to post report data generated in SSIS.

Protected

Yellow Row and column headings highlighted in yellow are view-only.

Tan Row headings highlighted in tan are view-only and contain workgroup type, workgroup tasks and county names.

Blue Cells highlighted in blue are view-only. Formulas used to calculate time needed to process workgroups and, in turn, project staff needs based on current resource levels are contained within the blue cells.

Salmon Salmon highlighted areas represent totals and sub-totals of workgroup counts, current and projected staff needs, hours needed and time available for casework. These cells, also containing formulas, are view-only.

Gold Cells highlighted in gold represent areas which may be modified to account for differences when changes in practice take place. Such cells can be found in the *Calculated Workgroup Time* worksheet.

The following chapters guide users through the use of the Workload Analytic Tool, providing step-by-step instructions for entering data, viewing reports and interpreting their meaning, and managing the tool and its data.

Before the user can use the reports generated by the Analytic Tool, data must first be entered into the tool. Much of the data will come from the SSIS system, with users simply pasting the results of reports into the Analytic Tool. Other information, such as unit names and number of staff, must be entered into the tool by the user. This section of the User's Guide describes the data to be entered into the Analytic Tool, where it should be entered and how.

ANALYTIC TOOL

Data entry is confined to the first two tabs in the *Analytic Tool* workbook: Resource Summary and Workgroup Counts. For users of Microsoft Office version 2007 and later, select the "enable external content" option when the security warning appears upon opening the file. This will allow the tool to update itself from the information to be entered in the *Measures* workbook. This should happen automatically for users of Microsoft Office 2003 and earlier.

Resource Summary

The *Resource Summary* worksheet allows users to record the number of caseworker Full-time Equivalents (FTEs). As the number of FTEs change, the counts can be updated by posting new figures to the *Resource Summary* worksheet. The column labeled "Caseworker FTEs" provides cells for the user to report counts of staff by unit or by staff person, if the county is small. The user will begin by first entering into the column labeled "Unit" the name of each unit (or staff person, for small counties).

If counts of workgroups did not change (*Workgroup Counts* worksheets) nor the time needed to spend on a workgroup (*Calculated Workgroup Time*), by entering updated counts of caseworker FTEs into the respective cells, projections for the amount of staff needed to handle workgroups will be updated.

Users should identify the average number of hours caseworkers are supposed to work, less time for lunch. The user should insert a "1" into the cell beneath the 40, 37.5 or 35 hour column, as appropriate, under the label "Weekly Required Work Hours." This will in turn cause the appropriate hours caseworkers have available to devote to casework to be applied (104.30, 97.79 or 91.27 hours, respectively) in the calculation of resource need.

The remaining portions of the worksheet which provide answers to projecting staffing need and staff difference are explained in the Reports chapter of the Reference Guide.

The table which follows describes the contents of each column in the *Resource Summary* worksheet. Totals are provided for the county and by unit.

Column	Definition
Unit	Unit names should be entered.
Total FTE Count	Totals and ratios are auto-populated, summing the county's unit staffing resources and need.
Current Caseworker FTEs	Counts of caseworker FTEs should be entered for each unit.
Projected FTE Need	The number of staff needed to handle the caseload size, based on the counts of workgroups populated in the <i>Case Counts</i> worksheet, is calculated for each unit.
Ratio of Need	The proportion of "Projected FTE Need" to "Current Caseworker FTEs" is auto-populated.
Staffing Difference	The number auto-populated in the "Staffing Difference" column represents the result of the formula "Projected FTE Need" less "Current Caseworker FTEs."
Weekly Required Work Hours	Column title.
40	Users should enter a "1" in the cell below the label if the average hours caseworkers are required to work each week is 40, less time for lunch.
37.5	Users should enter a "1" in the cell below the label if the average hours caseworkers are required to work each week is 37.5, less time for lunch.
35	Users should enter a "1" in the cell below the label if the average hours caseworkers are required to work each week is 35, less time for lunch.

Workgroup Counts

Workgroup types are defined using the terms "event" and "status." "Event" workgroups (e.g., investigations) are those in which a particular event or action must take place before a new workgroup may pass to the next stage. "Status" workgroups (e.g., case management, foster care) are those in which there is no specific activity occurring and any required tasks associated with the workgroup are defined in terms of frequency. A count of status workgroups should represent those which are active as of a certain period of time; often the end of the month is used to count workgroups. The analytic tool has been constructed to measure resource need for event workgroups based on the month in which the event was initiated (e.g., date of report).

Counts of workgroups for each workgroup type should be entered in the *Workgroup Counts* worksheet. Formulas have been applied to the worksheet that sums the total number of workgroups for the county and for each unit. A total count of workgroups for the county may be viewed in the "County Totals" column.

The table below describes the contents of each column in the *Workgroup Counts* worksheet.

Column	Definition
Workgroup Type Code	The code used to define workgroup types is displayed.
Workgroup Type Definition	The description identifies the specific workgroup type and placement type for children removed from the home.
County Totals	Counts of workgroups for each workgroup type are calculated for the county.
Unit Name	Counts of workgroups for each workgroup type by unit should be entered in the unit's respective column. Unit names entered in the <i>Resource Summary</i> worksheet are auto-populated in the column headings.
Totals	Using formulas in each cell, the total number of workgroups is auto-populated for the county and for each unit.

