

Cost Allocation Methodologies



*Helping States Determine Equitable Distribution of
Software Development Costs to Benefiting Programs
Over the System Development Lifecycle*

CAM-TOOL User Guide

May 2004

Updated December 2014

Guide to the Microsoft Excel tool to assist States in the
creation of Cost Allocation Plans for shared system
development

CAM-TOOL USER GUIDE - TABLE OF CONTENTS



CAM-TOOL INTRODUCTION.....	3
System Requirements.....	3
User Requirements:	3
Downloading the CAM-TOOL.....	3
Preparing Data for Use in the CAM-TOOL software.....	4
Starting the CAM-TOOL software.....	4
CAM-TOOL Main Menu and Navigation.....	5
CAM-TOOL Data Operations.	7
The CAM-TOOL Worksheet Format.....	8
CAM-TOOL Worksheet Conventions and Constraints.....	8
The System Information Worksheet.....	11
The Benefiting Programs Worksheet.....	14
The Allocation Structure Worksheet.....	17
The Functional Modules Worksheet.....	20
The Sub_Modules Worksheet.....	22
The Details Worksheet.....	25
The Weighting System Worksheet.....	29
The All System Usage Worksheet.....	31
The Recipient Counts Worksheet.....	40
The Shared Usage LOE Worksheet.....	49
The Cost Allocation Plan Worksheet.....	54
The Child Welfare Cap Worksheet.....	58
The Program Summary Worksheet.....	60
The Format All System Usage Worksheet.....	63
The Format Shared Usage Worksheet.....	68
The Help Menu Worksheet.....	72
CAM-TOOL Worksheet Data Flow and Fields.....	73
Glossary of Terms.....	82

CAM-TOOL INTRODUCTION

The CAM-TOOLKIT includes the Cost Allocation Methodologies Handbook and the companion CAM-TOOL software. The CAM-TOOL was designed for use by States in creating cost allocation plans for software development costs; the CAM-TOOL implements the systematic cost allocation process outlined in the CAM Handbook. Use of the CAM-TOOL is most appropriate when there is a need to provide cost allocation justification that quantifies detailed benefit for multiple programs (e.g., during *planning* for the Implementation Advance Planning Document, or IAPD, submission for a system used by multiple operating divisions). In contrast, the Preliminary Advance Planning Document, or PAPD, submission allows for any reasonable cost allocation methodology (i.e., usually equal shares) among the benefiting programs.

The CAM-TOOL is a Microsoft Excel application that incorporates Excel functions, macros, and Visual Basic for Applications functionality to automate tasks associated with cost allocation.

System Requirements

- The CAM-TOOL has been updated for use with Microsoft Excel 2010 or later versions.
- The CAM-TOOL uses macros in its normal operation, so macros must be enabled on your computer. Contact your technical support staff for assistance in enabling macros on your system.

User Requirements:

- Knowledge of the process of system cost allocation. Please refer to the CAM Handbook for complete details.
- Basic proficiency in Microsoft Excel.

Downloading the CAM-TOOL

Download the CAM-TOOL guidance and software documents from the website of the Administration for Children and Families, Office of Child Support Enforcement (ACF/OCSE) or the website for Food and Nutrition Services (FNS).

ACF OCSE website: <http://www.acf.hhs.gov/programs/css/resource-library/search?keyword=CAM-toolkit&h=1>

FNS website: <http://www.fns.usda.gov/apd/cam-toolkit>

Download all of the CAM files to a single directory on your hard drive:

- CAM TOOL (MS Excel workbook)
- CAM TOOL Examples (Simple Data Example, Complex Data Example, Data Example with Weighting)
- CAM TOOL Help Files (compressed folder)*
- CAM User Guide (PDF)
- CAM Handbook (PDF)

NOTE: Unzip the CAM TOOL Help Files into the same directory as the CAM TOOL and the CAM TOOL Examples. Do not open the CAM-TOOL directly from the website; it will not be able to access help files or save data properly.

Preparing Data for Use in the CAM-TOOL software

The CAM-TOOL does not include functionality for initial cost estimation. You must use cost estimation tools such as Constructive Cost Model (CoCoMo) to estimate the total work effort and the cost to be allocated.

The CAM-TOOL is designed to allocate the development costs that will be shared by multiple state and Federal programs. Costs that will be charged directly to one federal or state program will be excepted from the cost allocation plan calculations and will not be included in the results displayed on the Cost Allocation Plan worksheet. Direct charges must be accounted for separately in the project budget and added to the allocated costs determined by the CAM-TOOL in order to arrive at each program's share of the total project cost.

With the work effort and cost to be allocated in hand, you will be ready to use the CAM-TOOL. Below is a simplified view of using the CAM-TOOL.

- You will need to account for and map all of the work effort in your cost estimation process in establishing an Allocation Structure of three levels (Functional Modules, Sub_Modules, and Detail).
- You will also need to map a scale for level of effort, i.e., create a scale of values for the efforts from your cost estimation process to use as the Allocation Base in the CAM-TOOL. If costs are estimated in hours of programming, use development hours as the allocation base. If other estimates are used, such as lines of code, you will need to document a weighting scale to factor in the level of effort.
- Then, working within the CAM-TOOL, you will identify each program that will benefit from the proposed system, and identify the system elements that each program expects to use.
- Finally, you will enter the total cost to be allocated from your cost estimation process.
- The CAM-TOOL will use the identified work efforts and the program sizes to arrive at a usage share for each benefiting program. The CAM-TOOL will then use the development values you entered as the allocation base and your previously-determined allocation cost estimate to determine the "fair share" of costs for each of the benefiting programs.

To create multiple Cost Allocation Models for your project, it is best to create a fresh copy of the CAM-TOOL for each new scenario, giving each workbook a scenario-specific name.

Starting the CAM-TOOL software

Double-click on the CAM-TOOL filename or icon in your working directory. This application uses macros in its normal operation. Therefore, you may either enable macros for the current Excel session (recommended), or you may reset the default Security level for all sessions (generally not recommended).

CAM-TOOL Main Menu and Navigation

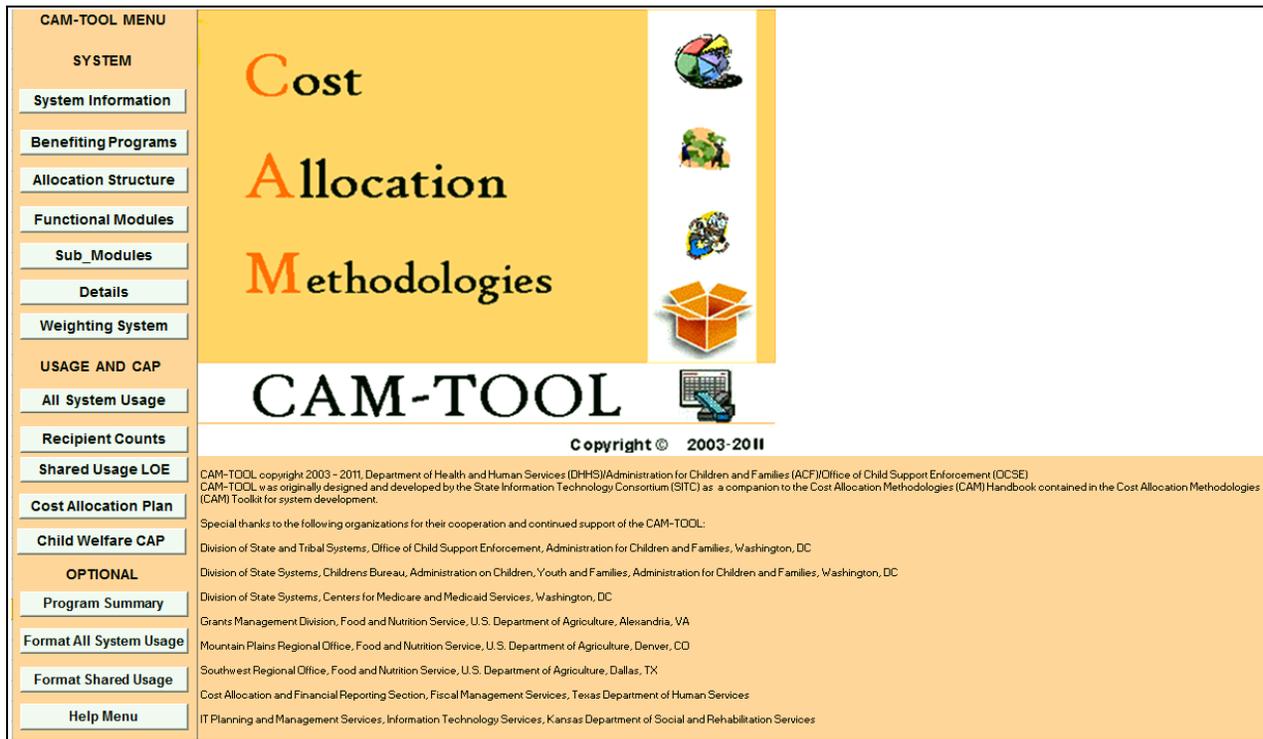


Figure 1 CAM-TOOL

Main menu. The Main Menu panel appears at the upper left of each worksheet in the CAM-TOOL, as shown in Figure 1. Main Menu buttons present the workflow of the CAM-TOOL, and are the easiest means to navigate between worksheets. The Main Menu contains three sections: System, Usage and CAP, and Optional, described at a high level below. Later sections provide detail on each Menu button and the dataflow between worksheets.

Section 1: System. The top group of menu buttons link to the worksheets that capture data about the system being cost allocated. These worksheets provide for guided entry of information on the system, the benefiting programs, the system components to be developed, and the applicable weighting system.

- **System Information:** The System Information worksheet captures information about the system undergoing cost allocation.
- **Benefiting Programs:** The Benefiting Programs worksheet identifies the programs that will benefit from the system development and program related information. The CAM-TOOL uses program abbreviations to identify the benefiting programs on usage data worksheets, the cost allocation worksheet, and optional worksheets.
- **Allocation Structure:** The Allocation Structure worksheet documents up to three levels of allocation (i.e., functional module, sub_module, and detail) and the basis for development calculations, such as development hours, lines of code, user screens, etc.
- **Functional Modules:** The Functional Modules worksheet is used to document the highest-level system components, or functional modules.

- **Sub_Modules:** The Sub Modules worksheet is used to document how the functional modules break out to the second level of system components to be developed, the sub_modules.
- **Details:** The Details worksheet is used to document how the sub_modules break out further to the third level of system development components, the detail level.
- **Weighting System:** The Weighting System supplemental worksheet documents your system of measuring or ranking the relative ease or difficulty of each development effort. You must implement a weighting system if you are estimating costs in a unit other than development hours.

Section 2: Usage and CAP. The middle group of menu buttons link to the worksheets that document the breakdown of system functionality used by each benefiting program. These sheets help calculate the “fair share” of cost allocation for each benefiting program.

- **All System Usage:** opens All System Usage worksheet to document the planned usage of the system by each benefiting program.
- **Recipient Counts:** opens System Recipient Counts worksheet to assign duplicated recipient counts for each benefiting program to support the usage identified in All System Usage worksheet.
- **Shared Usage LOE:** opens Shared Usage LOE worksheet to calculate the level of effort values for shared system usage and then to calculate the cost allocation plan.
- **Cost Allocation Plan:** opens Cost Allocation Plan worksheet to document the final cost allocation percentages based on the results in the Shared Usage LOE worksheet.
- **Child Welfare CAP:** opens Child Welfare CAP worksheet to document any further breakdown of costs within Child Welfare, and calculation of the overall single figure to be used by the CAM-TOOL for the federal financial participation by Child Welfare.

Section 3: Optional. The final group of menu buttons link to optional CAM-TOOL worksheets for ad hoc data analysis, and direct access to Help Files. These worksheets do not feed data to any other worksheets; they are available for end-user reference and analysis.

- **Program Summary:** The Program Summary worksheet provides a summary of the system functionality usage by benefiting program.
- **Format All System Usage:** The Format All System Usage worksheet allows custom formatting of data for reporting, presentation, or additional calculations.
- **Format Shared Usage:** The Format Shared Usage worksheet allows custom formatting of data for reporting or presentation, or additional calculations.
- **Help:** The Help worksheet contains links to the CAM-TOOL help files related to specific worksheets. Help files must reside in the same directory as the CAM-TOOL software in order for them to work correctly.

CAM-TOOL Data Operations.

The CAM-TOOL uses data entered to worksheets in three ways.

- (1) Data on the original worksheet remains visible as a reference.
- (2) Command buttons on selected worksheets allow the user to make progressive calculations of usage, and to copy some or all of the data onto other worksheets.
- (3) The CAM-TOOL copies some data automatically for use in background calculations.

Therefore, it is CRITICAL that you observe and follow notes in this Guide for how and where you may add rows or columns of data.

The CAM-TOOL Worksheet Format

All worksheets in the CAM-TOOL follow the format shown in Figure 2.

1	A	B	C	D	E	F	G	H
	CAM-TOOL MENU	?	Sub Modules		Copy to the Details Worksheet			
			Enter Project/System Name in System Information					
			FUNCTIONAL MODULE	SUB MODULE	DESCRIPTION	ALLOCATION TYPE	BUDGETED COSTS	ACTUAL COSTS
2	SYSTEM		Alerts					
3	System Information		Assessment					
4	Benefiting Programs		Case Management					
5	Allocation Structure		Eligibility Determination					
6	Functional Modules		Financial					
7	Sub_Modules		Intake					
8	Details		Interfaces					
9	Weighting System		Reports					
10	USAGE AND CAP		Integration Support					
11	All System Usage		Security Management					
12	Recipient Counts							
13	Shared Usage LOE							
14	Cost Allocation Plan							
15	Child Welfare CAP							
16	OPTIONAL							
17	Program Summary							
18	Format All System Usage							
19	Format Shared Usage							
20	Help Menu							

Figure 2 Common Layout for CAM-TOOL Worksheets

In **Figure 2** above, format areas common to all worksheets are called out:

1. Each worksheet displays the main menu for navigation.
2. “?” (i.e., question mark) appears in cell B1 on each worksheet. Click on the “?” to access the help file for the worksheet.
3. Row 1 on each worksheet contains worksheet header information and command buttons to initiate specific CAM-TOOL automated functions. Figure 2 includes one command button, **Copy to the Details Worksheet**.
4. Row 2 is reserved for column header information, such as Functional Module, etc.
5. Worksheet data input and display begins in cell “C3”. In Figure 2, worksheet data includes Alerts, Assessment, Case Management, etc.

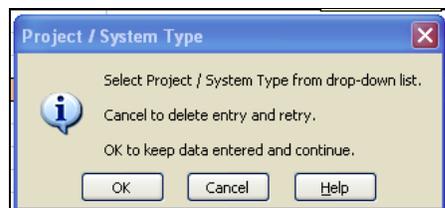
CAM-TOOL Worksheet Conventions and Constraints.

Conventions used throughout the CAM-TOOL include the following:

1. **Data copied to other worksheets.** The CAM-TOOL frequently copies data from one completed worksheet into one or more other worksheets for further use. Each worksheet chapter in this Guide identifies data that has been "copied from" another worksheet and data that will be "copied to" other worksheets or calculations.

Important constraint: *BE CAUTIOUS when it is necessary to correct or update data. In the CAM-TOOL, data you enter on one worksheet is copied and expanded to more detail on other worksheets. When you make a change to a prior worksheet, be sure to re-run each succeeding automated CAM-TOOL operation in order to preserve the integrity of your data.*

2. **Adding data rows.** In the System group of worksheets, the CAM-TOOL provides specific areas for adding **rows** of information as needed to expand functional modules to submodules to detail modules. In these areas, you may add as many **rows** as your cost allocation data requires.
3. **Deleting or changing columns:** ***Do NOT change any column names, delete columns, or change the order of columns in the Benefiting Programs, Sub_Modules, or Details Worksheets, or the CAM-TOOL will not provide accurate calculations.*** A required field may be empty of data, but the data column itself must exist to allow CAM-TOOL calculations to run.
4. **Changing data after entry to the CAM-TOOL.** Data resulting from CAM-TOOL automated tasks or calculations is protected from manual changes. Changes must be accomplished by using CAM-TOOL buttons and userforms.
5. **Data Length and Wrapping.** You may enter numeric, alphanumeric, or text data as you would in any Excel spreadsheet. Existing fields for alphanumeric data are set to wrap the display of text data. If you enter a number that is too long for the current display setting, "###" displays instead of numbers. To correct this, you may widen the column by dragging the column separator at the top of the spreadsheet.
6. **Optional Summary worksheets.** Worksheets on the "Optional" portion of the navigation menu provide results of calculations. These sheets are 'stand-alone' in the sense that data is not copied from these sheets or used in further CAM-TOOL processes. You may change the names and ordering of columns on these sheets to provide custom views for printing, or to conduct your own further calculations on the data.
7. **Data validation errors and alerts.** The CAM-TOOL offers numerous command buttons that copy data from one sheet to another, or make calculations to data on a worksheet. Before doing so, the CAM-TOOL performs basic data validation checks, for example, to check that there is data on the worksheet, or that all of the data fields required in the calculation are filled in. If there is insufficient or incorrect data, the CAM-TOOL cancels the button action and offers a message box with information on corrective actions (see examples below).



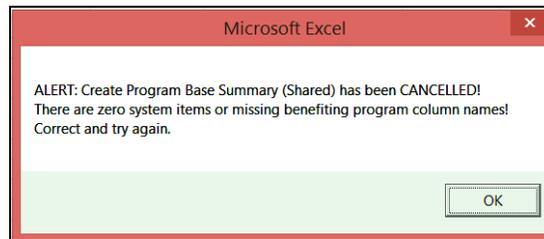


Figure 3 Common CAM-TOOL Alert Messages

The most critical error messages are covered in the User Guide sections to which they apply.

The System Information Worksheet

Click on the System Information menu option to open the System Information worksheet, as shown in Figure 4.

	A	B	C	D	E	F	G	H
			System Information					
1	CAM-TOOL MENU	?	CAM TOOL - Enter Project Name on System Information Worksheet					
2	SYSTEM							
3	System Information		Project/System	SYSTEM INFORMATION		COMMENTS		
4	Benefiting Programs		Project Description	CAM TOOL - Enter Project Name on System Information Worksheet				
5	Allocation Structure		Project/System Type (select from list)	New Development				
6	Functional Modules		Target Date of Completion (mm/dd/yyyy)	4/10/2016				
7	Sub_Modules		Estimated Budget in Dollars (\$)	\$0.00				
8	Details		Current Phase (select from list)	Requirements				
9	Weighting System		Project Leads	Program	Role	Title	Phone Number	Email
10	USAGE AND CAP		Insert contact information					
11	All System Usage		State Contacts	Program	Role	Title	Phone Number	Email
12	Recipient Counts		Insert contact information					
13	Shared Usage LOE		Regional Contacts	Program	Role	Title	Phone Number	Email
14	Cost Allocation Plan		Insert contact information					
15	Child Welfare CAP		Federal Contacts	Program	Role	Title	Phone Number	Email
16	OPTIONAL		Insert contact information					
17	Program Summary							
18	Format All System Usage							
19	Format Shared Usage							
20	Help Menu							

Figure 4 System Information Worksheet

Overview: The System Information worksheet documents information about the project/system. This information is for reference, and is not used in any automated calculations. The Project/System Name entered on this worksheet appears in the header of other worksheets.