SSIS General Report Workgroup Count Sources

SSIS offers a series of reports which capture counts of workgroups, by workgroup type, when using the Workload Analytic Tool to determine resource need. The reports are available in the General Reports option listed within the Tools toolbar.

It is recommended that resource need be measured on an ongoing basis, i.e., monthly or quarterly. When selecting the period option, the type of workgroup needs to be considered.

- During the Period should be used for "event" workgroup types.
For workgroups in which an "event" occurred or a specific task had to be taken to complete the workgroup, specifically, Intake Screening (Child), Traditional (Family) Investigation, Facility Investigation and Family Assessment Response workgroup types, counts will be based on those which *started* during the period.
- End of the Period should be used for "status" workgroup types.
For all other workgroup types or "status" workgroups, the count of workgroups active as of the end of the period should be used when calculating resource need. By selecting the period option Custom and entering the last day of the period in both the start and end date fields, workgroups active as of the end of the period will be identified. (Example - Start date: 11/30/2009 End date: 11/30/2009)

Counts of workgroup types by placement type, those in the 400 series, are based on a count of children. The workgroup or family is the unit of measure for all other workgroup types.

In the tables that follow, SSIS reports are identified from which the count of each workgroup type may be obtained. In a few instances, workgroup types which are similar in nature have been combined into a single workgroup type for the purpose of measuring resource need, as the time needed is similar among the included workgroup types. For some of the combined workgroup types, more than one report may be needed to obtain the full count of workgroups. In a few other instances payment data is needed to obtain the count of workgroups, as referenced by the term "*Payment Data*" in the column labeled Report. Such information is not available in SSIS.

SSIS General Reports

For each workgroup type, the specific report to be used is identified in the *Report* column. The items referenced in the *Fields to Use* column include a combination of filter selections to be applied in producing the reports and workgroup titles and column and row labels which disclose where the data may be found in the SSIS General Reports. The highlighted rows identify the menu option in which the report is listed.

Workgroup Type	Report	Fields to Use
Intake Menu Option		
101 Intake Screening (Child)	Detailed Intake Statistics by Program Area	Select the following options when running the report: 'Child Welfare General,' 'Children's Mental Health,' 'Child Protective Services,' 'Adolescent Independent Living Skills' and 'Minor Parents.'
Child Maltreatment Menu Option		
102, 104 Traditional (Family) Investigation, Facility Investigation	Child Maltreatment Summary – Family Investigations plus Facility Investigations	Total number of assessments listed for 'All Child Maltreatment' plus Total number of investigations listed for 'All Child Maltreatment.'
103 Family Assessment Response	Child Maltreatment Summary – Family Assessments	Total number of assessments listed for 'All Child Maltreatment.'
Case Workgroup Menu Option plus Placement Menu Option		
201, 412 Child Protective Case Management/ Trial Home Visit	Workgroup Statistics – By Program plus Children In Out-Of-Home Care by Setting and Reason	Number of 'Child Protective Services' 'Case Management' 'Remaining' workgroups ¹ plus Number of children in 'Child's reunification home' placement setting. ²
Case Workgroup Menu Option		
202 Child Welfare Case Management	Workgroup Statistics – By Program	Number of 'Child Welfare (General)' 'Case Management' 'Remaining' workgroups. ³

¹ The count of Child Protective Case Management workgroups should be reduced for each workgroup where all children in the workgroup are in an out-of-home placement.

² For workgroups involving out-of-home placement, select the appropriate Setting Filter after entering the period end date in the start and end fields for the Custom period option. Refer to the last page of the report, referencing the unduplicated count of children in the selected placement setting.

³ The count of Child Welfare Case Management workgroups should be reduced for each workgroup where all children in the workgroup are in an out-of-home placement.

Workgroup Type	Report	Fields to Use
Payment Data plus Case Workgroup Menu Option plus Placement Menu Option		
203, 204, 410 Parent Support Outreach Program/ Minor Parent/Supervised Independent Living	<i>Payment Data</i> plus Workgroup Statistics – By Program plus Children in Out-Of-Home Care by Setting and Reason	<i>Monthly payments for Parent Support Outreach Program, unduplicated by workgroup number, are to be used to obtain workgroup counts</i> plus Number of ‘Minor Parents’ ‘Case Management’ ‘Remaining’ workgroups plus Select ‘Supervised independent living’ setting filter to obtain number of unduplicated children, found on the last page of the report.
Case Workgroup Menu Option		
205 Children’s Mental Health	Workgroup Statistics – By Program	Number of ‘Children’s Mental Health’ ‘Case Management’ ‘Remaining’ workgroups. ⁴
Placement Menu Option		
401 Shelter Care	Count of Children in Out-of-home Care by Setting and Reason	Select ‘Shelter’ setting filter to obtain number of unduplicated children, found on the last page of the report.
402 Relative Foster Care	Count of Children in Out-of-home Care by Setting and Reason	Select ‘Foster family home – relative’ setting filter to obtain number of unduplicated children, found on the last page of the report.
403 Non-relative Family Foster Care	Count of Children in Out-of-home Care by Setting and Reason	Select ‘Foster family home – non-relative’ setting filter to obtain the number of unduplicated children, found on the last page of the report.
Placement Menu Option plus Payment Data		
404, 405 Corporate Foster Care/ Private Agency (therapeutic) Foster Care	Count of Children In Out-Of-Home Care by Setting and Reasons plus <i>Payment Data</i>	Select ‘Foster home – corporate/shift staff’ setting filter to obtain the number of unduplicated children, found on the last page of the report plus <i>Monthly payments to Private Agency (therapeutic) Foster Care facilities are to be used to obtain children counts.</i>

⁴ The count of Children’s Mental Health workgroups should be reduced for each workgroup where all children in the workgroup are in an out-of-home placement.

Workgroup Type	Report	Fields to Use
Placement Menu Option		
406 Group Home	Count of Children in Out-of-home Care by Setting and Reason	Select 'Group home' setting filter to obtain the number of unduplicated children, found on the last page of the report.
407 Residential Facility	Count of Children in Out-of-home Care by Setting and Reason	Select 'Residential treatment center' setting filter to obtain the number of unduplicated children, found on the last page of the report.
408 Relative Pre-adoptive Home	Count of Children in Out-of-home Care by Setting and Reason	Select 'Preadoptive – relative' setting filter to obtain the number of unduplicated children, found on the last page of the report.
409 Non-relative Pre-adoptive Home	Count of Children in Out-of-home Care by Setting and Reason	Select 'Pre-adoptive home – non-relative' setting filter to obtain the number of unduplicated children, found on the last page.
413,414 Correctional Placements ⁵	Count of Children in Out-of-home Care by Setting and Reason	Select 'Juvenile correctional facility (non-secure, 12 or fewer children)' plus 'Juvenile correctional facility (non-secure, 13 or more children)' plus 'Juvenile correctional facility (locked)' setting filter options to obtain the number of unduplicated children, found on the last page of the report.
415, 416 ICPC Placements	Address for Children in Out-of-Home Care	Sorting by state, count the number of children placed in a state outside of MN plus Count the number of children known to the county for which MN is the receiving state.

⁵ Counts of correctional placement workgroups should only be used to determine resource need if such workgroups are the responsibility of the Child Safety and Permanency Division. If responsibility lies with the Department of Corrections, the counts should not be included.

MEASURES

The input of data is more extensive in the *Measures* workbook, but largely comprised of copying and pasting detailed reports which users will generate in SSIS. The worksheet tabs identify the respective report numbers in SSIS which correlate to the data to be posted into the respective sheets. For example, RT1 measures recurrence of maltreatment, while 1.3 measures time to reunification (referring to the second round of federal indicators) and SSIS4 measures the frequency of face-to-face contact with families. Detailed case level data for each of these SSIS reports will be posted in the respective worksheet in the *Measures* file, i.e., RT1, 1.3 and SSIS4. In all, 19 reports in SSIS will help counties correlate workload to the achievement of outcomes and process standards.

RT1	Recurrence of Maltreatment
RT2	Abuse in Foster Care
1.1	Time to Reunification (retrospective)
1.3	Time to Reunification (prospective)
1.4	Re-entry
2.1	Time to Adoption
2.3	Adoption for Children in Care 17+ Months
2.4	TPR for Children in Care 17+ Months
2.5	Time from TPR to Adoption
3.1	Achieving Permanency for Children in Care 24+ Months
3.2	Achieving Permanency for Children with TPR
3.3	Emancipation for Children in Care 3+ Years
4.1	Placement Stability, 0 - 12 months
4.2	Placement Stability, 12 - 24 months
4.3	Placement Stability, 24 - 36 months
SSIS1	Timeliness of Assessments
SSIS4	Frequency of Face-to-face Contact with Families
SSIS5	Frequency of Face-to-face Contact with Children in Care
SSIS8	Multiple Removals

Two other reports are found in the *Analytic Tool* workbook - 1.2, Median Length of Stay for Children Reunified, and 2.2, Median Length of Stay for Children Adopted. These reports rely on data obtained from measures 1.1 and 2.1, respectively, and as such will not necessitate users to copy and paste additional SSIS case level data.

As with the other workbook, users of Microsoft Office version 2007 and later will need to select the "enable external content" option when the security warning appears upon opening the file. This will allow the tool to complete the necessary steps needed to match caseworkers to the units listed in the *Analytic Tool* workbook and generate the report results. This should happen automatically for users of Microsoft Office 2003 and earlier.

The order of the SSIS reports in the *Measures* workbook matches the order in the *Analytic Tool* workbook. The final two tabs, both colored green, help the user manage the tool and identify and resolve any problems with data entered into the tool. These last two tabs will be discussed in the *Tool Management* chapter.

The process of entering the data into the *Measures* workbook can be broken down into two broad steps: 1) export the data from SSIS and 2) paste the data into *Measures*. Each step is described in full.

Export Data from SSIS

Upon logging into SSIS, go to the “Tools” menu at the top of the main SSIS window and select the “SSIS Analysis and Charting” option. The data needed to correlate workload to outcomes and performance is located under the reporting choices positioned on the left side of the “SSIS Analysis and Charting” window. Specifically, data will be used from the reports found in the “Federal Indicators Round 2” and “State Indicators” report options.