Before entering data to the CAM-TOOL, please 'save as' and provide a project-specific or scenario-specific filename to the CAM-TOOL instance.

1. **Worksheet Data.** The worksheet provides an area to document key system information and comments, and a separate area to document contact information for state, region, and federal staff.

System Information. The upper area of the worksheet documents entry of the system name, a description of the project/system, the system type (e.g., new development, system upgrade, web front-end, other), the target date of completion, estimated budget in dollars, current phase (e.g., requirements, design, development, etc.), and project leads. Comments may be entered to the right of each System Information entry. Fields and entry areas include:

- Project/System Name -- enter name for the system to be cost allocated. This name will appear in the header area of other worksheets. Comments for reference may be entered in the Comments area.
- Description -- enter brief description of the system or the scenario to be documented. Comments for reference may be entered in the Comments area.

- Project/System Types (select from list) -- select the type of system from the dropdown list shown in Figure 5, Project/System Type. Comments for reference may be entered in the Comments area.

	SYSTEM INFORMATION	COMMENTS
Project/System	CAM TOOL - Enter Project Name on System Information Worksheet	
Project Description		
Project/System Type (select from list)	New Development	
Target Date of Completion (mm/dd/yyyy)	New Development	
Allocation Budget in Dollars (\$)	Upgrade	
Total Project Budget in Dollars (\$)	Web Front-End	
	Other	

Figure 5 Project/System Type Dropdown List

- List choices include: New Development, Upgrade, Web Front-End, Other. If the choice is "Other," provide a description in adjacent Comments space.
- Target Date of Completion -- enter estimated completion date in format "mm/dd/yyyy." Comments for reference may be entered in the Comments area.
 - Allocation Budget in Dollars (\$) -- enter estimated allocation budget for the project. This total should include all development costs that are to be allocated to more than one program. This total should not include the portion of the budget that is direct charged to programs at the module or sub_module level. Comments for reference may be entered in the Comments area.
 - Total Project Budget in Dollars (\$) – enter the estimated total budget for the project. This total should include the Allocation Budget and any additional costs for modules or submodules that will be charged directly to one program.
 - Current Phase (select from list) -- select from dropdown list, as shown in Figure 6. If "Other," provide a description in adjacent Comments space.

? System Information		
CAM TOOL - Enter Project Name on System Information Worksheet		
	SYSTEM INFORMATION	
Project/System	CAM TOOL - Enter Project Name on System Information Worksheet	
Project Description		
Project/System Type (select from list)	New Development	
Target Date of Completion (mm/dd/yyyy)		1/1/2000
Allocation Budget in Dollars (\$)		\$0.00
Total Project Budget in Dollars (\$)		\$0.00
Current Phase (select from list)	Requirements	
Project Leads	Planning	able
Insert contact information	Requirements	
	Design	
	Development	
	Unit Test	
State Contacts	User Acceptance Test	able
Insert contact information	Other	

Figure 6 Current Phase Dropdown List

- Project Leads - Provide name and contact information for project lead personnel. Comments for reference may be entered in the Comments area.

Project Contact Information. The lower area of the worksheet documents information on the project, state, region, and federal contacts involved with the project. You may enter any necessary contact information that would be helpful in the cost allocation process. This data is used for reference only and can be tailored for your specific needs.

- Project / State / Region / Federal Contacts - provide name and contact information for state / region / federal key staff involved with the project.

- Program -- identify the project / state / region / federal program office associated with the contacts.
- Role -- identify project role for listed project / state / region / federal staff.
- Title -- identify position title for listed project / state / region / federal staff.
- Phone Number -- identify the phone number for listed project / state / region / federal staff.
- Email -- identify the email address for listed project / state / region / federal staff.

2. **Command Buttons.** None.

Required Fields needed for the CAM-TOOL automated calculations.

- Project/System Name -- used in the header of CAM-TOOL worksheets.

3. **Data Copied To This Worksheet.** None.

4. **Data Copied From This Worksheet.**

System/Project Name is used in the header of CAM-TOOL worksheets.

5. **Worksheet Calculations.** None.

6. **Constraints and Notes.** None

The Benefiting Programs Worksheet

Click on the Benefiting Programs menu option to open the Benefiting Programs worksheet, as shown in Figure 7.

PROGRAM ABBREV	PROGRAM	PROGRAM SIZE	RECIPIENT COUNTS	FEDERAL PROGRAM	FEDERALLY FUNDED?
SNAP	Supplemental Nutrition	Large	500,000	HHS/FNS	Yes
TANF	Temporary Assistance	Large			
MED	Medicaid Eligibility Serv	Large			Yes
CSE	Office of Child Support	Large			
Foster Care (IV-E)	Title IV-E	Small			
Foster Care (Non IV-E)	State Foster Care (Non	Small			
Youth Transition	Title IV-E	Small			
State CPI	Child Protective Invest	Small			
STATE 5	State Program 5	Small			
STATE 6	State Program 6	Small			
REFUGEE	State Refugee Assistanc	Small			

Figure 7 Benefiting Programs Worksheet

Overview. The Benefiting Programs worksheet documents high-level information on all programs that will benefit from the project.

1. **Worksheet Data.** This worksheet documents entry of the program abbreviation, full program name, program size (e.g., Large or Small), recipient counts (i.e., the number of duplicated recipients for a benefiting program), the associated Federal program (if any), an indicator for federal funding (e.g., “yes” or “no-state only”), and the applicable Federal match rate for each program. Most data entered to this sheet is copied to other sheets for further definition, and is also used in CAM-TOOL calculations. Data fields include:

- Program Abbrev -- enter an abbreviation for each program that will benefit from the project. Abbreviations are used by the CAM-TOOL in a number of other worksheets.
- Program -- enter the full program name for each program abbreviation.
- Program Size -- select size of each program from dropdown list:

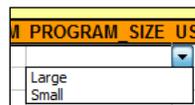


Figure 8 Program Size Dropdown List

Program Size is used by the CAM-TOOL as the basis for calculations on the Shared Usage LOE worksheet.

For purposes of cost allocation, a program is considered small if it has less than 5% of the total duplicated recipient count for all benefiting programs. Refer to Chapter 4, Activity 1, of the CAM Handbook for more information on how to make this determination.

The Program Size is a critical factor in the cost allocation process. Please ensure that all benefiting programs have the correct program size designation.

- Recipient Count -- enter recipient count for each benefiting program. The recipient count is used to calculate an “adjusted” cost allocation share (e.g., percentage of allocation) for each small program. Refer to Chapter 4 of the CAM Handbook for more information on how to make this determination.
- Federal Program -- enter name of any Federal program associated with each benefiting program.
- Federally Funded? -- from dropdown list, select whether each program is a Federal or a State-only program:

FEDERAL PROGRAM	FEDERALLY FUNDED?	MATCH RATE
	Yes	
	Yes	
	No - State Program	

Figure 9 Federally Funded Dropdown List

- Match Rate -- enter the applicable match rate for each Federal program as a decimal number, i.e., enter “.50” for a match rate of 50%. If there is no Federal match, you must enter a zero (0) in this field. Verify applicable match rates with the Federal programs involved in the project.

Note: The CAM-TOOL calculations are designed to use one single figure for the federal match rate for each benefiting program. Child Welfare costs frequently must be cost-allocated further to identify attributions to the several cost centers within Child Welfare. Use the Child Welfare CAP worksheet to document any further breakdown by cost center, and the overall resulting single figure to be used by the CAM-TOOL. When an overall rate has been determined on the Child Welfare CAP worksheet, enter it to the Benefiting Programs worksheet.

2. **Command Buttons.** None

3. **Required Fields needed for the CAM-TOOL automated calculations.** For each program, you **MUST** enter data for program abbreviation, name, size, recipient counts, and match rate. See important constraint below for correcting errors in data entry.

- Program_Abbrev
- Program_Size (Small vs Large)
- Recipient Counts
- Match Rate

4. **Data Copied To Worksheet.** None.

5. **Data Copied From Worksheet.** Data is copied from this worksheet to multiple other worksheets, and is also used by the CAM-TOOL in a number of automated calculations.

- Program Abbrev -- copied to All System Usage, Shared Usage LOE, Cost Allocation Plan, as well as automated calculations. This is the data item most frequently used by the CAM-TOOL.
- Program Size -- used in automated calculations in Recipient Counts, All System Usage, and Shared Usage LOE worksheets.

- Recipient Counts -- copied to Recipient Counts worksheet and also used in automated calculations.
- Match Rate -- copied to Cost Allocation Plan and used in automated calculations.

6. Worksheet Calculations. None.

7. Constraints and Notes.

- Columns must NOT be inserted between the defined columns for Program_Abbrev, Program, Program Size, Recipient Counts, Federal Program, Federally Funded, and Match. These columns MUST remain as Columns C through I respectively. In particular, the CAM-TOOL uses Program Size data (column "E") to calculate the benefiting program shares for the Shared Usage LOE Worksheet.

There is no limit to the number of rows that may be used to document benefiting programs, starting with Row 3.

- If you leave this worksheet without filling in one or more Program names, Program Sizes, Recipient Counts, or Match Rates, the system displays the error message below and returns you to the Benefiting Programs worksheet to fill in the missing information.

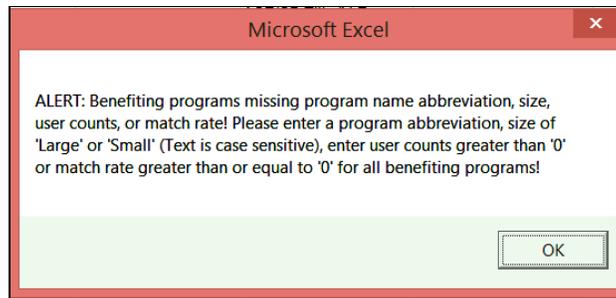


Figure 10 Error Message - Missing Data

- The same error can occur if you enter data to a new line and then try to backspace to 'erase' the data you entered. **To delete data, highlight the error cell(s), right-click, and choose to Delete Contents of the cells.**

The Allocation Structure Worksheet

Click on the Allocation Structure menu option to open the Allocation Structure worksheet, as shown in Figure 11.

	A	B	C	D	E	
1	CAM-TOOL MENU SYSTEM System Information Benefiting Programs Allocation Structure Functional Modules Sub_Modules Details Weighting System USAGE AND CAP All System Usage Recipient Counts Shared Usage LOE Cost Allocation Plan Child Welfare CAP OPTIONAL Program Summary Format All System Usage Format Shared Usage Help Menu	?	Allocation Structure			
2			CAM-TEST Project			
3			LEVELS	HIERARCHY	DESCRIPTION	
4			Level 1	Functional Modules (Program Functional Areas)	CAM-TEST project has 10 functional modules identified on the Functional Modules worksheet.	
5			Level 2	Sub_Modules (Cost categories/cost pools)	CAM-TEST project's sub_module level is a breakout of system module activities. There are currently 30 submodules. See Sub_Modules worksheet.	
6			Level 3	Details	CAM-TEST detail modules break out the sub_module functions of the system (e.g., reports and interfaces). See Details worksheet.	
7			ALLOCATION BASE: Identify the allocation base to be used for all system components. (The allocation base is the measurement you select to track and calculate the cost allocation for all benefiting programs. If the allocation base is anything other than development hours, you must apply a weighting system to all measurements.			
8				Allocation Base:	Description:	
9				Allocation Base: Development Hours	Development hours identified in cost estimation tool for all system components. No further weighting will be applied.	
10			OTHER COMMENTS:			
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						

Figure 11 Allocation Structure Worksheet

Overview. The Allocation Structure worksheet documents a high-level description of the allocation methodology and the allocation base to be used for this Cost Allocation Plan. The CAM-TOOL supports three levels of allocation (functional modules, sub_modules, and details) that may be expanded and documented in subsequent worksheets. The worksheet also identifies the allocation base (e.g., development hours, lines of code, etc.) that you have selected for this Cost Allocation Plan.

1. **Worksheet Data.** The Allocation Structure worksheet documents descriptions of how the three available levels of detail will be used in this specific cost allocation process, the allocation base for this Cost Allocation Plan, and relevant comments.

Allocation Structure. The CAM-TOOL provides three allocation levels similar to a work-breakdown structure for the system development. These should represent the distinct levels and units of work planned for system development. In order to use the CAM-TOOL for cost allocation, you must first assess your project plan and cost estimation process to identify the three-level structure of effort that you will document in the CAM-TOOL. The following examples refer to the system described in Figure 11, above.

- **Level 1 – Functional Module:** The system shown in Figure 11 above will be designed to have 10 areas of program development, or 10 Functional Modules. These will be identified and described in the Functional Modules Worksheet. These may include an Alerts module (e.g., programming, testing, etc.) to generate system notifications to users about due dates or past due work, or Data Collection, Eligibility Determination, Benefit Issuance, etc.
- **Level 2 – Sub_Module:** Each Functional Module breaks out to a second level of cost category or defined development effort. Figure 11 documents that the 10 Functional Modules will break out to a total of 30 Sub_Modules. These will be identified and described in the Sub_Modules Worksheet.
- **Level 3 – Detail:** Each Sub_Module breaks out to a further level of detailed effort. Figure 11 documents that the 30 Sub_Modules will break out to the distinct items to be developed. These will be identified and described in the Details Worksheet.

Allocation Base. Allocation base is the measurement used to track and calculate the development effort for benefiting programs. The **allocation base** you document in the CAM-TOOL must encompass the entire work effort for the system functionality in the allocation hierarchy to allow for proper cost allocation. As shown in Figure 11 at the beginning of the chapter, the Allocation Structure Worksheet documents your selected Allocation Base. You may insert additional rows if needed.

Figure 12 lists examples of different allocation bases.

Note: you must select **one** allocation base to characterize the entire development effort in the Cost Allocation Plan.

Allocation Base	Description
SOFTWARE DEVELOPMENT HOURS	Estimated or actual development hours expended on specific system functionality
STORAGE/DATABASE SIZE	Estimated or actual storage size or database size related to specific system functionality
LINES OF CODE (LOC)	Estimated or actual lines of code related to specific system functionality
FUNCTION POINTS	Estimated or actual function points related to specific system functionality
SCREENS	Estimated or actual screens related to specific system functionality

Figure 12 Examples of Allocation Bases

The optimal allocation base is the number of development hours, as estimated by your cost estimation process. Development hours can function as an indication of both work breakdown and level of effort required for system development. Where the allocation base is development hours, no other weighting is needed.

Other allocation bases may not inherently include the level of effort in the base measurement. As shown in Figure 12, lines of code can be used as an allocation base. However, lines of code are a measure of size and do not necessarily indicate level of effort. A very complex system function may have taken a lot of time to

develop and test, but may have resulted in only 30 lines of code, whereas another very simple function may require 100 lines of code.

Where the allocation base measure does not include the level of effort, a weight factor must be applied to indicate the level of effort. You must develop a scale, (i.e., 1 to 5 for low-to-high) and apply the weighting scale to all of the allocation base values. (The weighting system must be described in detail on the Weighting System worksheet.)

The CAM-TOOL uses Allocation Base data in several worksheets:

- First, you will select and identify your allocation base in the Allocation Structure worksheet.
- Next, you must describe and define the base values and any weighting system you have developed to encompass them, in the Weighting System worksheet.
- Finally, you will enter the actual base values and any weighting (type and value) for each unit of system functionality on the All System Usage worksheet.
- The CAM-TOOL will then use your evaluation of effort in calculating the fair share for each benefiting program.

Comments. This worksheet provides a comment section below the area for Allocation Base. It may be used for any comments or additional descriptions that would be helpful to the cost allocation process. You may add as many comment rows as you wish.

2. **Command Buttons.** None
3. **Required Fields needed for the CAM-TOOL automated calculations.** None required for CAM-TOOL calculations.
4. **Data Copied To Worksheet.** None.
5. **Data Copied From Worksheet.** None.
6. **Worksheet Calculations.** None.

The Functional Modules Worksheet

Click on the Functional Modules menu option to open the Functional Modules worksheet, as shown in Figure 13.

	A	B	C	D	E	F
1	CAM-TOOL MENU ? SYSTEM System Information Benefiting Programs Allocation Structure Functional Modules Sub_Modules Details Weighting System USAGE AND CAP All System Usage Recipient Counts Shared Usage LOE Cost Allocation Plan Child Welfare CAP OPTIONAL Program Summary Format All System Usage Format Shared Usage Help Menu	?	Functional Modules	Copy to Sub_Modules Worksheet		
			CAM-TEST Project			
2			FUNCTIONAL MODULE	DESCRIPTION	BUDGETED COSTS	ACTUAL COSTS
3			Alerts	This function will create and send alerts to appropriate users, and maintain system and user alerts and alert status.		
4			Assessment	This function will display assessments, record client needs, and access and print data from legacy system databases as permitted		
5			Case Management	This function will record and update case and participant data in legacy systems		
6			Eligibility Determination	This function will track, display, and automatically update client eligibility and benefits calculations		
7			Financial	This function will record, track and display expenditures, generate automatic payment transactions, generate and track vouchers and refunds.		
8			Intake	This function will record, display, and maintain client application data, including demographics, education, employment, etc.		
9			Interfaces	This function will communicate with other internal and external operating systems and programs.		
10			Reports	This function will produce, track and archive application outcome reports, payment processing reports, required state and federal reports, and management reports.		
11			Integration Support	This function will support data access from mainframe based legacy systems and manage rules, data mapping, and relationships between systems with minimal effort and disruption.		
12			Security Management	This function will provide security access and administration for data security and user access, including adherence to NIST SP 800-53, integration/interface with RACF security packages, managing access by mobile devices, providing screen-level and field-level security, and managing intrusion detection/malicious attack prevention.		
13						
14						
15						

Functional Module names will be copied to Sub_Modules worksheet.

Figure 13 Functional Modules Worksheet

Overview. The Functional Modules worksheet documents Level 1 of the Allocation Structure, including the name and description of each functional module, and optional fields for the budgeted and actual costs for the functional module. Functional Module names will be copied from this worksheet to the Sub_Modules worksheet for further breakdown.

The Functional Modules worksheet has one command button, **Copy to the Sub_Modules Worksheet**, as shown in Figure 13 above. This button copies the functional module names to the Sub_Modules worksheet so you may document the relationship of the sub-modules to the functional modules in the system allocation hierarchy.

NOTE: If you are using the CAM-TOOL to document an Interim Cost Allocation Plan, you may need to update the original budgeted costs before submitting a final Cost Allocation Plan. Use the Actual Costs column to document updates to the original budgeted costs.