The process used to export the data from SSIS is identical for all 19 measures. Using the default period option for the measure, i.e., the most recent six month period of the calendar year, SSIS will generate a pie-chart showing the distribution of cases for the measure. Users do not need to filter or otherwise narrow the data options before generating the SSIS report.

To access the detailed case-level data, the user must select “Data” from the menu option located at the top of the page. SSIS will open a table, showing relevant case level data. The user should position the mouse over the table and click the right mouse button, invoking the Export option to appear.

After selecting the Export option, SSIS will ask the user where to save the exported data, using a standard Windows save dialog. Because there are 19 separate measures which must be exported from SSIS, it is important to use simple, descriptive names such as RT1 or 1.4 when exporting the data from SSIS. Data should be exported as an excel spreadsheet file (.xls) or comma separated values file (.csv); do not save the file as a HTML file or any other option provided by SSIS. When possible, it is suggested users save the data to their local computers.

Note -

For users of Excel version 2007 and later, the Excel file created by SSIS may be identified as being corrupt. Allowing Excel to correct the file will grant the user access to the data. Files exported using comma separated value files (.csv) do not have this problem. SSIS also intermittently fails to export the data, even if the user carefully followed the directions contained in this guide. Saving the file to the user’s local computer should avoid this issue from occurring.

Repeat this process for each of the 19 measures, ensuring that all of the exported data are stored in the same folder, for ease of reference in the next step. When the user is done exporting the report results from SSIS, the user should have a file folder containing 19 data files.

Paste Data into *Measures*

After saving the SSIS report data as a series of Excel files, the user must open each exported data file, one at a time, and copy the data from the SSIS data file (.xls or .csv) into the corresponding *Measures'* worksheet. When opening the files created when exporting data from SSIS, Excel may ask the user for permission to repair the file. If asked, allow Excel to do so.

Select the Copy command after highlighting all columns which contain data in the file exported from SSIS and then Paste the data into the respective *Measures* worksheet, placing the data into the first cell in the first column - A1. The tool will, by default, open the data worksheets to the appropriate cell, A1. To ensure the accuracy of the reports to be generated by the Workload Analytic Tool, it is important that all of the data be copied correctly.

For example, to post the case-level data for RT1 into the *Measures* workbook, the user will open the Excel file that was created containing the data exported for that specific report. Select all of the columns with data and copy. Open or switch to the *Measures* file and paste the data into the worksheet labeled RT1. To make sure the data is organized correctly, it is necessary to paste the data into the tool at cell A1.

After pasting all of the exported data into the *Measures* workbook, delete the exported data tables from your computer. These files are no longer needed since the data are now in the *Measures* file of the Workload Analytic Tool.

Assign Staff to Units

In order to calculate the outcome scores by unit, the user must help the tool organize caseworkers by unit. Open the *Staff* worksheet and click the button labeled "Update Staff List." The left-most column in the sheet will fill with names of caseworkers as presented in the various SSIS reports. The user should select the caseworker's unit from the drop-down list provided in the Unit column. The Unit names entered in the *Analytic Tool* workbook will appear in the drop-down list.

Generate the Measures

To generate the results using the SSIS case-level data, select the *Management* worksheet (last tab colored green) and review any issues presented in the Warnings /

Notes column. This worksheet will identify if potential data problems exist before the measures are calculated.

The following describes the types of warnings or notes which may result.

Measure is Empty - An empty measure may be an indication that the user forgot to paste the data exported from SSIS into the tool. However, it is possible, especially for smaller counties, that some measures may actually lack even a single case which is relevant to the measure. In these cases, this error does not constitute a problem and may be safely disregarded.

Assign All Cases to a Worker - Data tables where one or more cases are not assigned to a specific worker will be identified. When cases are not assigned to a specific worker, the unit and workload scores will be less accurate than the county-wide scores. Whenever possible, the user should assign cases to a worker where assignments were not identified within SSIS.

Inappropriate Data - The Workload Analytic Tool has a limited ability to identify inappropriate data entered into the tool. Many potential problems are handled silently by the tool. When this is impossible, the *Management* worksheet identifies an error and indicates which measure contains a problem. It also presents a count of the number of warnings or errors in each measure. Before calculating the measure scores the user must address or understand each warning or note and how it could impact the accuracy of the scores generated by the *Analytic Tool*. For example, the tool is limited to 2000 cases per data table. If the user pastes more than 2000 rows of data into the tool, the *Management* worksheet will flag this as an error.

Define Label - The *Management* worksheet counts the number of staff in each unit and compares the count to the entry in the *Analytic Tool* file. If the numbers do not agree, the tool notifies the user of a possible data entry error. Imbalances do not affect the mathematical accuracy of the outcome measures. They can, however, affect how cases and units are grouped when the outcomes are grouped by workload ratios.

If Excel generates an error when pasting the data into the *Measures* workbook, the user should first check to see that he or she is pasting data into the first cell of the first column (A1) and that he or she has not selected any blank columns in the exported data file.

Once all errors and warnings have been resolved or understood, click the button labeled "Calculate ALL." Depending on system resources and the size of the data set, the calculations may take anywhere from a few seconds to a minute to complete. During this time Excel may become unresponsive. *Do not close Excel or exit the tool while these calculations are being performed.*

After the measures have processed successfully, the word "Yes" will appear next to "Measures Calculated," indicating that the calculations were completed successfully. For users of Excel version 2007 and later, this text should be colored green. In older versions of Excel, the text may be a different color. If "Yes" does not appear, an error resulted during the calculation process and the cause will need to be identified.

Once the measures have been calculated, the user should save the file and close it.

The Excel workbook *Analytic Tool* provides administrators, managers and supervisors with information on workload need and correlates that need on being able to achieve improved outcomes and meet process standards. The reports may be categorized into two types - Workload Need and Performance, with each report being described below.

WORKLOAD NEED

Resource Summary

The *Resource Summary* worksheet allows users to record the number of caseworker Full-time Equivalents. It is in this worksheet that users first posted unit and caseworker names and FTE counts. This worksheet also provides the answer to the question "How many staff are needed to handle workload in a quality manner?"

The column labeled "Projected FTE Need" provides the ultimate answer to the question as to adequacy of staffing. Projected need is based on the sum of the hours needed to spend on the caseload for each workgroup type based on the caseload size; the result is divided by the time available for case work to determine the overall count of caseworkers needed for the county and by unit.

A positive number in the "Staffing Difference" column indicates additional caseworkers are needed. A negative number indicates that a shift of resources from one unit to another or to other programs within a county may be warranted as more caseworkers are available than what are needed to handle the volume of child welfare/children's mental health workgroups.

A ratio of the Projected FTE Need to the Current Caseworkers FTE may also be used to identify resource need. A ratio greater than 1 in the "Ratio of Need" column indicates additional resources are needed while a ratio less than 1 indicates a shift in resources may apply. A ratio equal to 1 indicates the number of current caseworker FTEs is the number needed to handle the present caseload size.

A description of the worksheet contents of each column was provided earlier in the Data Entry chapter.

Hours Needed

A formula has been applied to the *Hours Needed* worksheet to calculate the total time needed to spend on the volume of workgroups for a given workgroup type, summing the total hours for each workgroup type for the county and by unit. The

counts of workgroups for each workgroup type, taken from the *Workgroup Counts* worksheet, is multiplied by the total time needed to complete the required and other tasks (*Calculated Workgroup Time*) for each workgroup type.

To illustrate the formula, the following example is offered using a Non-Relative Family Foster Care workgroup. The count of workgroups in the *Workgroup Counts* worksheet listed for workgroup type 403 - Non-relative Family Foster Care will be multiplied by the "Time Standard for Caseworkers" for that same workgroup type as taken from the *Calculated Workgroup Time* worksheet.

The following table provides a general description of the worksheet contents by column.

Column	Definition
Workgroup Type Code	The code used to define workgroup types is displayed.
Workgroup Type Definition	The description identifies the specific workgroup type and placement type for children removed from the home.
Time Standard for Caseworkers	Using the formula contained in each cell, the hours needed to handle a workgroup based on the required and other tasks is posted from the <i>Calculated Workgroup Time</i> worksheet.
County Totals	Using the formula contained in each cell, the total number of hours needed for each workgroup type is summed for the county.
Unit Name	Using the formula contained in each cell, the total number of hours needed for each workgroup type is broken down by unit based on the "Time Standard for Caseworkers" and the workgroup count in each unit. Unit names entered in the <i>Resource Summary</i> worksheet are auto-populated in the column headings.
Totals	Using the formula contained in each cell, the total number of hours needed to spend on the workgroups is summed for the county and for each unit.

Note

Time needed to complete Traditional (Family) Investigation/Facility Investigation workgroups and Family Assessment Response workgroups has been increased to account for state and county policy which provides caseworkers with 45 days to render a decision. The time needed for these workgroup types is increased by half again as much for each, as if the investigations and assessments are completed in the month in which they are received.

FTEs Needed

The *FTEs Needed* worksheet generates a count of needed resources in terms of full-time equivalent caseworkers. The resulting figure identifies the number of

caseworkers needed based on the number of workgroups for each workgroup type. The total hours needed to manage the volume of workgroups, taken from the *Hours Needed* worksheet, is divided by the number of hours caseworkers have available to devote to case work, taken from the *Resource Summary* worksheet and based on the average hours caseworkers work in a week.

The contents of the *FTEs Needed* worksheet are described below.

Column	Definition
Workgroup Type Code	The code used to define workgroup types is displayed.
Workgroup Type Definition	The description identifies the specific workgroup type and placement type for children removed from the home.
County Totals	Counts of FTEs needed to manage the volume of workgroups on a monthly basis are displayed by workgroup type for the county.
Unit Name	Using the formula contained in each cell, FTEs needed are displayed for each workgroup type by unit. Unit names entered in the <i>Resource Summary</i> worksheet are auto-populated in the column headings.
Totals	Using the formula contained in each cell, the total number of hours needed to spend on the workgroups is summed for the county and for each unit.

PERFORMANCE

The *Analytic Tool* contains three worksheets which correlate workload need to the second round of CFSR outcome measures and three worksheets which correlate that need to Minnesota process standards as measured by reports categorized as "SSIS." Each of the worksheets is described in the following few pages.

Permanency Reports

The *Analytic Tool* workbook contains three worksheets, as identified with a blue tab, which relate workload need to several of the outcome measures used in conjunction with the second round of the CFSR to assess a state's ability to help children achieve permanency. One of the respective worksheets provides data at the county level and another at the unit level. The last worksheet groups units by their workload ratios, allowing users to more clearly see how workload may have an effect on achieving positive outcomes.