1. **Worksheet Data.** The worksheet documents Level 1 of the Allocation Structure. Entry fields include:
 - Functional Module -- Enter the name for each functional module.

- Description -- Enter a detailed description for each functional module.
- Budgeted Costs -- Document the estimated cost for each functional module.
- Actual Cost – Enter updates to original budget for an Interim Cost Allocation Plan update or to finalize a Cost Allocation Plan.

2. Command Button.

Copy to the Sub_Modules Worksheet command button. This button copies the functional module names to the Sub_Modules worksheet. Clicking this button opens a message box asking if you wish to preserve or delete existing data on the Sub_Modules worksheet.

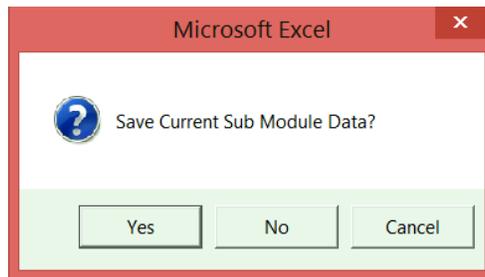


Figure 14 Save Sub Module Data

Clicking **Yes** will save existing data on the Sub_Modules worksheet. Functional Modules names will be transferred to the Sub_Modules worksheet, making any necessary additions, changes, and deletions to Functional Module names already on the Sub_Modules worksheet.

Clicking **No** will replace all data on the Sub_Modules Worksheet with the new Functional Module names.

Clicking **Cancel** closes the message box; you will remain in the Functional Modules Worksheet.

3. Required Fields needed for the CAM-TOOL automated calculations.

- Functional Module.

4. Data Copied To Worksheet. None.

5. Data Copied From Worksheet. Functional Module names will be copied to the Sub_Modules worksheet for further breakdown.

6. Worksheet Calculations. None.

7. Constraints and Notes. None.

The Sub_Modules Worksheet

Click on the Sub_Modules menu option to open the Sub_Modules worksheet, as shown in Figure 15.

	A	B	C	D	E	F	G	H
	CAM-TOOL MENU SYSTEM	? Sub Modules		Copy to the Details Worksheet				
1	System Information	CAM-TEST Project						
2		<input type="checkbox"/>	FUNCTIONAL_MODULE	SUB_MODULE	DESCRIPTION	ALLOCATION_TYPE	BUDGETED_COSTS	ACTUAL_COSTS
3	Benefiting Programs			Alerts				
4				Assessment				
5	Allocation Structure			Case Management				
6				Eligibility Determination				
7	Functional Modules			Financial				
8				Intake				
9	Sub_Modules			Interfaces				
10				Reports				
11	Details			Integration Support				
12				Security Management				
13	Weighting System							
14	USAGE AND CAP							
15	All System Usage							
16								
17	Recipient Counts							
18								
19	Shared Usage LOE							
20								
21	Cost Allocation Plan							
22								
23	Child Welfare CAP							
24	OPTIONAL							
25	Program Summary							
26								
27	Format All System Usage							
28								
29	Format Shared Usage							
30								
31	Help Menu							

Figure 15 Sub_Modules Worksheet after Copying Names from Functional Modules

Overview. When you complete entry of the Functional Modules, and click the command button to **Copy to the Sub_Modules Worksheet**, this worksheet will display the functional module names copied from the Functional Modules worksheet, as shown in Figure 15 above.

Use the worksheet to expand functional modules to identify component sub_modules, if any. For each sub_module, provide a description and an allocation type. In Figure 16, below, the functional modules have been expanded to identify the sub_modules in each. Note that the single Functional Module of Alerts has been expanded into two sub_modules for Management and Staff.

After you complete entering Sub_Modules, clicking the **Copy to the Details Worksheet** command button will copy the Functional Module and Sub_Module names to the Detail worksheet for further breakdown.

	A	B	C	D	E	F	G	H
	CAM-TOOL MENU	?	Sub Modules		Copy to the Details Worksheet			
1			CAM-TEST Project					
2			FUNCTIONAL MODULE	SUB MODULE	DESCRIPTION	ALLOCATION TYPE	BUDGETED COSTS	ACTUAL COSTS
3	SYSTEM		Alerts	Management	Alerts on actions that need man	Shared		
4	System Information		Alerts	Staff	Alerts that worker actions are ne	Shared		
5	Benefiting Programs		Assessment	Eligibility Verification	Online verification	Shared		
6	Allocation Structure		Assessment	Searches	Access information across legac	Shared		
7	Functional Modules		Case Management	Participant Data	Participant personal, employe	Shared		
8	Sub_Modules		Case Management	Child and Adult Services	Providers	Shared		
9	Details		Case Management	Means Tested Services	Apply guidelines for means-base	Shared		
10	Weighting System		Eligibility	Eligibility Determination	Eligibility qualification interview	Shared		
11	USAGE AND CAP		Financial	Obligations Management	Obligation creation and mainte	Shared		
12	All System Usage		Financial	Payment Processing	Receipt and processing of paym	Shared		
13	Recipient Counts		Financial	Deposit Processing	Create and reconcile bank depos	Shared		
14	Shared Usage LOE		Intake	Customer Info Inq	Customer information inquiry	Shared		
15	Cost Allocation Plan		Intake	Customer Info Maint	Customer information changes a	Shared		
16	Child Welfare CAP		Intake	Financial Affidavit	Customer financial and payment	Shared		
17	OPTIONAL		Interfaces	INT1	Interface legacy system 1 for Me	Direct		
18	Program Summary		Interfaces	INT2	Interfaces legacy system 2	Shared		
19	Format All System Usage		Interfaces	INT3	Interfaces legacy system 3	Shared		
20	Format Shared Usage		Interfaces	INT4	Interface legacy system 4 for FN	Direct		
21	Help Menu		Interfaces	INT5	Interface external system 5 for C	Direct		
22			Interfaces	INT6	Interface external system 6 for T	Direct		
23			Interfaces	INT7	Interface external system 7 for C	Direct		
24			Reports	Management	System and performance data fo	Shared		
25			Reports	Staff	Summary information for staff	Shared		
26			Integration Support	Demographics	Client information accessible acr	Shared		
27			Integration Support	Eligibility	Client eligibility information acc	Shared		
28			Integration Support	Medical	Client medical information acces	Shared		
29			Integration Support	Employment	Client employment information a	Shared		
30			Integration Support	Insurance	Client insurance information acc	Shared		
31			Integration Support	Education	Client education information acc	Shared		
32			Security Management	Security Data	Security and access data	Shared		

Functional and Sub module names will be copied to the Details Worksheet

Figure 16 Sub_Modules Worksheet After Entry of Sub_Modules

1. **Worksheet Data.** The worksheet provides the second level of detail in the allocation structure. You can expand the Functional Modules copied from the Functional Modules Worksheet to add one or more Sub_Modules, inserting rows as necessary. The worksheet documents each sub-module name, description, and the allocation type (Direct or Shared) from the dropdown list. The worksheet provides optional fields for entering budgeted or actual costs for each sub-module. Data fields include:

- Functional Module -- copied from Functional Modules spreadsheet. Insert additional rows to break out the Functional Module into multiple Sub_Modules. Copy or enter the Functional Module name to each new Sub_Module row.
- Sub Module -- enter descriptive name for each sub-module.
- Description -- enter description for each sub-module.
- Allocation Type -- dropdown list. Select Direct or Shared allocation type from the dropdown list for each Sub_Module. Allocation type is used in CAM-TOOL automated calculations on the Shared Usage LOE worksheet to distinguish sub-modules that are direct charges to one benefiting program, from those allocated to two or more benefiting programs.

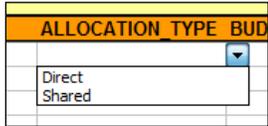


Figure 17 Allocation Type Dropdown List

- Budgeted Costs -- document the estimated cost for each sub-module (optional).
- Actual Cost -- for future updates to your Cost Allocation Plan, you may add the actual costs for each sub-module (optional).

2. Command Button.

Copy to the Details Worksheet command button. This button copies the Functional Module and Sub_Module names to the Details worksheet. Clicking this button opens a message box asking if you wish to preserve or delete existing data on the Details worksheet.

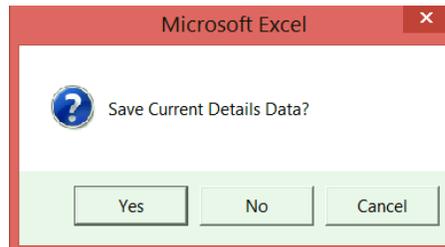


Figure 18 Save Details Data

Clicking **Yes** will save existing data on the Details worksheet. Sub_Module names will be transferred to the Details worksheet, making any necessary additions, changes, and deletions to Sub_Module names already on the Details worksheet.

Clicking **No** will replace all data on the Details Worksheet with the new Functional Module names.

Clicking **Cancel** closes the message box; you will remain in the Sub_Modules Worksheet.

3. Required Fields needed for the CAM-TOOL automated calculations.

- Functional Module names
- Sub_Module names
- Allocation Type

4. Data Copied To Worksheet. Functional Module names.

5. Data Copied From Worksheet.

- Functional Module names -- copied to Detail Worksheet.
- Sub_Module names -- copied to Detail Worksheet.
- Allocation Type -- "Direct" allocations copied to All System Usage.

6. Worksheet Calculations. None.

7. Constraints and Notes.

- You must NOT insert Columns between the defined columns for Functional Module, Sub_Module, Description, and Allocation Type. The CAM-TOOL looks for Allocation Type data in column "F" to use in later automated calculations and in developing the final Cost Allocation Plan.

You may insert as many rows as necessary, starting with Row 3, to document sub-modules.

The Details Worksheet

Click on the Details menu option to open the Details worksheet, as shown in Figure 19.

	A	B	C	D	E
	CAM-TOOL MENU SYSTEM	?	Details	Copy to the All System Usage Worksheet	
1	System Information		CAM-TEST Project		
2			FUNCTIONAL_MODULE	SUB_MODULE	DETAIL
3	Benefiting Programs		Alerts	Management	
4			Alerts	Staff	
5	Allocation Structure		Assessment	Eligibility Verification	
6			Assessment	Searches	
7	Functional Modules		Case Management	Participant Data	
8			Case Management	Child and Adult Services	
9	Sub_Modules		Case Management	Means Tested Services	
10			Eligibility	Eligibility Determination	
11	Weighting System		Financial	Obligations Management	
12			Financial	Payment Processing	
13	USAGE AND CAP		Financial	Deposit Processing	
14			Intake	Customer Info Inq	
15	All System Usage		Intake	Customer Info Maint	
16			Intake	Financial Affidavit	
17	Recipient Counts		Interfaces	INT1	
18			Interfaces	INT2	
19	Shared Usage LOE		Interfaces	INT3	
20			Interfaces	INT4	
21	Cost Allocation Plan		Interfaces	INT5	
22			Interfaces	INT6	
23	Child Welfare CAP		Interfaces	INT7	
24			Reports	Management	
25	OPTIONAL		Reports	Staff	
26	Program Summary		Integration Support	Demographics	
27			Integration Support	Eligibility	
28	Format All System Usage		Integration Support	Medical	
29			Integration Support	Employment	
30	Format Shared Usage		Integration Support	Insurance	
31			Integration Support	Education	
32	Help Menu		Security Management	Security Data	

Figure 19 Details Worksheet after Copying Names from Sub_Modules Worksheet

Overview. When you complete entry of the Sub_Modules, and click the command button to **Copy to the Details Worksheet**, this worksheet will display the functional module and sub-module names.

The worksheet documents the third level of the allocation structure. You will expand the Sub_Modules copied into the worksheet to add one or more Detail objects, inserting rows as necessary. The worksheet documents the name and description for each detail object or program. In Figure 20, below, the sub-module rows have been expanded to identify the detail objects in each. Note that the single Sub_Module for Management Alerts has been expanded into three detail-level alerts, Mgt Alert 1, Mgt Alert 2, and Mgt Alert 3.

After you complete entering data for the Detail level of allocation, clicking the **Copy to the All System Usage Worksheet** command button will copy the Functional Module names, Sub-Module names, and Detail names to the All System Usage worksheet.

	A	B	C	D	E	F
1	CAM-TOOL MENU	?	Details		Copy to the All System Usage Worksheet	
2			CAM-TEST Project			
3	SYSTEM		FUNCTIONAL MODULE	SUB MODULE	DETAIL	DESCRIPTION
4	System Information		Alerts	Management	Mgt Alert 1	Financial action pending
5	Benefiting Programs		Alerts	Management	Mgt Alert 2	Case Action pending
6	Allocation Structure		Alerts	Staff	Staff Alert 1	Ticklers
7	Functional Modules		Alerts	Staff	Staff Alert 2	Payment suspended
8	Sub_Modules		Alerts	Staff	Staff Alert 3	Case Action pending
9	Details		Assessment	Eligibility Verification	None	
10	Weighting System		Assessment	Searches	None	
11	USAGE AND CAP		Case Management	Participant Data	Person data	Client personal demographic data
12	All System Usage		Case Management	Participant Data	Education	Client education data
13	Recipient Counts		Case Management	Participant Data	Employment	Client employment data
14	Shared Usage LOE		Case Management	Participant Data	Grants	Client
15	Cost Allocation Plan		Case Management	Child and Adult Services	None	Provid
16	Child Welfare CAP		Case Management	Means Tested Services	Interactive Review	Struct
17	OPTIONAL		Case Management	Means Tested Services	Integration with XNDS	Integra
18	Program Summary		Case Management	Means Tested Services	Interface Controllers Office	Access
19	Format All System Usage		Case Management	Means Tested Services	Overpayments Analysis	Analys
20	Format Shared Usage		Case Management	Means Tested Services	Quality Control Reviews	Green
21	Help Menu		Eligibility	Eligibility Determination	None	
22			Financial	Obligations Management	None	
23			Financial	Payment Processing	None	
24			Financial	Deposit Processing	None	
25			Intake	Customer Info Inq	None	
26			Intake	Customer Info Maint	None	
27			Intake	Financial Affidavit	None	
28			Interfaces	INT1	None	
29			Interfaces	INT2	INT2 for TANF	Interface legacy sys 2 for TANF only
30			Interfaces	INT2	INT2 for CSE	Interface legacy sys 2 for CSE only
31			Interfaces	INT3	INT3 for TANF	Interface legacy system 3 for TANF
32			Interfaces	INT3	INT3 for CSE	Interface legacy system 3 for CSE
33			Interfaces	INT4	None	
34			Interfaces	INT5	None	
35			Interfaces	INT6	None	
36			Interfaces	INT7	None	
37			Reports	Management	Mgt Report 1	Mgt Report dashboard
38			Reports	Management	Mgt Report 2	Financial summary

Functional, Sub Module, and Detail names will be copied to All System Usage Worksheet

Figure 20 Completed Details Worksheet After Entry of Detail

1. **Worksheet Data.** Data fields include:

- Functional Module -- copied automatically from the Functional Modules spreadsheet. As you create each new Detail row, enter or copy the Functional Module name to the row.
- Sub_Module -- copied by the CAM-TOOL from Functional Modules spreadsheet. As you create each new Detail row, enter or copy the Sub_Module name to the row.
- Detail -- enter the name of each Detail level object or program. If there is no Detail level object for a Sub_Module, enter "none" for the Detail name.
- Description -- Enter a description for each Detail object or program.

2. **Command Button.**

Copy to the All System Usage Worksheet command button. This button copies the functional module, sub-module, and details names to the All System Usage worksheet for weight, base value, and program usage assignment. Clicking this button opens a message asking if you wish to preserve or delete existing data on the All Systems Usage worksheet.

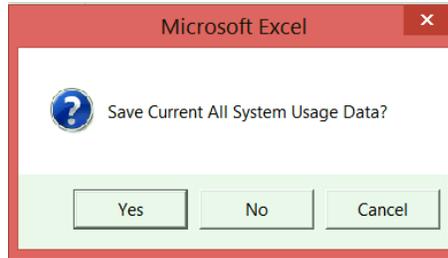


Figure 21 Save All System Usage Data

Clicking **Yes** will save existing data on the All Systems Usage worksheet. Detail module names will be transferred to the All Systems Usage worksheet, making any necessary additions, changes, and deletions to Details data already on the All Systems Usage worksheet.

Clicking **No** will replace all data on the All Systems Usage Worksheet with the new Details module names.

Clicking **Cancel** closes the message box; you will remain in the Details worksheet.

After data is copied to the All System Usage worksheet, a message box will appear asking if you need to complete Weighting System data.

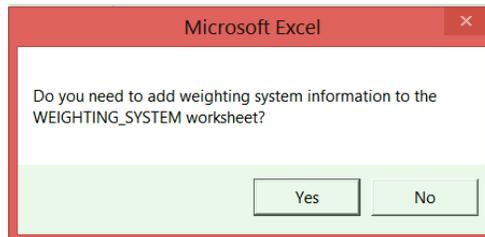


Figure 22 Add Weighting System Information

Clicking **Yes** your screen redirects to the Weighting System Worksheet so you can add weighting system narrative.

Clicking **No** displays the All System Usage worksheet.

3. Required Fields needed for the CAM-TOOL automated calculations.

- Functional Module names
- Sub_Module names (optional)
- Detail names (optional)

4. Data Copied To Worksheet.

- Functional Module
- Sub_Module

5. Data Copied From Worksheet.

- Functional Module names -- copied to All System Usage Worksheet, Recipient Counts Worksheet, and Shared Usage Worksheet

- Sub_Module names -- copied to All System Usage Worksheet, Recipient Counts Worksheet, and Shared Usage Worksheet.
- Detail names -- copied to All System Usage Worksheet, Recipient Counts Worksheet, and Shared Usage Worksheet.

6. Worksheet Calculations. None.

7. Constraints and Notes. None.

The Weighting System Worksheet

Click on the Weighting System menu option to open the Weighting System worksheet, as shown in Figure 23.

	A	B	C	D	E	F	G
	CAM-TOOL MENU SYSTEM	? Weighting System: Please describe any weighting system used					
1	System Information	CAM-TEST Project					
2		Describe the cost allocation weighting system used on this project					
3	Benefiting Programs						
4		The CAM-TEST project will use Development Hours as the Allocation Base.					
5	Allocation Structure	No additional weighting system will be applied.					
6							
7	Functional Modules						
8							
9	Sub_Modules						
10							
11	Details						
12							
13	Weighting System						
14							
15	USAGE AND CAP						
16	All System Usage						
17							
18	Recipient Counts						
19							

Figure 23 Weighting System Worksheet

Overview. This worksheet provides a place for you to describe a weighting system and provide further detail to the allocation structure identified on the Allocation Structure worksheet. If you are using development hours as your allocation methodology, simply say so on this worksheet, as shown in Figure 23 above. You will enter the specific hour estimates on the All System Usage worksheet.

Another allocation base, such as Lines of Code or user screens, that does not measure level of effort, requires use of a weighting system that captures the relative ease or difficulty of developing each system component. Use this worksheet to describe the design and intent of the weighting system and to identify the different types of weights in your weighting system.