The table below details the 15 Permanency Measures.

Measure	Description
1.1	Of all children discharged to reunification during the period, what percentage was reunified in less than 12 months?
1.2	Of all children discharged to reunification during the period, what was the median length of stay?
1.3	Of all children entering care for the first time during the period what percentage was discharged to reunification in less than 12 months?
1.4	Of all children discharged to reunification in the 12 month period prior to the selected year, what percent re-entered care within 12 months of the date of discharge?
2.1	Of all children discharged to adoption during the period, what percentage was reunified in less than 24 months?
2.2	Of all children discharged to adoption during the period, what was the median length of stay?
2.3	Of all children in care for 17 months or longer as of the first day of the year, what percentage was discharged to a finalized adoption by the end of the year?
2.4	Of all children in care for 17 months or longer as of the first day of the year, what percentage became legally free within six months?
2.5	Of all children becoming legally free in the year prior to the selected period, what percentage was adopted within 12 months of becoming legally free?
3.1	Of all children in foster care 24 months or longer as of the first day of the selected period, what percentage was discharged to a permanent home by the end of the year and before their 18 th birthday?
3.2	Of all children discharged during the year who were legally free for adoption, what percentage was discharged to a permanent home prior to their 18 th birthday?
3.3	Of all children emancipated or aging out during the year, what percentage was in care for three years or longer?

Measure	Description
4.1	Of all children served in foster care for less than 12 months, what percentage had two or fewer placement settings?
4.2	Of all children served in foster care for 12 to 24 months, what percentage had two or fewer placement settings?
4.3	Of all children served in foster care for 24 to 36 months, what percentage had two or fewer placement settings?

Permanency - County

The CFSR measures are identified in the first column of the worksheet, next to a brief description of each measure. The column labeled “Nat’l 75th Percentile” provides the score for the 75th percentile group, the score by which states are measured in regard to their ability to satisfy the federal outcome.

Three key pieces of information regarding the county-wide item scores are provided in this worksheet. First, the “% Meeting Measure” is a calculation of the percentage of cases which meet the CFSR Item criteria, allowing counties to compare their scores to the national 75th percentile score. The worksheet also provides the number of cases meeting the standard and the total number of cases relevant to the measure.

Column	Definition
Measure	CFSR measure numeric identifier (.e.g., 1.1).
Description	Brief description of each CFSR Measure.
Nat’l 75 th Percentile	The national 75 th percentile score for the measure.
% Meeting Measure	The percentage of cases which met the requirement for the measure.
# Meeting Measure	The number of cases which met the requirement for the measure.
Total # Cases	The total number of cases included in the population for the measure.
Average Workload Ratio	The average workload ratio of all caseworkers in the measure.

Permanency - Unit

The *Permanency- Unit* worksheet provides results for the same measures as does the *Permanency - County* worksheet, grouping outcomes and ratio of workload need at the unit level. This worksheet allows users to compare unit outcomes to county outcomes and the national 75th percentile. Where the previous report or worksheet, *Permanency - County*, provided all information in a single row, individual unit scores are provided in a column, to allow easy comparison across units.

Row	Definition
Average Workload Ratio	The workload ratio of each unit in the county.

Row	Definition
% Meeting Measure	The percentage of cases which met the requirement for the measure.
# Meeting Measure	The number of cases which met the requirement for the measure.
Total # Cases	The total number of cases included in the population for the measure.

Column	Definition
Measure	CFSR measure numeric identifier (e.g., 1.1).
Description	Brief description of the CFSR measure.
Nat'l 75 th Percentile	The national 75 th percentile score for the measure.
County Score	The county-wide score for the CFSR measure.
Units	Each unit identified in the tool is scored separately.

Permanency - Workload

The *Permanency - Workload* worksheet allows users to assess how workload need affects the ability to achieve improved outcome scores, drawing comparisons based on workload need or the ratio of need. In this report or worksheet, units are grouped by their ratio of workload need, grouping together those with a ratio within a set range (e.g., 0.75 or less, 0.76 to 1.00, 1.01 to 1.25).

Row	Definition
% Meeting Measure	The percentage of cases which met the requirement for the measure.
# Meeting Measure	The number of cases which met the requirement for the measure.
Total # Cases	The total number of cases included in the population for the measure.

Column	Definition
Measure	CFSR measure numeric identifier (e.g., 1.1).
Description	Brief description of each CFSR measure.
Nat'l 75 th Percentile	The national 75 th percentile score for the measure.
County Score	The county-wide score -for the CFSR measure.
Workload	Units are grouped by ratio of resource need.

Safety and State Measures

The *Analytic Tool* workbook contains an additional three worksheets with tabs also colored blue which contain two of the federal measures that assess safety and four which assess adherence to state process standards. The worksheets are grouped similarly to those for the permanency measures - County, Unit and Workload. The specific measures included in this set of worksheets are: RT1, RT2, SSIS1, SSIS5 and SSIS8.

The table below details the two measures which assess safety from the perspective of re-abuse and the three state process measures.

Measure	Description
RT 1	Of all children who were victims of abuse during the reporting period, what percentage did not have another substantiated or indicated report within a six-month period?
RT 2	Of all children who were in foster care during the reporting period, what percentage was the subject of maltreatment by a foster parent or facility staff?
SSIS 1	What was the percentage of child maltreatment assessments initiated within 24, 48, 72, 96, 120 and over 120 hours of a report?
SSIS 4	For families receiving CPS as of the selected date, what percentage have had a face-to-face contact with a social worker within the last 0 - 30 days, 31 - 60 days, 61 - 90 days and 91+ days?
SSIS 5	For children in out-of-home placement as of the selected date, what percentage have had a face-to-face contact with a social worker within the last 0 - 30 days, 31 - 60 days, 61 - 90 days and 91+ days?
SSIS 8	For children who entered placement during the last 24 months, how many times within the last 24 months were they removed from the home?

The following provides information for the individual report worksheets.

Safety_State - County

The measures are identified in the first column of the worksheet, next to a brief description of each measure. Data are provided for three key pieces of information regarding the county-wide item scores. First, the “% Meeting Measure” is a calculation of the percentage of cases from the SSIS data set which meet the item’s criteria. The *Analytic Tool* also provides a count of the cases which satisfy the standard and the total number of cases included in the measure’s population.

Column	Definition
Measure	Measure numeric identifier (e.g., RT1).
Description	Brief description of each measure.

Column	Definition
% Meeting Measure	The percentage of cases which met the requirement for the measure.
# Meeting Measure	The number of cases which met the requirement for the measure.
Total # Cases	The total number of cases included in the population for the measure.
Average Workload Ratio	The average workload ratio of all caseworkers in the measure.

Safety_State - Unit

As with the Permanency Measures, the *Safety_State - Unit* worksheet provides the same measures as the *Safety_State - County* worksheet, but grouping the results at the unit level.

Row	Definition
Average Workload Ratio	The workload ratio of each unit in the county.
% Meeting Measure	The percentage of cases which met the requirement for the measure.
# Meeting Measure	The number of cases which met the requirement for the measure.
Total # Cases	The total number of cases included in the population for the measure.

Column	Definition
Measure	Measure numeric identifier (e.g., RT1).
Description	Brief description of each measure.
County Score	The county-wide score for the measure.
Units	Each unit identified in the tool is scored separately.

Safety_State - Workload

The *Safety_State - Workload* worksheet allows users to assess how workload or resource need affects the ability to achieve improved outcomes, drawing comparisons based on workload or the ratio of need, by grouping units with a similar ratio into a single group.

Row	Definition
% Meeting Measure	The percentage of cases which met the requirement for the measure.
# Meeting Measure	The number of cases which met the requirement for the measure.
Total # Cases	The total number of cases included in the population for the measure.

Column	Definition
Measure	Measure numeric identifier (e.g., RT1).
Description	Brief description of each measure.
County Score	The county-wide score for the measure.
Workload	Units are grouped by ratio of resource need.

Users should be aware of a couple of items when evaluating the affect workload need has in being able to achieve positive results. First, in measures where the size of the population is small, the impact of individual case outcomes can have an influence on a county's or unit's rate of success for a particular measure. One or two cases with significantly different results, when the population of cases is small, may have a dramatic effect on the result, positively or negatively.

Secondly, using larger time frames (e.g., a full year instead of six months) will increase the data set, resulting in scores which may be more representative of group outcomes. The default time frame used by SSIS, however, provides data on the most recent six-month period available which should be adequate to generate meaningful results for most counties.

Each of the Workload Analytic Tool’s workbooks, *Analytic Tool* and *Measures*, contain worksheets with green tabs indicating that their contents are used to manage the data and processes which serve to produce the resource need calculations and correlate that need with performance. The respective worksheet in the *Analytic Tool* workbook labeled *Calculated Workgroup Time* is for reference purposes only, while the two in the *Measures* workbook require some user input, which was discussed earlier in the Data Entry chapter.

A fuller description of each is provided below.

ANALYTIC TOOL

The Time Study portion of the Workload Study measured the average amount of time needed to complete required and other tasks. “Required” tasks are defined as those which must be done based on policy or practice standards while “other” tasks are not dictated by policy, such as preparing for court or meetings. The sum of the required and other tasks for each workgroup type is the calculated time needed to spend on a workgroup on a monthly basis or “Time Standard.”

The *Calculated Workgroup Time* worksheet identifies the times needed to complete the various required and other tasks for each type of workgroup. Time for required tasks is listed for only those workgroup types for which the required task is to be completed. All workgroups have time reported for other tasks. As changes in policy or workflow are made, the worksheet may be amended to capture new required tasks, delete obsolete required tasks and update times needed to perform both required and other tasks.

The content of the worksheet is described below.

Column	Definition
Required Tasks	The individual required tasks are listed along with a placeholder for time to complete other tasks.
Workgroup Types	Each workgroup type is listed which allows a unique time standard to be computed for each workgroup type.

Note

Counts of Family/Facility Investigations and Family Assessment Responses initiated during the month are used to calculate resource need. Given that state and county policy provides caseworkers with 45 days to render a decision, the time needed for this workgroup type will be increased by half again as much for each, as if the investigations and assessments are completed in the month in which they are received. The increase in time adjustment is found in the Hours Needed worksheet.