You also need to specify and describe the range of weight values that the CAM-TOOL will use in calculating usage and fair share for each benefiting program. As noted earlier in the Allocation Structure section, you must develop a scale, such as 1-5, where 1 is low complexity/effort and 5 is high complexity/effort.

Document your weighting system in three steps:

- Use this worksheet to describe the design and intent of weighting system.
- List and describe the different types of weights in your weighting system.
- List and describe the range of specific weight values that you are going to use in calculating usage and a fair share for each benefiting program.

When your narrative is complete, you will enter the actual base value and the weight values from your weighting system to each unit of system functionality on the All System Usage Worksheet.

If you are using user screens for the allocation base, your weighting system may include a scale for effort/complexity such as the one shown in Figure 24, Weighting System Example

	A	B	C	D	E	F	G
	CAM-TOOL MENU SYSTEM	? Weighting System: Please describe any weighting system used					
1	System Information	CAM-TEST Project					
2		Describe the cost allocation weighting system used on this project					
3	Benefiting Programs						
4		The CAM-TEST project will use the number of user screens to be developed as the Allocation Base.					
5	Allocation Structure						
6		Complexity of each effort will be evaluated on a scale of 1 to 5, where 1 indicates the lowest level of complexity and 5 indicates the highest level of complexity					
7	Functional Modules						
8							
9	Sub_Modules	Scale (1 to 5)		Complexity of effort			
10		1		Low			
11	Details	2		Medium-Low			
12		3		Medium			
13	Weighting System	4		Medium-High			
14		5		High			
15	USAGE AND CAP						
16	All System Usage						
17							
18	Recipient Counts						
19							
20	Shared Usage LOE						

Figure 24 Weighting System Example

- Worksheet Data.** You must use this worksheet to describe the design and intent of your weighting system, including the weight type and the specific weights you will assign to each system component for automatic calculation of the usage and fair share for each benefiting program.
- Command Buttons.** None.
- Required Fields needed for the CAM-TOOL automated calculations.** None.
- Data Copied To Worksheet.** None.
- Data Copied From Worksheet.** None.
- Worksheet Calculations.** None.
- Constraints and Notes.**
The actual weights associated with the system functionality will be assigned on the All System Usage worksheet.

The All System Usage Worksheet

Click on the All System Usage menu option to open the All System Usage worksheet, as shown in Figure 25.

FUNCTIONAL_MODULE	SUB_MODULE	DETAIL	USAGE_TYPE	WEIGHT_TYPE	WEIGHT	BASE_VALUE	NUM_SMALL	NUM_LARGE

Figure 25 All System Usage Worksheet.

Overview. When completed, this worksheet displays the usage data for all system components. Worksheet data indicates small and large program system usage, shared usage, and the usage of sub-module modules or detail functionality that only benefit one program. The worksheet provides a complete view of system functionality usage.

Some of the information on this screen was copied from the Detail worksheet and from the Benefiting Programs worksheet. You add more data by selecting command buttons, and the CAM-TOOL displays the results of additional automated calculations. Finally, selecting command buttons allows you to copy data from this sheet to other sheets.

This chapter will provide an overview of the general actions and process, then discuss each of the actions in more detail.

1. Worksheet Data.

- **Functional Module** -- copied from the DETAILS worksheet.
- **Sub_Module** -- copied from the DETAILS worksheet.
- **Detail** -- copied from the DETAILS worksheet.
- **Usage Type** – automatic calculation by **Tally Usage by Program Size** command button.
- **Weight Type and Weight** – data entered through the command button **Enter Weights or Base Values**. When you are using a Weighting System, you enter the weight value and the type of weight you have assigned to each specific system component. The weight type is the descriptive label of the weight (Source Lines of

Code, Function Points, user screens, etc.); the weight is the scale value assigned to this specific system component (1 for low effort, 5 for high effort).

- **Base Value** – data entered through the command button **Enter Weights or Base Values**. When your allocation base is a measurable level of effort, such as development hours, you enter a measurable value for each specific system component.
- **Num Small and Num Large** -- automated calculation by the command button **Tally Usage by Program Size**. Tally of the number of small programs and the number of large programs using specific system components.
- **Program Abbreviation columns** – data entered through the command button **Enter Usage=X**. (Column headers, i.e., FS, TANF, copied from the Benefiting Programs worksheet.

2. Data Copied To Worksheet.

- Functional Module'
- Sub Module
- Detail
- Program Abbreviations
- Usage Type – of "Direct."

3. Worksheet Calculations.

Three command buttons allow you to add or modify usage information about each system component copied from the Detail worksheet. (Refer to Figure 25.)

- **Enter Weights or Base Values** command button. Assign or modify a base value and a weighting value to each system component in accordance with your allocation base and your weighting system.
- **Enter Usage =X** command button. Identify the programs that use each component.
- **Tally Usage by Program Size** command button automatically assesses the Xs you entered for program usage, and provides results in three columns:
 - NUM_SMALL (total of small programs using the component),
 - NUM_LARGE (total of large programs using the component) and
 - USAGE_TYPE (whether the component is Shared by more than one program, or has Direct use by only one program).

Note: See Section 5 of this chapter, **Command Buttons for on-worksheet calculation**, for more detailed information on these command buttons, including specific data fields and actions.

Figure 26 below shows the All System Usage worksheet after the worksheet calculations have been completed. Please note that the "Weight Type" and "Weight" columns are empty because this example uses development hours as the Base Value to identify the level of effort, and therefore, no additional weighting is necessary.

CAM-TOOL MENU SYSTEM		All System Usage		Enter Weights or Base Values	Enter Usage = "X"	Tally Usage by Program Size	Copy for System Recipient Counts	Create Program Base Summary (All)	Format All System Usage (Copy)						
System Information	CAM-TEST Project														
	FUNCTIONAL	MODULE	SUB_MODULE	DETAIL	USAGE_TYPE	WEIGHT_TYPE	WEIGHT	BASE_VALUE	NUM_SMALL	NUM_LARGE	SNAP	TANF	MED	CSE	Foster Care (IV-E)
Benefiting Programs	Alerts	Management		Mgt Alert 1	Shared		20		1	3	X	X	X		
	Alerts	Management		Mgt Alert 2	Shared		25		2	2	X	X	X		
Allocation Structure	Alerts	Management		Mgt Alert 3	Shared		10		1	1	X				
	Alerts	Staff		Staff Alert 1	Shared		5		2	2	X	X			
Functional Modules	Alerts	Staff		Staff Alert 2	Shared		5		0	3	X	X	X		
	Alerts	Staff		Staff Alert 3	Shared		12		1	4	X	X	X	X	
Sub_Modules	Assessment			Eligibility Verification	None		150		3	3	X	X	X		
	Assessment			Searches	None		125		3	3	X	X	X		
Details	Case Management			Participant Data	Shared		100		7	4	X	X	X	X	X
	Case Management			Participant Data	Shared		100		6	1				X	X
Weighting System	Case Management			Participant Data	Shared		100		3	3	X	X			
	Case Management			Grants	Shared		75		5	4	X	X	X	X	X
USAGE AND CAP	Case Management			Child and Adult Services	None		120		3	3	X	X	X		X
All System Usage	Case Management			Means Tested Services	Shared		100		3	3	X	X	X		X
	Case Management			Means Tested Services	Shared		100		3	3	X	X	X		X
Recipient Counts	Case Management			Integration with XND5	Shared		100		3	3	X	X	X		X
	Case Management			Interface Controllers Office	Shared		75		4	3	X	X	X		X
Shared Usage LOE	Case Management			Overpayments Analysis	Shared		120		4	3	X	X	X		X
	Case Management			Quality Control Reviews	Shared		200		4	3	X	X	X		X
Cost Allocation Plan	Eligibility			Eligibility Determination	None		12		3	3	X	X	X		
	Financial			Obligations Management	None		275		4	4	X	X	X	X	X
Child Welfare CAP	Financial			Payment Processing	None		200		5	4	X	X	X	X	X
	Financial			Deposit Processing	None		200		5	4	X	X	X	X	X
OPTIONAL	Intake			Customer Info Inq	None		100		7	4	X	X	X	X	X
	Intake			Customer Info Maint	None		100		7	4	X	X	X	X	X
Program Summary	Intake			Financial Affidavit	None		100		4	4	X	X	X	X	X
Format All System Usage	Interfaces			INT1	None		50		0	1			X		
	Interfaces			INT2	Direct		50		0	1		X			
Format Shared Usage	Interfaces			INT2 for TANF	Direct		50		0	1				X	
	Interfaces			INT2 for CSE	Direct		50		0	1					X
Help Menu	Interfaces			INT3	Direct		50		0	1		X			
	Interfaces			INT3 for TANF	Direct		50		0	1					

Figure 26 All System Usage Worksheet with Data.

4. Data Copied From Worksheet.

After usage calculations are complete, three command buttons allow you to copy data to other worksheets. (Refer to Figure 26.)

- **Copy for System Recipient Counts** command button copies data to create the Recipient Counts Worksheet.
- **Create Program Base Summary (All)** command button copies data to create the Base Summary worksheet for your reference and analysis.
- **Format All System Usage (Copy)** command button copies all worksheet data to the Format All System Usage worksheet where you can format or manipulate the data further.

Note: See Section 6 of this chapter, **Command Buttons to Copy Data From Worksheet**, for more detailed information on these command buttons, including specific data fields and actions.

5. Command Buttons for on-worksheet calculation.

There are three command buttons for on-worksheet calculations (**Enter Weights or Base Values**, **Enter Usage = "X"**, and **Tally System Usage**). Their operations are detailed below.

- **Enter Weights or Base Values** command button.

Use this command button to enter or modify a base value or a weight type and weight for specific system components. The button opens the "Enter Weights or Base Values" userform listing the system components shown on the All System Usage worksheet.

Enter Weights or Base Values

Select Weights or Base Value: Base Values Total Selected Items: 2

Please Select Items:

Alerts	Management	Mgt Alert 1	
Alerts	Management	Mgt Alert 2	
Alerts	Management	Mgt Alert 3	
Alerts	Staff	Staff Alert 1	
Alerts	Staff	Staff Alert 2	
Alerts	Staff	Staff Alert 3	
Assessment	Eligibility Verification	None	
Assessment	Searches	None	
Case Management	Participant Data	Person data	
Case Management	Participant Data	Education	
Case Management	Participant Data	Employment	
Case Management	Participant Data	Grants	
Case Management	Child and Adult Services	None	
Case Management	Means Tested Services	Interactive Review	
Case Management	Means Tested Services	Integration with XNDS	
Case Management	Means Tested Services	Interface Controllers Offi	
Case Management	Means Tested Services	Overpayments Analysis	
Case Management	Means Tested Services	Quality Control Reviews	
Eligibility	Eligibility Determination	None	
Financial	Obligations Management	None	
Financial	Payment Processing	None	
Financial	Deposit Processing	None	
Intake	Customer Info Inq	None	
Intake	Customer Info Maint	None	
Intake	Financial Affidavit	None	
Interfaces	INT1	None	Direct
Interfaces	INT2	INT2 for TANF	
Interfaces	INT2	INT2 for CSE	
Interfaces	INT3	INT3 for TANF	
Interfaces	INT3	INT3 for CSE	
Interfaces	INT4	None	Direct
Interfaces	INT5	None	Direct
Interfaces	INT6	None	Direct

Select All Clear Selections Enter Value: 8 Insert Data

Weight Type: Delete Value(s) for Selected Items

Figure 27 Enter Weights or Base Values Userform.

In Figure 27 above, Base values have been highlighted for action. Two Management Alerts have been selected and a base value of 8 has been entered. If the allocation base is hours, then “8” represents eight hours of development effort.

- **Select Weights or Base Value dropdown** –Open this dropdown list to choose whether you are adding/changing Base Values, or Weight Types and Weights, for all system components. You must use the same kinds of measures for all system components, i.e., all Base Values, or all Weight Types and Weights.

Enter Weights or Base Values

Select Weights or Base Value: Base Values Select an Entry Type: Weights and Types

Base Values

Figure 28 Weights or Base Values Dropdown.

Select Base Values to activate the Enter Value box for entry of a base value for each system component.

Select Weights and Types to activate both entry boxes at the bottom of the userform for entry of the Weight Type and the weighted scale Value for each component.

- **Total Selected Items display** -- displays the number of system components currently highlighted.

- **Click to highlight component(s)** -- Select each of the system components to add or change by clicking anywhere on a component row. Click to highlight and select, click again to de-select and remove the highlight. Continue selecting all of the components for this action.
- **Select All button** -- use to highlight all system components on the list.
- **Clear Selections button** -- use to remove all selection highlights from the system components list.
- **Weight Type entry box** – activated only when "Weights and Types" is selected in the dropdown box for Select Weights or Base Values. Enter the type of weight to be assigned to the components you have highlighted.
- **Enter Value entry box**-- enter the specific value to be assigned to the components you have highlighted. If you selected Base Values in the **Select Weights or Base Value** dropdown, the number you enter will be copied to the Base Value column on the worksheet. If you selected Weights and Types from the dropdown, the number you enter will be copied to the Weight column and used as a weighted scale value.
- **Insert Data button** – This button will assign to each highlighted system component the data you entered for Value and/or Weight Type, and copy the results to the All System Usage worksheet. A message box will request confirmation.

Clicking **Yes** copies selected value data to the All System Usage worksheet.

Clicking **No** closes the message box; you will remain in the Enter Weights and Base Values userform.

- **Delete Value(s) for Selected Items button** – Deletes data from the All System Usage worksheet. This button will delete value data for each highlighted system component from the All System Usage worksheet. When you click this button, a message box will request confirmation:

Clicking **Yes** deletes selected value data from the All System Usage worksheet.

Clicking **No** closes the message box; you will remain in the Enter Weights and Base Values userform.

- **Enter Usage ="X" command button.**

Use this command button to assign or update the usage indicator (X) that identifies which benefiting programs use a system component. The button opens the "Enter Usage By Program" userform listing all of the system components shown on the All System Usage worksheet.

Component Name	Category	Sub-Category	Status
Alerts	Management	Mgt Alert 1	Shared
Alerts	Management	Mgt Alert 2	Shared
Alerts	Management	Mgt Alert 3	Shared
Alerts	Staff	Staff Alert 1	Shared
Alerts	Staff	Staff Alert 2	Shared
Alerts	Staff	Staff Alert 3	Shared
Assessment	Eligibility Verification	None	Shared
Assessment	Searches	None	Shared
Case Management	Participant Data	Person data	Shared
Case Management	Participant Data	Education	Shared
Case Management	Participant Data	Employment	Shared
Case Management	Participant Data	Grants	Shared
Case Management	Child and Adult Services	None	Shared
Case Management	Means Tested Services	Interactive Review	Shared
Case Management	Means Tested Services	Integration with XNDS	Shared
Case Management	Means Tested Services	Interface Controllers Office	Shared
Case Management	Means Tested Services	Overpayments Analysis	Shared
Case Management	Means Tested Services	Quality Control Reviews	Shared
Eligibility	Eligibility Determination	None	Shared
Financial	Obligations Management	None	Shared
Financial	Payment Processing	None	Shared
Financial	Deposit Processing	None	Shared
Intake	Customer Info Inq	None	Shared
Intake	Customer Info Maint	None	Shared
Intake	Financial Affidavit	None	Shared
Interfaces	INT1	None	Direct
Interfaces	INT2	INT2 for TANF	Direct
Interfaces	INT2	INT2 for CSE	Direct
Interfaces	INT3	INT3 for TANF	Direct
Interfaces	INT3	INT3 for CSE	Direct
Interfaces	INT4	None	Direct

Figure 29 Enter Usage by Program Userform

- **Benefiting Program dropdown.** This dropdown at upper left of the userform lists each Benefiting Program abbreviation on the All System Usage worksheet. Select the Benefiting Program to assign or update usage of specific system components.
- **Total Selected Items display.** Total of system components currently highlighted for action.
- **Highlight Items Where Selected Program Usage = X button.** Clicking this button opens a confirmation box asking whether you wish to display current program usage Xs.

Clicking **Yes** highlights all system components currently identified as intended for use by this benefiting program.

Clicking **No** is not recommended. "No" clears any previously-designated usage highlights for the benefiting program. Use this function only when you wish to re-enter all usage for the selected benefiting program. (Note: you may also clear usage highlights by using the **Clear Selections** button.)

- **Select Items area--** Click anywhere on a system component line to toggle the highlight on or off for that component. Add or remove the highlights for components that the selected Benefiting Program will use.
- **Select All button.** This button highlights all of the system components listed.

- **Clear Selections button.** This button removes all selection highlights from the system components list.
- **Update Usage = X button.** This button will update data on the All Systems Usage worksheet to display an X for each system component you have highlighted for the selected benefiting program.

When you click this button, a message box will request confirmation: "Only the selected items will have usage = "X" assigned for this program. Are you sure that you want to update usage for this program?"

Clicking **Yes** updates the usage "X" indicator for each highlighted component on the All System Usage worksheet.

Clicking **No** closes the message box without updating data on the All System Usage worksheet.

- **Tally Usage by Program Size command button.**

This command button causes the CAM-TOOL to take three actions:

(1) Calculate the number of small programs and the number of large programs indicated to use each system component. Results display in the Num Small and Num Large columns for each system component.

(2) Calculate the total number of programs indicated to use each system component. Results display in the Totals column to the right of benefiting program columns.

(3) Label each system component as "Direct" (used by only one benefiting program) or "Shared" (used by two or more benefiting programs). Results display in the Usage Type column for each system component.

These CAM-TOOL calculations are based on the number of usage="X" assignments in the benefiting program columns and the Program Size indicator (e.g., Large or Small) on the Benefiting Program worksheet (see Figure 25, Program Size Calculations).

6. **Command Buttons to Copy Data From Worksheet.** There are three command buttons to copy data from the worksheet (**Copy for Recipient Counts**, **Create Program Base Summary - All**, and **Format All System Usage - Copy**). Their operations are detailed below.

- **Copy for System Recipient Counts** command button.

This button copies information from this worksheet to the Recipient Counts worksheet. Clicking the button displays a confirming message box, asking "Have you entered all base usage assignments, indicated by an "X", for all Benefiting Programs?"

Clicking **Yes** starts the copy action, and opens the Recipient Counts Worksheet.

Clicking **No** closes the message box; you will remain in the All System Usage Worksheet.

Copied data includes Functional Module, Sub_Module, Detail, Usage Type, Weight Type, Weight, Base Value, Num Small, Num Large, and Benefiting Program columns.

- **Create Program Base Summary (All).**

This button is optional to the basic computations of the CAM-TOOL. The button creates a summary of usage by benefiting program on the Program Summary worksheet. The optional summary is provided for your reference and analysis.

As an example, one benefiting program may use 45 of 100 system functions, and a second benefiting program may use 30 of 100 system functions. This button will create a separate list of the functions used by each program (whether usage is direct or shared), and calculate the total number of functions used. See the later chapter on Program Summary Worksheet for additional information on the worksheet.

Clicking this button opens a message box warning "All information in the Program Base Summary worksheet will be DELETED. Are you sure that you want to create a program base summary for all usage?"

Clicking **Yes** starts the copy action, and opens the Program Summary Worksheet.

Clicking **No** closes the message box; you will remain in the All System Usage Worksheet.

Copied data: Functional Module, Sub-Module, Detail, Usage Type, and Base Value data.

Please note: This button differs from the **Create Program Summary (Shared)** button on the Shared System Usage LOE worksheet in the amount of data copied. See the later chapter on Program Summary Worksheet for additional information.

- **Format All System Usage (Copy).**

This button is optional to the basic computations of the CAM-TOOL. Clicking this button copies all data on this worksheet to the Format All System Usage worksheet where you may perform further data calculations and analysis. Copied data includes all of the data visible on the worksheet.

7. Required Fields. For each benefiting program, you must enter data for base values and usage.

- Functional Module
- Sub_Module
- Detail
- Program Abbrev
- Enter Usage = Xs
- Usage Type (calculation based on number of Usage Xs)
- Weight Type (if used in this scenario)
- Weight (if used in this scenario)
- Base Value
- Num Small (calculated total of small programs)

- Num Large (calculated total of large programs)

8. Constraints and Notes.

The CAM-TOOL uses all of the information on this worksheet to complete calculations on the System Recipient Counts worksheet and the Shared Usage LOE worksheets. Therefore, all columns must remain in their current positions. Do NOT add columns or rows to the All System Usage Worksheet.

Clicking **Yes** starts the action to copy recipient counts from the Benefiting Programs worksheet, replacing each "X" with the actual recipient count for that program.

Clicking **No** closes the message box; you will remain in the System Recipient Counts Worksheet.

In Figure 31 below, each cell with usage="X" has been assigned the recipient counts that you entered on the Benefiting Programs worksheet.

	A	B	C	D	E	F	G	H	I	J	K	L	M
	CAM-TOOL MENU SYSTEM	?	Recipient Counts		Assign BENEFITING PROGRAMS Worksheet Recipient Counts	Modify Recipient Counts by Program	Calculate Shared Usage Level of Effort (LOE)						
1	System Information		CAM-TEST Project										
2			FUNCTIONAL_MODULE	SUB_MODULE	DETAIL	USAGE_TYPE	WEIGHT_TYPE	WEIGHT	BASE_VALUE	NUM_SMALL	NUM_LARGE	SNAP	TANF
3	Benefiting Programs		Alerts	Management	Mgt Alert 1	Shared		20	1	3		500000	465000
4			Alerts	Management	Mgt Alert 2	Shared		25	2	2		500000	
5	Allocation Structure		Alerts	Management	Mgt Alert 3	Shared		10	1	1		500000	
6	Functional Modules		Alerts	Staff	Staff Alert 1	Shared		5	2	2		500000	465000
7			Alerts	Staff	Staff Alert 2	Shared		5	0	3		500000	465000
8	Sub_Modules		Alerts	Staff	Staff Alert 3	Shared		12	1	4		500000	465000
9			Assessment	Eligibility Verification	None	Shared		150	3	3		500000	465000
10	Details		Assessment	Searches	None	Shared		125	3	3		500000	465000
11			Case Management	Participant Data	Person data	Shared		100	7	4		500000	465000
12	Weighting System		Case Management	Participant Data	Education	Shared		100	6	1			
13			Case Management	Participant Data	Employment	Shared		100	3	3		500000	465000
14	USAGE AND CAP		Case Management	Participant Data	Grants	Shared		75	5	4		500000	465000
15	All System Usage		Case Management	Child and Adult Services	None	Shared		120	3	3		500000	465000
16			Case Management	Means Tested Services	Interactive Review	Shared		100	3	3		500000	465000
17	Recipient Counts		Case Management	Means Tested Services	Integration with XNDS	Shared		100	3	3		500000	465000
18			Case Management	Means Tested Services	Interface Controllers Office	Shared		75	4	3		500000	465000
19	Shared Usage LOE		Case Management	Means Tested Services	Overpayments Analysis	Shared		120	4	3		500000	465000
20			Case Management	Means Tested Services	Quality Control Reviews	Shared		200	4	3		500000	465000
21	Cost Allocation Plan		Eligibility	Eligibility Determination	None	Shared		12	3	3		500000	465000
22	Child Welfare CAP		Financial	Obligations Management	None	Shared		275	4	4		500000	465000
23			Financial	Payment Processing	None	Shared		200	5	4		500000	465000
24	OPTIONAL		Financial	Deposit Processing	None	Shared		200	5	4		500000	465000
25	Program Summary		Intake	Customer Info Inq	None	Shared		100	7	4		500000	465000
26			Intake	Customer Info Maint	None	Shared		100	7	4		500000	465000
27	Format All System Usage		Intake	Financial Affidavit	None	Shared		100	4	4		500000	465000
28			Interfaces	INT1	None	Direct		50	0	1			
29	Format Shared Usage		Interfaces	INT2	INT2 for TANF	Direct		50	0	1			465000
30			Interfaces	INT2	INT2 for CSE	Direct		50	0	1			
31	Help Menu		Interfaces	INT3	INT3 for TANF	Direct		50	0	1			465000

Figure 31 Recipient Counts Worksheet – Assign Recipient Counts

- **Modify Recipient Counts by Program** command button.

This command button modifies recipient counts for selected system components.

NOTE: In most cases, modifying recipient counts at this level of detail will have only a small impact on the cost allocation “fair share” for small and large programs. The function is included for the rare instances in which it would be cost effective to capture costs in such detail.

Click this button to modify selected recipient counts when you need to capture the specific number of program recipients that would actually benefit from a particular system component. For example, MED (e.g., Medicare) may have a total recipient count of 500,000 but you wish to show that only 225,000 of the program recipients would get beneficial use of certain system components. The benefiting programs involved in the cost allocation would need to determine and justify modified recipient counts by system component.

Clicking this button opens the “Modify Recipient Counts” userform shown in Figure 32.

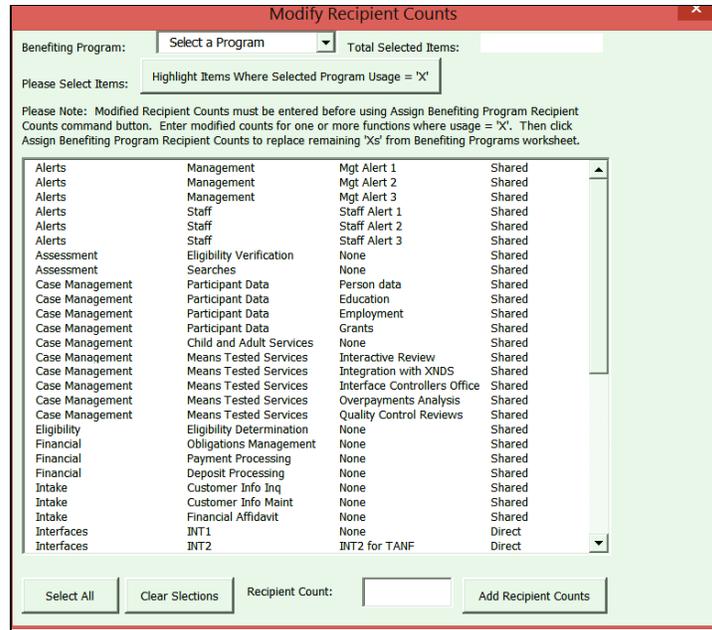


Figure 32 Modify Recipient Counts

- **Benefiting Program dropdown.** This dropdown lists Benefiting Program abbreviations. Select a Benefiting Program to manually assign recipient counts for one or more system components.
- **Total Selected Items display field.** Total of system components currently highlighted.
- **Highlight Items to Modify Counts button.** Clicking this button opens a confirmation box asking whether you wish to highlight the system components currently used by this benefiting program.

Clicking **Yes** will highlight all system components currently indicated for usage by the selected benefiting program.

Clicking **No** is not recommended. "No" closes the message box without highlighting current usage. Use this function only when you wish to reassign all recipient counts for the benefiting program manually.

- **Please Select Items.** Highlight the system components to be assigned a specific recipient count. Click anywhere on a program component row to toggle a highlight on or off.
- **Select All button.** Click to highlight all of the listed system components.
- **Clear Selections button.** Click to remove all highlights from system components.
- **Recipient Count entry.** Enter the specific recipient count to be assigned to the highlighted components.

- **Add Recipient Counts.** Click to update the recipient counts on the Shared Usage LOE worksheet and to recalculate the total number of recipients displayed in the Total column.
- **Calculate Shared Usage Level of Effort (LOE) command button.**

When recipient counts are complete, this command button will perform automated calculations to determine the final cost allocation “fair share” (i.e. percentages) for the benefiting programs, and display results on the Shared Usage LOE Worksheet.

Copied data: Functional Module, Sub_Module, Detail, Usage Type, Weight Type, Weight, Base Value, Num Small, Num Large, and Benefiting Program columns.

Clicking this button opens an Alert message box warning "All information in the Shared Usage LOE worksheet will be deleted! Any costs designated on SubModules Worksheet as Direct Cost will be removed from shared cost calculations. These will be referenced separately on the Cost Allocation Plan worksheet for your reference. Are you sure that you want to calculate shared usage LOE?"

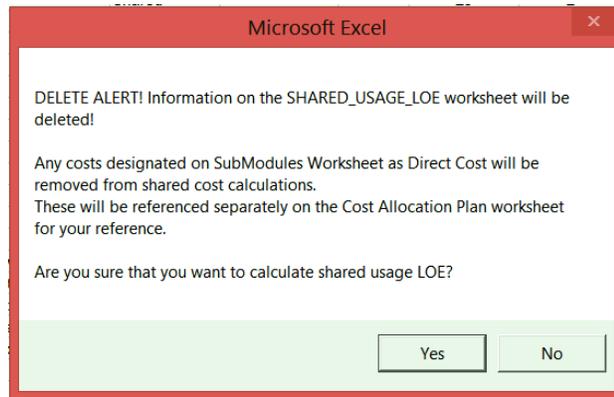


Figure 33 Direct Cost Submodule Alert

Clicking **Yes** starts the automated calculations detailed below, then displays the results on the Shared Usage LOE Worksheet.

Clicking **No** closes the message box; you will remain in the System Recipient Counts Worksheet.

3. Worksheet Calculations -- Shared Usage LOE

- **Overview.**
 - **Shared Usage.** Where a system component will be used only by large programs, the usage share for that system component will be divided equally among the large programs using that component.

Where a system component will be used only by small programs, recipient counts will be used to calculate the specific usage share for each benefiting small program.

Where a system component will be used by both small and large programs, the CAM-TOOL first calculates the share for each small program. After all small programs are processed, the remaining percent of usage is divided into equal shares for the large programs.

- **Components Identified for Direct Use.** For any system component with a usage designation of Direct, the CAM-TOOL makes a further assessment. The CAM-TOOL determines whether the assignment as Direct was made at the Detail module level, or at the Sub_Module level. If the Direct assignment was made at the Detail module level, the module is included in shared usage calculations. (This would be the case where one specific Report of several is used only by one program.)

If you designated the component as Direct at the SubModule level, on the Sub_Module Worksheet, you must handle and track the cost for development as a separate budget item outside the scope of the cost allocation plan. In order to account for all development effort, the CAM-TOOL will carry a direct-cost SubModule through all of the usage calculations. Then, at this point, as noted in the Warning message, the SubModule system component will be removed from shared cost allocation calculations and listed separately on the Cost Allocation Plan as “Excluded from Cost Allocation”.

NOTE: A function may have been incorrectly designated as Direct on the Sub_Module Worksheet. If so, you will need to correct the status on the SubModule Worksheet, and step through CAM-TOOL functions on the All System Usage worksheet and Recipient Counts worksheet. Once corrections have been made, re-run the Calculated Shared Usage Level of Effort (LOE) command button.

- **Shared Usage Data Operations.**

The steps below illustrate the origins of the data used in this calculation, and the operations that provide results on the Shared Usage LOE worksheet. This calculation example has been set up with the following assumptions:

- There are 5 benefiting programs: 3 are large programs (FS, MED, TANF) and 2 are small programs (Program 4 and Program 5).
- There are no programs with a “direct” benefit.
- The Allocation Base is development hours.

(1) CAM-TOOL Set-Up Steps and Dataflow

- **Preparation Step 1:** The CAM-TOOL data for this calculation originated on the Benefiting Programs Worksheet, which documented the benefiting programs (2 Small programs and 3 Large programs), and recipient counts for each program (see Figure 34).

PROGRAM_ABBREV	PROGRAM	PROGRAM_SIZE	RECIPIENT_COUNTS
FS	Food Stamps	Large	500,000
TANF	TANF	Large	465,000
MED	MEDICAID	Large	500,000
PROGRAM 4	PROGRAM 4	Small	750
PROGRAM 5	PROGRAM 5	Small	900

Figure 34 Preparation Step 1

- **Preparation Step 2:** CAM-TOOL data for this calculation includes the program usage assigned on the All System Usage worksheet, as shown below. (The base values and weights assigned on the All System Usage worksheet are addressed in Calculation Step 3 below.)

Note: Program 4 will benefit from Alert AL1, AL2, and AL4, as shown by the usage=Xs. The **Total** column shows that a total of 4 programs will benefit from Alert AL1, 4 programs will benefit from Alert AL2, and 4 programs will benefit from Alert AL4.

Functional Module	Sub_Module	Detail	Usage Type	Num Small	Num Large	FS	TANF	MED	Program 4	Program 5	Totals
Alerts	Management	AL1	Shared	1	3	X	X	X	X		4
Alerts	Management	AL2	Shared	2	2	X		X	X	X	4
Alerts	Management	AL3	Shared	1	1	X				X	2
Alerts	Staff	AL4	Shared	2	2	X	X		X	X	4
Alerts	Staff	AL5	Shared	0	3	X	X	X			3

Figure 35 Preparation Step 2

- **Preparation Step 3:** The CAM-TOOL dataflow continued to the Recipient Counts worksheet. Recipient counts from the Benefiting Programs worksheet were inserted to system functions used by each program, replacing each usage=X. Note in Figure 36 below that Program 4 now shows a recipient count of 750 for Alerts AL1, AL 2, and AL4.

Note: the **Total** column has recalculated to total the recipient counts: a total of 1,465,570 recipients will benefit from Alert AL1; 1,001,650 recipients will benefit from Alert AL2; and 966,650 recipients will benefit from Alert AL4.

Functional Module	Sub_Module	Detail	Num Small	Num Large	FS	TANF	MED	Program4	Program5	Total
Alerts	Management	AL1	1	3	500,000	465,000	500,000	750		1,465,750
Alerts	Management	AL2	2	2	500,000		500,000	750	900	1,001,650
Alerts	Management	AL3	1	1	500,000				900	500,900
Alerts	Staff	AL4	2	2	500,000	465,000		750	900	966,650
Alerts	Staff	AL5	0	3	500,000	465,000	500,000			1,465,000

Figure 36 Preparation Step 3

(2) Calculate Shared Usage Level of Effort (LOE) command button calculations.

- **Calculation Step 1:** It is at this point that calculations begin for the command button Calculate Shared Usage Level of Effort (LOE). Calculations are repeated for each row of system components.

The first step calculates recipient count percentages for each small program that uses a program component. This is determined by dividing the small program recipient counts by the total recipients that will benefit from the system component. For Alerts, the recipient count percentages are calculated as follows:

Preparation Step 3 above showed Program 4 has 750 of the total 1,465,570 recipients who will benefit from Alert AL1. Program 4 also has 750 of the total 1,001,650 recipients of Alert AL2; and has 750 of the 966,650 recipients of Alert AL4.

Preparation Step 3 also showed Program 5 has 900 of the total 1,001,650 recipients who will benefit from Alert AL2; has 900 of the total 500,900 recipients of Alert AL3; and has 900 of the 966,650 recipients of Alert AL4.

Recipients count percentages shown in Figure 37 were calculated as follows:

Program 4, Alert AL1: percent of recipients calculates as $750/1,465,750 = 0.0005$.
 Program 4, Alert AL 2: percent of recipients calculates as $750/1,001,650 = 0.0007$.
 Program 4, Alert AL 4: percent of recipients calculates as $750/966,650 = .0008$.

Program 5, Alert AL 2: percent of recipients calculates as $900/1,001,650 = 0.0009$.
 Program 5, Alert AL 3: percent of recipients calculates as $900/500,900 = 0.0018$.
 Program 5, Alert AL 4: percent of recipients calculates as $900/966,650 = .0009$.

Functional Module	Sub_Module	Detail	Num Small	Num Large	FS	TANF	MED	Program4	Program5	Total
Alerts	Management	AL1	1	3				0.0005		1
Alerts	Management	AL2	2	2				0.0007	0.0009	1
Alerts	Management	AL3	1	1					0.0018	1
Alerts	Staff	AL4	2	2				0.0008	0.0009	1
Alerts	Staff	AL5	0	3						1

Figure 37 Calculation Step 1

- **Calculation Step 2:** Second, the CAM-TOOL calculates the recipient count percentage for large programs.

The usage for small programs is subtracted from the maximum decimal total of 1.

For Alert AL2, there are 2 small programs under Num Small (Program 4 and Program 5).

Program 4's recipient count percentage is .0007, and Program 5's recipient count percentage is .0009. The calculation subtracts these shares from 1:
 $1 \text{ (i.e., 100\% of the Total)} - [.0007 + .0009] = .9984$.

After subtracting small programs, the remaining usage percentage is .9984.

The remaining usage percentage is divided equally among the number of large programs, as shown in Figure 38.

For Alert AL2 , there are 2 large programs under Num Large (FS and MED).

The 2 large programs divide the usage percentage of .9984 (i.e., .9984/2) or .4992.

Functional Module	Sub_Module	Detail	Num Small	Num Large	FS	TANF	MED	Program4	Program5	Total
Alerts	Management	AL1	1	3	.3332	.3332	.3332	0.0005		1
Alerts	Management	AL2	2	2	.4992		.4992	0.0007	0.0009	1
Alerts	Management	AL3	1	1	.9982				0.0018	1
Alerts	Staff	AL4	2	2	.49915	.49915		0.0008	0.0009	1
Alerts	Staff	AL5	0	3	.33333	.33333	.33333			1

Figure 38 Calculation Step 2

- **Calculation Step 3:** The third calculation determines the overall share of usage for each benefiting program. This calculation factors in Base Value and Weight data, and transforms the recipient count percentages into a program-level share of the development effort for each system component.

In our example, the allocation base for cost allocation is software development hours. The Base Values are the estimated development hours; there is no additional weighting system.

To illustrate the calculation, in Figure 39 we have added the Base Value and Weight columns next to the recipient count percentages they will act on.