MEASURES

The *Measures* workbook contains tool management functions in the Workload Analytic Tool which serve to correlate performance with resource need. The two green tabbed worksheets, *Staff* and *Management*, contain the tool management functions. Specifically, the *Staff* worksheet provides the user with the ability to assign staff to individual units as recorded by the user in the *Analytic Tool* workbook. The *Management* worksheet controls the calculation of the measures, and provides the user with warning or error messages, as appropriate.

Use of the *Staff* and *Management* worksheets is covered in greater detail in the Data Entry chapter. The following outlines the contents of each.

Staff

Column	Definition
Staff Name	Each staff member in the county is listed (max 600).
Unit	Provides a drop-down list of possible units. Users must assign each staff member to a unit.

In addition to the two columns, there is a button at the top of the worksheet, labeled "Update Staff List." This button refreshes the list of staff listed in the "Staff Name" column.

Management

There are two sections to this worksheet. The first section of the worksheet, highlighted in cream, is labeled "Tool Status." It presents the status of the data entered into the tool. The second section of the worksheet, highlighted in light blue, is labeled "Management Tools" and presents two buttons which enable the user to control the Workload Analytic Tool.

Tool Status

The following table details the contents of this portion of the worksheet.

Column	Definition
Tab	List of worksheets in the workbook. The names of the tabs correspond to the measures calculated by the tool.
Data Present	Identifies if there are data present in the tool for each measure.
Cases Not Assigned to Worker / Unit	Number of cases in a tab / measure not assigned to a specific worker. Cases must be assigned to individual workers in order to calculate measure scores on a per unit basis.
Missing / Corrupt Data	Number of cases in a tab / measure with data that can not be handled by the Workload Analytic Tool. This data should be corrected before calculating the measures. Invalid data affects the accuracy of the calculated scores.
Warnings / Notes	<i>See the table below for detailed content information.</i>
# Unassigned Staff	Presents the number of staff, listed in the <i>Staff</i> worksheet, who are not assigned to a specific unit. Workers must be assigned to units for the tool to accurately calculate measure scores for each unit.
Unit	List of units identified in the <i>Analytic Tool</i> workbook.
Analytic Tool FTE Count	Number of staff listed in the <i>Analytic Tool</i> workbook.
Staff Tab Count	Staff assigned to each unit in the <i>Staff</i> worksheet in the <i>Measures</i> workbook. ⁶

Warnings / Notes

Warning / Note	Definition
Too many cases	The Workload Analytic Tool can only handle 2000 cases per measure. Cases beyond 2000 will not be used to calculate the success rates.
Assign all cases to a worker	Some cases may not been assigned to a staff member.
Data error in required column	The message indicates the tool has detected an invalid entry or data corruption in a column necessary to calculate the measure score.
Staff members do not match	The number of staff listed in the <i>Analytic Tool</i> workbook does not match the number assigned in the <i>Staff</i> worksheet in the <i>Measures</i> workbook. ⁷

⁶ The *Staff* worksheet in the *Measures* workbook counts the number of caseworkers with at least one case assignment of the cases listed in the SSIS report worksheets. The count of caseworkers in the *Resource Summary* worksheet in the *Analytic Tool* workbook represents Full-time Equivalents. Hence, it may be appropriate for the counts to be different, such as when a caseworker is assigned to cases in a different program (e.g., adult services, developmental disabilities).

⁷ See footnote above (6).

Warning / Note	Definition
Assign all staff to a unit	There is at least one staff member listed on the <i>Staff</i> worksheet who is not assigned to a unit.

Management Tools

This section of the tool contains two buttons. The first button labeled “Calculate ALL” calculates the measure scores. The button labeled “Reset Tool” deletes all of the data, resets all of the scores to NULL, and refreshes the Staff list. This second button may be used to rapidly reset the tool when the user wishes to add new or updated SSIS reports to the tool.

Below the two buttons is a single cell, colored red or green, depending on the status of the tool. It is labeled “Measures Calculated.” When the cell next to the label is green and says “Yes” the measures have been calculated by the tool and the results may be viewed in the *Analytic Tool* workbook. When the cell is red and says “No” the measures have not been calculated by the tool and are not available in the *Analytic Tool* workbook. Older versions of Excel may not display the red and green highlighting, but the status - “Yes” or “No” - will be displayed, regardless.

RESET THE WORKLOAD ANALYTIC TOOL

The Workload Analytic Tool is designed to be used on an ongoing basis, allowing users to continually assess resource need and measure that need against the ability to satisfy federal outcome measures and state performance standards. Users should not paste new data on top of existing data in the *Measures* workbook; doing so could lead to errors in the calculations of the individual measures.

To reset the Workload Analytic Tool, open the *Measures* file and select the *Management* worksheet. Click the button marked “Reset Tool,” waiting while the tool deletes all of the data in the data tabs and resets the measure calculations. When the word “No” appears next to “Measures Calculated,” *Measures* has been successfully reset.

The reset process does not affect the data entered in the *Analytic Tool* file. The list of units in a county rarely changes and the number of workers in each unit changes more gradually than the number of workgroups assigned to a unit. As counts of FTEs for a given unit or equivalent for a given staff member for smaller counties change and/or workgroup counts fluctuate, the information should be updated in the *Analytic Tool* workbook in the respective worksheet, as appropriate.