Functional Module	Sub_Module	Detail	Base Value	Weight	FS	TANF	MED	Program4	Program5	Total
Alerts	Management	AL1	20		.3332	.3332	.3332	0.0005		1
Alerts	Management	AL2	25		.4992		.4992	0.0007	0.0009	1
Alerts	Management	AL3	10		.9982				0.0018	1
Alerts	Staff	AL4	5		.49915	.49915		0.0008	0.0009	1
Alerts	Staff	AL5	5		.33333	.33333	.33333			1

Figure 39 Calculation Step 3

The CAM-TOOL calculates “base value” and “weighting system” allocations differently.

Calculation for Base Values: The CAM-TOOL multiplies the base value for each system function by the benefiting program’s percentage of usage (base value ‘times’ recipient count percentage). We will step through the calculation for Alert AL2. In Figure 40 below, Alert AL2 has a base value of 25 (development hours).

As a large program, the FS usage percentage is .4992. Of the 25 development hours needed by AL2, the FS share should be:
 25 multiplied by .4992 = 12.48, highlighted in Figure 40 below.

As a large program, the MED usage percentage is .4992. Of the 25 development hours needed by AL2, the MED share should be:
 25 multiplied by .4992 = 12.48.

A small program, Program 4 recipient percentage is .0007. Of the 25 development hours needed by AL2, the Program 4 share should be:
 25 multiplied by .0007 = 0.0175.

A small program, Program 5 recipient percentage is .0009. Of the 25 development hours needed by AL2, the Program 5 share should be:
 25 multiplied by .0009 = 0.0225.

Functional Module	Sub_Module	Detail	Base Value	Weight	FS	TANF	MED	Program4	Program5	Total
Alerts	Management	AL1	20		6.664	6.664	6.664	0.01		20
Alerts	Management	AL2	25		12.48		12.48	0.0175	0.0225	25
Alerts	Management	AL3	10		9.982				0.018	10
Alerts	Staff	AL4	5		2.4955	2.4955		0.004	0.0045	5
Alerts	Staff	AL5	5		1.6665	1.6665	1.6665			5

Figure 40 Calculation Step 3 Base Values

NOTE: Calculation for Weight Values. Where a weighting system is used, the CAM-TOOL also factors the weight value into the calculation: multiplying base value 'times' weight 'times' recipient count percentage to calculate each program's usage share of every system component.

- **Calculation Step 4:** Finally, the command button inserts the new calculated data results into the Shared Usage LOE worksheet.

4. Required Fields needed for the CAM-TOOL automated calculations.

- Functional Module
- Sub_Module
- Detail
- Program Abbrev
- Usage Type (calculated from All System Usage worksheet)
- Weight Type (if used in this scenario)
- Weight (if used in this scenario)
- Base Value
- Num_Small (calculated from All System Usage worksheet)
- Num_Large (calculated from All System Usage worksheet)
- Usage (copied from All System Usage; replaced with Recipient Counts)

The Shared Usage LOE Worksheet

Click on the Shared Usage LOE menu option to open the Shared System Usage worksheet, as shown in Figure 41.

CAM-TOOL MENU SYSTEM														
? Shared Usage LOE (Level of Effort)														
CAM-TEST Project														
Create Cost Allocation Plan Summary														
Create Cost Allocation Plan Section														
Create Program Base Summary (Shared)														
Format Shared Usage LOE (Copy)														
System Information	FUNCTIONAL MODULE	SUB_MODULE	DETAIL	USAGE TYPE	WEIGHT TYPE	WEIGHT	BASE VALUE	NUM SMALL	NUM LARGE	SNAP	TANF	MED		
Benefiting Programs	Alerts	Management	Mgt Alert 1	Shared		20		1	3	6.663255444	6.663255444	6.663255		
	Alerts	Management	Mgt Alert 2	Shared		25		2	2	12.47940898		12.47940		
Allocation Structure	Alerts	Management	Mgt Alert 3	Shared		10		1	1	9.982032342				
Functional Modules	Alerts	Staff	Staff Alert 1	Shared		5		2	2	2.495732685	2.495732685			
	Alerts	Staff	Staff Alert 2	Shared		5		0	3	1.666666667	1.666666667	1.666666		
Sub Modules	Alerts	Staff	Staff Alert 3	Shared		12		1	4	2.998659983	2.998659983	2.998659		
Details	Assessment		Eligibility Verification	None		150		3	3	45.27893679	45.27893679	45.27893		
	Assessment		Searches	None		125		3	3	37.73244733	37.73244733	37.73244		
Weighting System	Case Management	Participant Data	Person data	Shared		100		7	4	22.22124148	22.22124148	22.22124		
	Case Management	Participant Data	Education	Shared		100		6	1					
USAGE AND GAP	Case Management	Participant Data	Employment	Shared		100		3	3	28.75593542	28.75593542			
All System Usage	Case Management	Participant Data	Grants	Shared		75		5	4	18.63112712	18.63112712	18.63112		
	Case Management	Child and Adult Services	None	Shared		120		3	3	39.72612026	39.72612026	39.72612		
Recipient Counts	Case Management	Means Tested Services	Interactive Review	Shared		100		3	3	33.08043174	33.08043174	33.08043		
Shared Usage LOE	Case Management	Means Tested Services	Integration with XNDS	Shared		100		3	3	88.10510022	88.10510022	88.10510		
Cost Allocation Plan	Case Management	Means Tested Services	Interface Controllers Office	Shared		75		4	3	24.79520682	24.79520682	24.79520		
Child Welfare CAP	Case Management	Means Tested Services	Overpayments Analysis	Shared		120		4	3	39.67233092	39.67233092	39.67233		
OPTIONAL	Case Management	Means Tested Services	Quality Control Reviews	Shared		200		4	3	66.1205153	66.1205153	66.12055		
Program Summary	Eligibility		Eligibility Determination	None		12		3	3	3.622314944	3.622314944	3.622314		
Format All System Usage	Financial		Obligations Management	None		275		4	4	65.49167534	65.49167534	65.49167		
Format Shared Usage	Financial		Payment Processing	None		200		5	4	47.61341876	47.61341876	47.61341		
Help Menu	Financial		Deposit Processing	None		200		5	4	47.61341876	47.61341876	47.61341		
	Intake		Customer Info Inq	None		100		7	4	22.22124148	22.22124148	22.22124		
	Intake		Customer Info Maint	None		100		7	4	22.22124148	22.22124148	22.22124		
	Intake		Financial Affidavit	None		100		4	4	23.1472968	23.1472968	23.14729		
	Interfaces	INT2	INT2 for TANF	Direct		50		0	1		50			
	Interfaces	INT2	INT2 for CSE	Direct		50		0	1					
	Interfaces	INT3	INT3 for TANF	Direct		50		0	1		50			
	Interfaces	INT3	INT3 for CSE	Direct		50		0	1					

Figure 41 Shared Usage LOE Worksheet.

Overview. At this point in the cost allocation process, the final shared usage level of effort values have been calculated, and the results have been copied onto this worksheet.

Four command buttons on the worksheet allow you to populate additional worksheets: **Cost Allocation Plan**, **Cost Allocation Plan Section**, **Program Base Plan Summary (Shared)** and **Format Shared Usage LOE (Copy)**.

Note: data copied from the worksheet is identified under each command button. Constraints are also identified as they apply to each command button.

1. Data Copied To Worksheet.

- Functional Module, Sub_Module, Detail, Usage Type, Weight Type, Weight, Base Value, Num Small, Num Large, Benefiting Programs abbreviations and calculated share of development effort are copied onto this worksheet from the Recipient Count Worksheet, by use of the command button **Calculate Shared Usage Level of Effort (LOE)**.

2. Worksheet Command Buttons.

- Create Cost Allocation Plan Summary** command button.
This button generates a cost allocation summary for all benefiting programs and displays the result on the Cost Allocation Plan worksheet. The Cost Allocation Summary lists the benefiting programs and the calculated share of usage for each program. Clicking the button initiates the calculations, and then opens the Cost Allocation Plan Worksheet to display results.

Calculation 1: In creating the Summary, the CAM-TOOL first adds up all of the shared usage level of effort values for each of the benefiting programs, as shown on the shaded Program Totals row in Figure 42 below. In the example, the total of FS

program usage is 33.288, the total for TANF is 10.826, for MED the total is 20.8105, for Program 4 the total is .0315, and for Program 5, the total is .045.

Calculation 2: The CAM-TOOL then determines a grand total for the shared usage elements. The grand total for the program totals is 65.

Calculation 3: Finally, the CAM-TOOL calculates the ratio of the grand total for each program.

FS program usage total of 33.288 represents 51 percent of the grand total, or .5121.
 TANF program usage total of 10.826 represents 16 percent of the grand total, or .1616.
 MED program usage total of 20.8105 represents 32 percent of the grand total, or .3202.
 Program 4 usage total of .0315 represents .05 percent of the grand total, or .0005.
 Program 5 usage total of .045 represents .07 percent of the grand total, or .0007.

The percent shares in decimal format are summed in the Total column to show that the final percentages add up to the "1," accounting accurately for the full grand total of 65.

Functional Module	Sub_Module	Detail	Base Value	Weight	FS	TANF	MED	Program4	Program5	Total
Alerts	Management	AL1	20		6.664	6.664	6.664	0.01		20
Alerts	Management	AL2	25		12.48		12.48	0.0175	0.0225	25
Alerts	Management	AL3	10		9.982				0.018	10
Alerts	Staff	AL4	5		2.4955	2.4955		0.004	0.0045	5
Alerts	Staff	AL5	5		1.6665	1.6665	1.6665			5
TOTALS:					33.288	10.826	20.8105	0.0315	0.045	65
Percent Share in decimal format:					0.5121	0.1666	0.3202	0.0005	0.0007	1.0000

Figure 42 Usage Totals for Cost Allocation

Calculation 4: The resulting percent share in decimal format is displayed on the Cost Allocation Plan Summary as each program's "fair share" of the allocation budget.

- **Create Cost Allocation Plan Section** command button.
 Clicking this button generates subset or section of cost-allocation for selected system components. This button performs the same calculations as the Create Cost Allocation Plan Summary button, but does so for a selected set of system components.

Clicking on this button opens the Create Cost Allocation Section userform listing all system components, as shown in Figure 43.

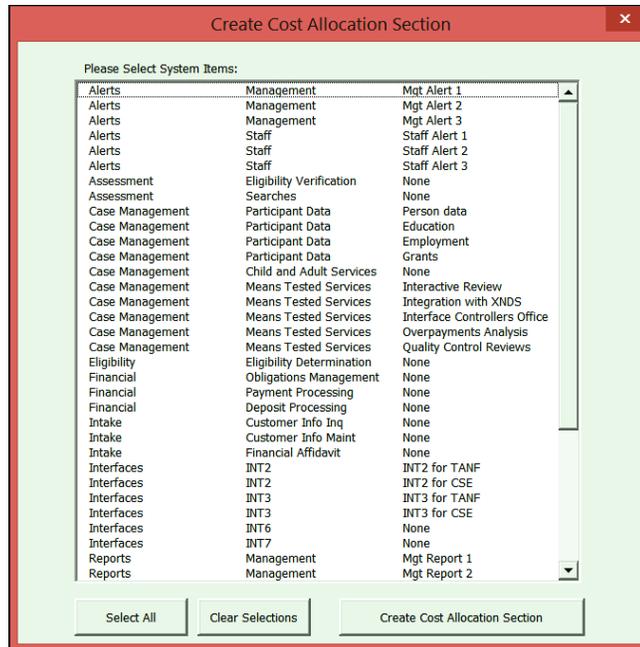


Figure 43 Create Cost Allocation Section

- **Please select system items.** Highlight one or more system functions to compose the "section" you wish to summarize.
- **Select All** button. Click to select all system components for summarization.
- **Clear Selections** button. Click to remove all highlights.
- **Create Cost Allocation Section** button. Click to open a confirming message box asking "Are you sure that you want to create a cost allocation section?"

Clicking **Yes** will open a naming message box (Enter Name of Cost Allocation Section).

Clicking **No** closes the message box; you will remain in the "Create Cost Allocation Section screen."

- **Enter Name of Cost Allocation Section** message box is shown in Figure 44 below. Enter a descriptive name for the cost allocation section / subset.

(Note: The Cost Allocation Plan worksheet will display any number of cost allocation plan sections that you wish to create. Use a naming convention that will allow you to distinguish the basis for each scenario.)

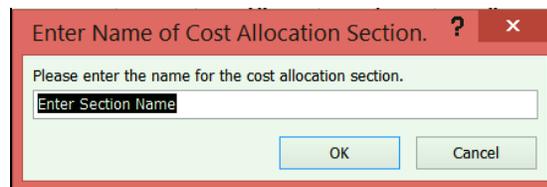


Figure 44 Create Cost Allocation Section Highlighted

Clicking **OK** will summarize the program shares for the highlighted items and copy the results to the Cost Allocation Plan worksheet.

Clicking **Cancel** closes the message box without naming the new Section.

NOTE: Creating a Cost Allocation Plan Section does not delete existing data on the Cost Allocation Plan Worksheet. Each time a Cost Allocation Plan Section is created, the new Section is appended below existing summaries on the Cost Allocation Plan worksheet. This allows you to create an overall summary, and to separately generate and display summaries of any subset combination of system functions. See the Cost Allocation Plan Worksheet for examples.

- **Create Program Base Summary (Shared)** command button

This button is optional to the basic computations of the CAM-TOOL. The button creates a summary of shared usage by benefiting program, and displays results on the Program Summary worksheet. The optional summary worksheet is provided for reference and for your use for further calculations, analysis, or formatting.

How it works: one benefiting program may share in the use 45 of 100 system components, and a second benefiting program may share in the use of 30 of 100 system components. This button will create two separate lists of shared system components on the Program Summary worksheet, one for each benefiting program.

Clicking this button opens a message box warning "All information in the Program Base Summary worksheet will be DELETED! Are you sure that you want to create a program base summary for shared usage?"

Click **Yes** to copy information to the Program Base Summary worksheet and open the worksheet.

Click **No** to close the message box; you will remain in the Shared System Usage worksheet.

Copied data includes, for each benefiting program, the total number of shared system components used; a list of each component's name, base value, and calculated final value.

Note: This button differs from the Create Program Summary (All) button on the All System Usage worksheet in the amount of data copied.

- **Format Shared Usage LOE (Copy)** command button.

This button creates an optional copy of all worksheet information onto the Format Shared Usage LOE worksheet. The optional worksheet is provided for reference and your use for further calculations, analysis, or formatting.

Clicking this button opens a message box warning "All information in the Format Shared Usage LOE worksheet will be DELETED! Are you sure that you want to create new summary for shared usage?"

Click **Yes** to copy information to the Format Shared Usage LOE worksheet and open the worksheet.

Click **No** to close the message box; you will remain in the Shared System Usage worksheet.

Copied data includes all data visible on the worksheet.

3. **Data Copied From Worksheet.** Data copied to Cost Allocation Plan Worksheet for includes Program Abbrev, and calculated values for program share of cost.
4. **Required Fields needed for the CAM-TOOL automated calculations.**
 - Functional Module
 - Sub_Module
 - Detail
 - Program Abbrev
 - Usage Type (calculated from Recipient Counts Worksheet)
 - Weight Type (if used in this scenario)
 - Weight (if used in this scenario)
 - Base Value
 - Num_Small (calculated from Recipient Counts Worksheet)
 - Num_Large (calculated from Recipient Counts Worksheet)
 - Usage (calculated from Recipient Counts Worksheet)

The Cost Allocation Plan Worksheet

Click on the Cost Allocation Plan menu option to open the Cost Allocation Plan worksheet, as shown in Figure 45.

	A	B	C	D	E	F	G	H
	CAM-TOOL MENU SYSTEM	? Cost Allocation Plan (All Benefiting Programs)			Go to Child Welfare CAP Worksheet		Delete CAP Section(s)	
1	System Information	CAM-TEST Project						
2								
3	Benefiting Programs	SUMMARY OF DIRECT MODULES EXCLUDED						
4	Allocation Structure	Functional Module	Sub Module					
5		Interfaces	INT1					
6		Interfaces	INT4					
7	Functional Modules	Interfaces	INT5					
8								
9	Sub Modules	SUMMARY OF ALL ALLOCATED FUNCTIONS			Enter Allocated Budget Amount:			15,000,000.00
10	Details	Federal/State Program	Program Share	Share Amount (\$)	Match Rate	Federal Share (\$)	FFP	State Share (\$)
11		SNAP	0.23933	3,589,950.00	0.5	1,794,975.00		1,794,975.00
12	Weighting System	TANF	0.27856	4,178,400.00	0.5	2,089,200.00		2,089,200.00
13		MED	0.22665	3,399,750.00	0.5	1,699,875.00		1,699,875.00
14	USAGE AND CAP	CSE	0.19694	2,954,100.00	0.66	1,949,706.00		1,004,394.00
15	All System Usage	Foster Care (IV-E)	0.00243	36,450.00	0.5	18,225.00		18,225.00
16		Foster Care (Non IV-E)	0.00149	22,350.00	0	0.00		22,350.00
17	Recipient Counts	Youth Transition	0.00022	3,300.00	0.5	1,650.00		1,650.00
18	Shared Usage LOE	State CPI	0.00023	3,450.00	0	0.00		3,450.00
19	Cost Allocation Plan	STATE 5	0.02188	328,200.00	0	0.00		328,200.00
20		STATE 6	0.03137	470,550.00	0	0.00		470,550.00
21	Child Welfare CAP	REFUGEE	0.0009	13,500.00	0	0.00		13,500.00
22	OPTIONAL	TOTALS	1	15,000,000.00		7,553,631.00		7,446,369.00
23	Program Summary	Alerts components			SECTION SUMMARY			Enter Allocated Budget Amount: 0.00
24	Format All System Usage	Federal/State Program	Program Share	Share Amount (\$)	Match Rate	Federal Share (\$)	FFP	State Share (\$)
25		SNAP	0.47124	0.00	0.5	0.00		0.00
26	Format Shared Usage	TANF	0.17954	0.00	0.5	0.00		0.00
27		MED	0.30919	0.00	0.5	0.00		0.00
28	Help Menu	CSE	0.03894	0.00	0.66	0.00		0.00
29		Foster Care (IV-E)	0	0.00	0.5	0.00		0.00
30		Foster Care (Non IV-E)	0	0.00	0	0.00		0.00
31		Youth Transition	0.00043	0.00	0.5	0.00		0.00
32		State CPI	0.00066	0.00	0	0.00		0.00
33		STATE 5	0	0.00	0	0.00		0.00
34		STATE 6	0	0.00	0	0.00		0.00
35		REFUGEE	0	0.00	0	0.00		0.00
36		TOTALS	1	0.00		0.00		0.00
37								

Figure 45 Cost Allocation Plan Worksheet

Overview. The Cost Allocation Plan Worksheet displays the overall Cost Allocation Plan for the project, and, optionally, the cost allocations for selected sections of system components. The worksheet calculates the usage share into budget allocation dollars whenever you enter or update a Budget Amount for the CAP Summary or any CAP Section.

Also optionally, if your SubModules worksheet identified one or more entire submodules as Direct, these will be listed in a section titled Summary of Direct Modules Excluded, for separate handling outside the scope of the allocated costs. Please note that this exclusion applies only to those Modules or SubModules that are to be charged directly in their entirety to one program (see note below). Figure 45 above identifies four submodules that were excluded by action of the **Calculate Shared Usage LOE** command button on the Recipient Counts worksheet.

NOTE: When a SubModule is identified as **Direct**, the cost and effort for its Detail-level components will be attributed to that same single program, **and will not be allocated across programs.**

When a SubModule is identified as **Shared**, the cost and effort for each of its Detail-level components will be assessed further, and **each will be allocated** to the specific program or programs that will utilize it.

For the remaining system components that were included in cost allocation calculations, Figure 45 displays the Summary of All Allocated Functions. The Summary identifies each benefiting program's share of the cost-allocated system components. The Summary is generated by the **Create Cost Allocation Plan Summary** command button on Shared Usage LOE worksheet. In Figure 45, the budget total of \$15,000,000 was hand-entered directly onto the worksheet, and may be updated at any time throughout the project

You may also refresh the Summary of All Allocated Functions as many times as needed.

*It is important to keep in mind: **the Allocated Budget Amount may not represent the total project budget.** The System Information Worksheet documents the amount of the Allocation Budget, and the Total Project Budget. When one or more SubModules have been identified as Direct cost charges on the SubModules Worksheet, their costs will be excluded from the Allocation Budget and must be represented separately in your overall project budget.*

In the worksheet above, the SNAP share of the allocated cost is \$1,794,975. However, SNAP may have additional costs in the overall project budget. If, for example, SNAP is direct charged \$850,000 for development of the SubModule INT1, then the SNAP share of the total project costs would be $\$1,794,975 + \$850,000 = \$2,644,975$.

After the CAM-TOOL has identified each program's share of the Allocation Budget, you must manually calculate the direct charges for development identified on the SubModules Worksheet. Your project budget should account for the aggregated total of the Allocation Budget and the Direct costs.

The Alerts Components Section Summary in Figure 45 provides the usage share for components selected through the **Create Cost Allocation Plan Section** command button on the Shared Usage LOE worksheet. You may generate any number of Section summaries.

You may also delete any or all of the summaries on this worksheet through the **Delete CAP Section(s)** command button.

1. Worksheet data

Each CAP Summary or Section provides a data entry field for the budget total (dollars) to be allocated to the project or scenario, a list of all benefiting programs, the program share of cost expressed as a percentage of usage, and columns for share of cost expressed in dollars, the match rate for each program, the Federal Share for each program (dollars), and the State Share for each program (dollars).

2. Data Copied To Worksheet.

- Federal / State Program. A list of each benefiting program for the project. It was copied to this worksheet from the Shared Usage LOE.
- Program Share of Cost. Benefiting Program share of cost expressed as a percentage of usage. Calculated by action of the command button **Create Cost Allocation Plan Summary** or **Create Cost Allocation Plan Section**.
- Match Rate. The rate of federal financial participation (FFP) for each program. It was copied to this worksheet by action of the command button **Create Cost Allocation Plan Summary** or **Create Cost Allocation Plan Section**.

3. Data Entered To Worksheet.

- Allocated Budget. Enter the total budget amount for the CAP Summary or a CAP Section. The total project budget should match the figure you entered on the System

Information worksheet. Totals for sections, or function subsets, must be calculated outside the CAM-TOOL and entered for each section or subset.

4. Worksheet Calculations.

When you enter an Allocated Budget Amount total in Column H, the CAM-TOOL calculates and inserts the following:

- Share Amount (\$). Share of program cost expressed in dollars (Budget Amount X Program Share of Cost)
- Federal Share (\$) (FFP). Federal Share for each program (Share Amount X Federal Match Rate).
- State Share (\$). State Share for each program (Share Amount -- Federal Share).

As shown in Figure 46 below, when an Allocated Budget Amount of \$15,000,000 is entered, the CAM-TOOL calculates the share amount in dollars. Using SNAP as an example, the SNAP program share percent of .23933 calculates to a dollar value of \$3,589,950 (i.e., \$15,000,000 X .23933 = \$3,589,950).

Using the match rates copied from Benefiting Programs worksheet, the CAM-TOOL calculates the Federal Share of Federal Financial Participation (FFP), and the State Share. In Figure 46, the SNAP match rate of 0.5 translates to a Federal Share of (\$3,589,950 X .5) or \$1,794,975 and a State Share of (\$3,589,950 -\$1,794,975) or \$1,794,975.

? Cost Allocation Plan (All Benefiting Programs)					
CAM-TEST Project		Go to Child Welfare CAP Worksheet		Delete CAP Section(s)	
SUMMARY OF ALL ALLOCATED FUNCTIONS			Enter Allocated Budget Amount: 15,000,000.00		
Federal/State Program	Program Share	Share Amount (\$)	Match Rate	Federal Share (\$) FFP	State Share (\$)
SNAP	0.23933	3,589,950.00	0.5	1,794,975.00	1,794,975.00
TANF	0.27856	4,178,400.00	0.5	2,089,200.00	2,089,200.00
MED	0.22665	3,399,750.00	0.5	1,699,875.00	1,699,875.00
CSE	0.19694	2,954,100.00	0.66	1,949,706.00	1,004,394.00
Foster Care (IV-E)	0.00243	36,450.00	0.5	18,225.00	18,225.00
Foster Care (Non IV-E)	0.00149	22,350.00	0	0.00	22,350.00
Youth Transition	0.00022	3,300.00	0.5	1,650.00	1,650.00
State CPI	0.00023	3,450.00	0	0.00	3,450.00
STATE 5	0.02188	328,200.00	0	0.00	328,200.00
STATE 6	0.03137	470,550.00	0	0.00	470,550.00
REFUGEE	0.0009	13,500.00	0	0.00	13,500.00
TOTALS	1	15,000,000.00		7,553,631.00	7,446,369.00

Figure 46 Cost Allocation Budget

This summary information may be useful as an exhibit table in a Cost Allocation Plan for submission to federal partners.

5. Command Buttons.

- **Go To Child Welfare CAP Worksheet** command button.
This command button opens the optional Child Welfare CAP Worksheet.
- **Delete CAP Section(s)** command button.
Clicking this button allows you to delete named sections from the Cost Allocation Plan worksheet.

Clicking on this button opens a “Delete CAP Section(s)” userform listing the sections named on the Cost Allocation Plan worksheet, as shown in Figure 47.

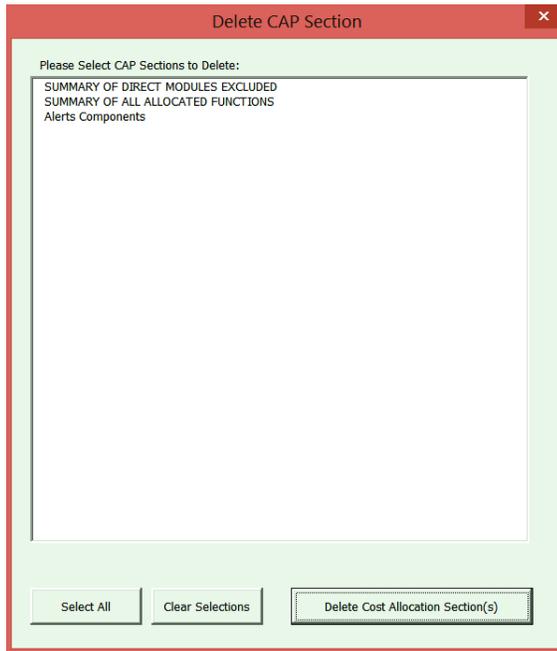


Figure 47 Delete CAP Section Userform

- **Please select CAP Sections to Delete.** Highlight one or more CAP Section names to flag for deletion.
- **Select All** button. Click to select all CAP Sections for deletion.
- **Clear Selections** button. Click to remove all highlights.
- **Delete Cost Allocation Section(s)** button. Click to open a confirming message box asking "Are you sure you want to delete a cost allocation section?"

Clicking **Yes** deletes the highlighted CAP sections from the Cost Allocation Plan worksheet.

Clicking **No** closes the message box; you will remain in the "Delete CAP Section screen."

6. Data Copied From Worksheet. None.

7. Required Fields needed for the CAM-TOOL automated calculations.

- Program Abbrev
- Program Share of Cost (%)
- Share Amount (calculated by the CAM-TOOL)
- Match Rate
- Allocated Budget / Section Amount
- Federal Share (\$) FFP (calculated by the CAM-TOOL)
- State Share (\$) (calculated by the CAM-TOOL)

The Child Welfare Cap Worksheet

Click on the Child Welfare CAP menu option to open the Cost Allocation Plan Child Welfare – Itemized Allocation worksheet, as shown in Figure 48. This worksheet can also be opened by clicking the **Go to Child Welfare CAP Worksheet** command button on the Cost Allocation Plan worksheet.

	A	B	C	D	E	F	G	H
	CAM-TOOL MENU SYSTEM	? Cost Allocation Plan (Child Welfare - Itemized Allocation)		Go to Cost Allocation Plan Worksheet				
1	System Information	CAM-TOOL Simple Data Example						
2								
3	Benefiting Programs	Document the breakdown by Child Welfare cost center, and the overall resulting single figure to be used by CAM-TOOL in high level calculations at the program level.						
4								
5	Allocation Structure							
6								
7	Functional Modules							
8								
9	Sub_Modules							
10								
11	Details							
12								
13	Weighting System							
14								
15	USAGE AND CAP							
16	All System Usage							
17								
18	Recipient Counts							
19								
20	Shared Usage LOE							
21								
22	Cost Allocation Plan							
23								
24	Child Welfare CAP							
25	OPTIONAL							
26	Program Summary							
27								
28	Format All System Usage							
29								
30	Format Shared Usage							
31								
32	Help Menu							
33								

Figure 48 Cost Allocation Plan (Child Welfare - Itemized Allocation) Worksheet

Overview. The CAM-TOOL calculations are designed to use one single figure for the federal match rate for each benefiting program. Most federal programs have predetermined match rates. However, Child Welfare cost components frequently must be assessed further in relation to the several cost centers within Child Welfare in order to determine the match rate to be applied to a particular system development project.

This worksheet documents any further breakdown by cost center, and the overall resulting single figure to be used by the CAM-TOOL in high level calculations at the program level.

Provide a narrative description and a breakdown of calculations to support the specific match rate to be used on the Cost Allocation Plan for this system development project. Document or reference the agency guidance used in the calculations.

When an overall rate has been determined, enter it to the Benefiting Programs worksheet, then regenerate the CAP Summary and any CAP Sections from the Shared Usage LOE worksheet. Ensure that the overall match rate used for Cost Allocation Plan summaries and Sections is correct.

1. **Data Copied To Worksheet.** None.
2. **Data Copied From Worksheet.** None.

3. Worksheet Calculations. None.

4. Required Fields needed for the CAM-TOOL automated calculations. None.

The Program Summary Worksheet

Click on the Program Summary menu option to open the Program Summary worksheet, as shown in Figure 49 and Figure 50 in this section.

Overview. This worksheet can display either of two summaries of usage for benefiting programs: the usage for all system components, or the usage of only the shared system components. The worksheet may be populated by either of two command buttons, the **Program Base Summary (All)** command button on the All System Usage worksheet, or the **Create Program Base Summary (Shared)** command button on the Shared Usage LOE worksheet.

The worksheet is optional, and is not used in further CAM-TOOL calculations. You are free to manipulate data, make further calculations, or conduct any customized analyses needed, without affecting CAM-TOOL operations.

The worksheet command button **Copy Worksheet for Backup** allows you to create a copy of the worksheet in order to preserve the data currently displayed on the worksheet for further use.

1. **Data Copied To Worksheet.** The two initiating command buttons copy different data onto the worksheet.
 - Data copied by **Create Program Base Summary (All)** command button on the All System Usage worksheet.

CAM-TOOL MENU SYSTEM		? Program Base Summary (All System Usage or Shared System Usage)				Copy Worksheet for Backup
1	System Information	CAM-TEST Project				
2						
3	Benefiting Programs	PROGRAM SUMMARY (ALL SYSTEM USAGE)				
4		SNAP		40		
5	Allocation Structure	FUNCTIONAL_MODULE	SUB-MODULE	DETAIL	USAGE_TYPE	BASE_VALUE
6		Alerts	Management	Mgt Alert 1	Shared	20
7	Functional Modules	Alerts	Management	Mgt Alert 2	Shared	25
8		Alerts	Management	Mgt Alert 3	Shared	10
9	Sub_Modules	Alerts	Staff	Staff Alert 1	Shared	5
10		Alerts	Staff	Staff Alert 2	Shared	5
11	Details	Alerts	Staff	Staff Alert 3	Shared	12
12	Weighting System	Assessment	Eligibility Verification	None	Shared	150
13		Assessment	Searches	None	Shared	125
14	USAGE AND CAP	Case Management	Participant Data	Person data	Shared	100
15		Case Management	Participant Data	Employment	Shared	100
16	All System Usage	Case Management	Participant Data	Grants	Shared	75
17		Case Management	Child and Adult Services	None	Shared	120
18	Recipient Counts	Case Management	Means Tested Services	Interactive Review	Shared	100
19		Case Management	Means Tested Services	Integration with XNDS	Shared	100
20	Shared Usage LOE	Case Management	Means Tested Services	Interface Controllers Office	Shared	75
21		Case Management	Means Tested Services	Overpayments Analysis	Shared	120
22	Cost Allocation Plan	Case Management	Means Tested Services	Quality Control Reviews	Shared	200
23		Eligibility	Eligibility Determination	None	Shared	12
24	Child Welfare CAP	Financial	Obligations Management	None	Shared	275
25	OPTIONAL	Financial	Payment Processing	None	Shared	200
26		Financial	Deposit Processing	None	Shared	200
27	Program Summary	Intake	Customer Info Inq	None	Shared	100
28		Intake	Customer Info Maint	None	Shared	100
29	Format All System Usage	Intake	Financial Affidavit	None	Shared	100
30		Interfaces	INT4	None	Direct	50
31	Format Shared Usage	Reports	Management	Mgt Report 1	Shared	30
32		Reports	Management	Mgt Report 2	Shared	80
33	Help Menu	Reports	Management	Mgt Report 3	Shared	20

Figure 49 Program Base Summary (All) -- From All System Usage Worksheet

Copied data includes **five** data fields: Functional Module, Sub_Module, Detail, Usage Type, and Base Value. A separate summary is created for each

benefiting program. Each summary lists the names of **all** system components used by the program, and provides a total count next to the program name.

- In Figure 49 above, note that worksheet data is titled “Program Summary (All System Usage).”
 - The SNAP benefiting program uses a total of 40 system components.
 - Note also that SNAP components include Interface INT4 (on row 30). This example assumes that Interface INT4 was identified on the SubModules worksheet as a Direct cost item that would not be included in cost allocation. Therefore, it appears on this list of all system components used by SNAP, but will be excluded from any listing of shared components.
- Data copied by **Create Program Base Summary (Shared)** command button on Shared Usage (LOE) worksheet.

CAM-TOOL MENU SYSTEM		? Program Base Summary (All System Usage or Shared System Usage)					Copy Worksheet for Backup
1	System Information	CAM-TEST Project					
2							
3	Benefiting Programs	PROGRAM SUMMARY (SHARED SYSTEM USAGE)					
4		SNAP	39				
5	Allocation Structure	FUNCTIONAL_MODULE	SUB-MODULE	DETAIL	USAGE_TYPE	BASE_VALUE	FINAL_VALUE
6		Alerts	Management	Mgt Alert 1	Shared	20	6.663255444
7	Functional Modules	Alerts	Management	Mgt Alert 2	Shared	25	12.47940898
8		Alerts	Management	Mgt Alert 3	Shared	10	9.982032342
9	Sub_Modules	Alerts	Staff	Staff Alert 1	Shared	5	2.495732685
10		Alerts	Staff	Staff Alert 2	Shared	5	1.666666667
11	Details	Alerts	Staff	Staff Alert 3	Shared	12	2.998659983
12	Weighting System	Assessment	Eligibility Verification	None	Shared	150	45.27893679
13		Assessment	Searches	None	Shared	125	37.73244733
14	USAGE AND CAP	Case Management	Participant Data	Person data	Shared	100	22.22124148
15		Case Management	Participant Data	Employment	Shared	100	28.75593542
16	All System Usage	Case Management	Participant Data	Grants	Shared	75	18.63112712
17		Case Management	Child and Adult Services	None	Shared	120	39.72612026
18	Recipient Counts	Case Management	Means Tested Services	Interactive Review	Shared	100	33.08043174
19		Case Management	Means Tested Services	Integration with XNDS	Shared	100	33.10510022
20	Shared Usage LOE	Case Management	Means Tested Services	Interface Controllers Office	Shared	75	24.79520682
21		Case Management	Means Tested Services	Overpayments Analysis	Shared	120	39.67233092
22	Cost Allocation Plan	Case Management	Means Tested Services	Quality Control Reviews	Shared	200	66.12055153
23	Child Welfare CAP	Eligibility	Eligibility Determination	None	Shared	12	3.622314944
24	OPTIONAL	Financial	Obligations Management	None	Shared	275	65.49167534
25		Financial	Payment Processing	None	Shared	200	47.61341876
26	Program Summary	Financial	Deposit Processing	None	Shared	200	47.61341876
27		Intake	Customer Info Inq	None	Shared	100	22.22124148
28	Format All System Usage	Intake	Customer Info Maint	None	Shared	100	22.22124148
29		Intake	Financial Affidavit	None	Shared	100	23.1472968
30	Format Shared Usage	Reports	Management	Mgt Report 1	Shared	30	7.452450847
31		Reports	Management	Mgt Report 2	Shared	80	19.88203065
32	Help Menu	Reports	Management	Mgt Report 3	Shared	20	4.968300565
33		Reports	Staff	Wages Report 1	Shared	50	11.0000417

Figure 50 Program Base Summary -- From Shared Usage (LOE)

Copied data includes **six** data fields: Functional Module, Sub_Module, Detail, Usage Type, Base Value, and the Final Value for the program’s shared usage of each component. A separate summary is created for each benefiting program. Each summary lists the names of the **shared** system components used by the program, and provides a total count next to the program name.

- In Figure 50 above, note that worksheet data is titled “Program Summary (Shared System Usage).”
- The SNAP benefiting program uses a total of 39 shared system components.
- Note also that the shared SNAP components do not include Interface INT4. This example assumes that Interface INT4 was identified on the SubModules worksheet as a Direct cost item that would not be included in cost allocation. Therefore, it has been excluded from this listing of shared components.

2. Command button.

Copy Worksheet for Backup command button.

Clicking the button copies the entire worksheet tab, creating a new tab with the title PROGRAM_BASE_SUMMARY_(2). Right-click the new worksheet tab and choose to Rename your tab with a scenario-specific name. You may further copy data from the worksheet copy out to another Excel workbook to examine or manipulate further.

NOTE: Data on this worksheet is refreshed completely whenever the **Create Program Base Summary (All)** command button is clicked on the All System Usage worksheet or the **Create Program Base Summary (Shared)** command button is clicked on the Shared Usage LOE worksheet. If you have altered worksheet data and wish to preserve a copy, use the **Copy Worksheet for Backup** command button to copy the worksheet.

3. **Data Copied From Worksheet.** The CAM-TOOL does not use data on this worksheet in automated calculations; you may copy worksheet data to a backup worksheet for further use.
4. **Worksheet Calculation.** None provided by the CAM-TOOL.
5. **Required Fields needed for the CAM-TOOL automated calculations.**
 - None

The Format All System Usage Worksheet

Click on the Format All System Usage menu option to open the Format All System Usage worksheet, as shown in Figure 51.

CAM-TOOL MENU SYSTEM	? Format All System Usage		Count Usage = "X" (Program Totals)	Count Usage = "X" (SubTotal)	Copy Worksheet for Backup					
System Information	CAM-TEST Project									
	FUNCTIONAL_MODULE	SUB_MODULE	DETAIL	USAGE_TYPE	WEIGHT_TYPE	WEIGHT	BASE_VALUE	NUM_SMALL	NUM_LARGE	SNAP
Benefiting Programs	Alerts	Management	Mgt Alert 1	Shared			20	1	3	X
	Alerts	Management	Mgt Alert 2	Shared			25	2	2	X
Allocation Structure	Alerts	Management	Mgt Alert 3	Shared			10	1	1	X
Functional Modules	Alerts	Staff	Staff Alert 1	Shared			5	2	2	X
	Alerts	Staff	Staff Alert 2	Shared			5	0	3	X
Sub_Modules	Alerts	Staff	Staff Alert 3	Shared			12	1	4	X
Details	Assessment	Eligibility Verification	None	Shared			150	3	3	X
	Assessment	Searches	None	Shared			125	3	3	X
Weighting System	Case Management	Participant Data	Person data	Shared			100	7	4	X
	Case Management	Participant Data	Education	Shared			100	6	1	
	Case Management	Participant Data	Employment	Shared			100	3	3	X
USAGE AND CAP	Case Management	Participant Data	Grants	Shared			75	5	4	X
All System Usage	Case Management	Child and Adult Services	None	Shared			120	3	3	X
	Case Management	Means Tested Services	Interactive Review	Shared			100	3	3	X
Recipient Counts	Case Management	Means Tested Services	Integration with XNDS	Shared			100	3	3	X
Shared Usage LOE	Case Management	Means Tested Services	Interface Controllers O	Shared			75	4	3	X
	Case Management	Means Tested Services	Overpayments Analysis	Shared			120	4	3	X
Cost Allocation Plan	Case Management	Means Tested Services	Quality Control Review	Shared			200	4	3	X
Child Welfare CAP	Eligibility	Eligibility Determination	None	Shared			12	3	3	X
	Financial	Obligations Management	None	Shared			275	4	4	X
OPTIONAL	Financial	Payment Processing	None	Shared			200	5	4	X
	Financial	Deposit Processing	None	Shared			200	5	4	X
Program Summary	Intake	Customer Info Inq	None	Shared			100	7	4	X
	Intake	Customer Info Maint	None	Shared			100	7	4	X
Format All System Usage	Intake	Financial Affidavit	None	Shared			100	4	4	X
Format Shared Usage	Interfaces	INT1	None	Direct			50	0	1	
	Interfaces	INT2	INT2 for TANF	Direct			50	0	1	
	Interfaces	INT2	INT2 for CSE	Direct			50	0	1	
Help Menu	Interfaces	INT3	INT3 for TANF	Direct			50	0	1	

Figure 51 Format All System Usage

Overview. Data was copied from the All Systems Usage worksheet by action of the command button **Format All System Usage (Copy)**.

This worksheet is optional to the basic computations of the CAM-TOOL. You are free to manipulate data, make further calculations, or conduct any customized analyses needed, without affecting CAM-TOOL operations.

Please note that data on this worksheet is completely refreshed whenever you click the **Format All System Usage (Copy)** command button on All System Usage worksheet. You may use the command button **Copy Worksheet for Backup** to preserve any changes you make to the worksheet.

1. Data Copied to the Worksheet.

- Functional Module
- Sub-Module
- Detail
- Usage_Type
- Weight_Type and Weight
- Base Value
- Num_Small and Num_Large
- Program Abbreviation columns
- Program usage indicators ("X")

2. Command Buttons.

- **Count Usage = "X" (Program Totals)** command button. Click this button to highlight a group of system components used by one or more programs and then to tally the number of components used by each program in the group.

- 1) Clicking the button opens the Usage Counts by Program userform.
- 2) Click on the topmost cell of the first program column to be totaled, to anchor the starting point for your selection highlight. Hold the left mouse button and highlight the area to be totaled.

For this calculation, you must select one contiguous area, not separate cells. In Figure 52 below, the FS, TANF, and MED benefiting programs columns are highlighted, and the selection field shows L3:N28 as the area to be totaled.

HT_TYPE	WEIGHT	BASE VALUE	NUM_SMALL	NUM_LARGE	SNAP	TANF	MED	CSE
		20	1	3	X	X	X	
		25	2	2	X		X	
				1	X			
				2	X	X		
				3	X	X	X	
				4	X	X	X	X
				3	X	X	X	
				3	X	X	X	
				4	X	X	X	X
		100	6	1				X
		100	3	3	X	X		X
		75	5	4	X	X	X	X
		120	3	3	X	X	X	
		100	3	3	X	X	X	
		100	3	3	X	X	X	
		75	4	3	X	X	X	
		120	4	3	X	X	X	
		200	4	3	X	X	X	
		12	3	3	X	X	X	
		275	4	4	X	X	X	X
		200	5	4	X	X	X	X
		200	5	4	X	X	X	X
		100	7	4	X	X	X	X
		100	7	4	X	X	X	X
		100	4	4	X	X	X	X
		50	0	1			X	
		50	0	1		X		

Figure 52 Usage Counts Selected for Program Totals

- 3) Click **OK** to open the Select Output Cells to Display Program Totals userform:

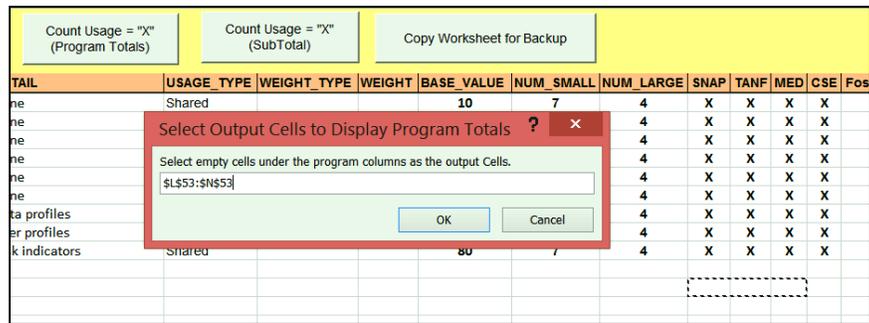


Figure 53 Output Cells Selected for Usage Totals

Select Output Cells: “Select empty cells under the program columns as the output Cells.” For this action you need to select adjacent cells below the specific benefiting program columns to display your totals.

Click into an empty cell below the first benefiting program you highlighted to total. Hold down the left mouse button and select adjacent empty cells below all of the program columns that you highlighted to total. In Figure 53, adjacent cells L53:N53 under the FS, TANF, and MED columns have been selected to hold totals.

Clicking **OK** will add the totals into the cells you have selected.

Clicking **Cancel** will close the window with a confirming message box; you will remain in the Format All System Usage worksheet.

- 4) **Note:** the CAM-TOOL does not automatically label the new totals. You need to create a descriptive label for the group of totals in a nearby cell.
 - 5) The **Count Usage = X (Program Totals)** command button can be used to create any number of totals, because the button does not automatically delete or overwrite data. You are able to select where to display and label each new total.
- **Count Usage = “X” (SubTotal)** command button.
Click this button to calculate a single-figure total for a selected group of usage Xs, whether that group is within one column, or drawn across several program columns. Use this button to total a particular set of functions in one or more program columns, such as all Alerts.
 - 1) Clicking the button opens the Subtotal Selected Usage Count userform.
 - 2) Click into a benefiting program column, on the topmost cell to be totaled. Hold the left mouse button and highlight the area to be totaled. The cells you select must be a continuous rectangular area.

You may select all the cells in one program column, or all the cells for a particular program function, across several columns. In Figure 54 below, Security functions are selected for the FS, TANF, and MED programs. The selection field shows L25:N27 will be totaled.

GE_TYPE	WEIGHT_TYPE	WEIGHT	BASE_VALUE	NUM_SMALL	NUM_LARGE	SNAP	TANF	MED	CSE
ed		120		3	3	X	X	X	
ed		100		3	3	X	X	X	
ed						X	X	X	
ed						X	X	X	
ed						X	X	X	
ed						X	X	X	
ed						X	X	X	
ed		200		5	4	X	X	X	X
ed		100		7	4	X	X	X	X
ed		100		7	4	X	X	X	X
ed		100		4	4	X	X	X	X
t		50		0	1			X	

Figure 54 Cells Selected for Usage Total

- 3) Clicking OK opens the Select Output Cell userform. Click into the empty cell you want to display the calculated total. In Figure 55, N53 has been selected to display the total.

GE_TYPE	WEIGHT_TYPE	WEIGHT	BASE_VALUE	NUM_SMALL	NUM_LARGE	SNAP	TANF	MED	CSE
red		20		5	4	X	X		
red		50		6	4	X	X		
red						X	X		
red						X	X		
red						X	X		
red						X	X		
red						X	X		
red						X	X		
red		10		5	4	X	X		
red		80		7	4	X	X		
red		80		7	4	X	X		
red		80		7	4	X	X		

Figure 55 Cell Selected to Display Usage Total

Clicking **OK** will add the total into the cell you have selected.

Clicking **Cancel** will close the userform with a confirming message box; you will remain in the Format All System Usage worksheet.

- 4) **Note:** The CAM-TOOL does not automatically label the new total. You need to create a descriptive label for each total in a nearby cell.
- 5) You may use the **Count Usage=X (Sub Total)** command button to create any number of totals, because the button does not automatically delete or overwrite data, and you are able to select where to display and label each new total.

- **Copy Worksheet for Backup** command button.

Clicking the button copies the entire worksheet tab, creating a new tab with the title `FORMAT_ALL_SYSTEM_USAGE_(2)`. Right-click the new worksheet tab and choose to Rename your tab with a scenario-specific name. You may further copy data from the worksheet copy out to another Excel workbook to examine or manipulate further.

NOTE: Data on this worksheet is refreshed completely whenever the **Format All System Usage (Copy)** command button is pressed on the All System Usage worksheet. If you have altered or added to data and wish to preserve a copy, use the **Copy Worksheet for Backup** command button to copy the worksheet.

3. **Data Copied form Worksheet.** No data copied by the CAM-TOOL.
4. **Worksheet Calculation.** None provided by the CAM-TOOL.
5. **Required Fields needed for the CAM-TOOL automated calculations.** None.

The Format Shared Usage Worksheet

Click on the Format Shared Usage menu option to open the Format Shared Usage worksheet, as shown in Figure 56.

A	B	C	D	E	F	G	H	I	J	K	L
CAM-TOOL MENU SYSTEM	?	Format Shared Usage LOE		Sum Program Values (Program Totals)	Sum Program Values (SubTotal)	Copy Worksheet for Backup					
System Information	CAM-TEST Project										
Benefiting Programs	FUNCTIONAL_MODULE	SUB_MODULE	DETAIL	USAGE_TYPE	WEIGHT_TYPE	WEIGHT	BASE_VALUE	NUM_SMALL	NUM_LARGE	SNAP	
Allocation Structure	Alerts	Management	Mgt Alert 1	Shared		20	1	3	6.66325444		
Functional Modules	Alerts	Management	Mgt Alert 2	Shared		25	2	2	12.47940898		
Sub_Modules	Alerts	Management	Mgt Alert 3	Shared		10	1	1	9.982032342		
Details	Alerts	Staff	Staff Alert 1	Shared		5	2	2	2.495732689		
Weighting System	Alerts	Staff	Staff Alert 2	Shared		5	0	3	1.666666667		
USAGE AND CAP	Alerts	Staff	Staff Alert 3	Shared		12	1	4	2.998659983		
All System Usage	Assessment	Eligibility Verification	None	Shared		150	3	3	45.27893679		
Recipient Counts	Assessment	Searches	None	Shared		125	3	3	37.73244733		
Shared Usage LOE	Case Management	Participant Data	Person data	Shared		100	7	4	22.22124148		
Cost Allocation Plan	Case Management	Participant Data	Education	Shared		100	6	1			
Child Welfare CAP	Case Management	Participant Data	Employment	Shared		100	3	3	28.75593542		
OPTIONAL	Case Management	Participant Data	Grants	Shared		75	5	4	18.63112712		
Program Summary	Case Management	Child and Adult Services	None	Shared		120	3	3	39.72612026		
Format All System Usage	Case Management	Means Tested Services	Interactive Review	Shared		100	3	3	33.08043174		
Format Shared Usage	Case Management	Means Tested Services	Integration with XNDS	Shared		100	3	3	33.10510022		
Help Menu	Case Management	Means Tested Services	Interface Controllers Office	Shared		75	4	3	24.79520682		
	Case Management	Means Tested Services	Overpayments Analysis	Shared		120	4	3	39.67233092		
	Case Management	Means Tested Services	Quality Control Reviews	Shared		200	4	3	66.12055153		
	Eligibility	Eligibility Determination	None	Shared		12	3	3	3.622314944		
	Financial	Obligations Management	None	Shared		275	4	4	65.49167534		
	Financial	Payment Processing	None	Shared		200	5	4	47.61341876		
	Financial	Deposit Processing	None	Shared		200	5	4	47.61341876		
	Intake	Customer Info Inq	None	Shared		100	7	4	22.22124148		
	Intake	Customer Info Maint	None	Shared		100	7	4	22.22124148		
	Intake	Financial Affidavit	None	Shared		100	4	4	23.1472968		
	Interfaces	INT2	INT2 for TANF	Direct		50	0	1			
	Interfaces	INT2	INT2 for CSE	Direct		50	0	1			
	Interfaces	INT3	INT3 for TANF	Direct		50	0	1			
	Interfaces	INT3	INT3 for CSE	Direct		50	0	1			

Figure 56 Format Shared Usage Worksheet

Overview. Data was copied from the Shared Systems Usage LOE worksheet by action of the command button **Format Shared System Usage LOE (Copy)**.

This worksheet is optional to the basic computations of the CAM-TOOL. You are free to manipulate data, make further calculations, or conduct any customized analyses needed, without affecting CAM-TOOL operations.

Please note that data on this worksheet is completely refreshed whenever you click the **Format Shared System Usage LOE (Copy)** command button on Shared System Usage worksheet. You may use the command button **Copy Worksheet for Backup** to preserve any changes you make to the worksheet.

1. Data Copied to the Worksheet.

- Functional Module.
- Sub-Module
- Detail
- Usage_Type
- Weight_Type and Weight
- Base Value
- Num_Small and Num_Large
- Program Abbreviation columns
- Program usage (calculated level of effort attributed to each benefiting program)

2. Command Buttons.

- **Sum Program Values (Program Totals)** command button. Click this button to highlight a group of system components used by one or more programs and then to tally the number of components used by each program in the group.

- 1) Clicking the button opens the Sum Values by Program userform.
- 2) Click into a benefiting program column, on the topmost cell to be totaled. Hold the left mouse button and highlight the area to be totaled. The cells you select must be a continuous rectangular area.

You may select all the cells in one program column, or all the cells for a particular program function, across several columns. In Figure 57 below, the SNAP, TANF, and MED benefiting programs columns are highlighted, and the selection field shows L18:N46 as the area to be totaled.

TYPE	WEIGHT_TYPE	WEIGHT	BASE_VALUE	NUM_SMALL	NUM_LARGE	SNAP	TANF	MED	
			75	4	3	24.79520682	24.79520682	24.79520682	
			120	4	3	39.67233092	39.67233092	39.67233092	
			200	4	3	66.12055153	66.12055153	66.12055153	
			12	3	3	3.622314944	3.622314944	3.622314944	
			275	4	4	65.49167534	65.49167534	65.49167534	65.
			200	5	4	47.61341876	47.61341876	47.61341876	47.
			200	5	4	47.61341876	47.61341876	47.61341876	47.
						22.22124148	22.22124148	22.22124148	22.
						22.22124148	22.22124148	22.22124148	22.
						23.1472968	23.1472968	23.1472968	23
						50			
						50			
						50			
			50	0	1				
			50	0	1				
			30	5	4	7.452450847	7.452450847	7.452450847	7.4
			80	4	4	19.88203065	19.88203065	19.88203065	19.
			20	5	4	4.968300565	4.968300565	4.968300565	4.9
			50	6	4	11.89829147	11.89829147	11.89829147	11.
			20	7	4	4.444248295	4.444248295	4.444248295	4.4
			20	7	4	4.444248295	4.444248295	4.444248295	4.4
			10	7	4	2.222124148	2.222124148	2.222124148	2.2
			12	7	4	2.666548977	2.666548977	2.666548977	2.6
			10	7	4	2.222124148	2.222124148	2.222124148	2.2
			10	7	4	2.222124148	2.222124148	2.222124148	2.2
			10	5	4	2.484150282	2.484150282	2.484150282	2.4
			10	5	4	2.484150282	2.484150282	2.484150282	2.4
			80	7	4	17.77699318	17.77699318	17.77699318	17.
			80	7	4	17.77699318	17.77699318	17.77699318	17.

Figure 57 Cells Selected for Program Totals

- 3) Clicking OK opens the Select the Output Cells window, asking you to "Select Output Cells for Program Totals."

IT_TYPE	WEIGHT	BASE_VALUE	NUM_SMALL	NUM_LARGE	SNAP	TANF	MED
		20	5	4	4.968300565	4.968300565	4.968300565
					11.89829147	11.89829147	11.89829147
					4.444248295	4.444248295	4.444248295
					4.444248295	4.444248295	4.444248295
					2.222124148	2.222124148	2.222124148
					2.666548977	2.666548977	2.666548977
					2.222124148	2.222124148	2.222124148
					2.222124148	2.222124148	2.222124148
					2.222124148	2.222124148	2.222124148
					2.484150282	2.484150282	2.484150282
					2.484150282	2.484150282	2.484150282
	10		5	4			
	80		7	4	17.77699318	17.77699318	17.77699318
	80		7	4	17.77699318	17.77699318	17.77699318
	80		7	4	17.77699318	17.77699318	17.77699318

Figure 58 Cells Selected to Display Program Totals

Select the cells (one below each program column) to display totals. Click into an empty cell below the first benefiting program you selected. Holding down the left mouse button, select adjacent empty cells below the program columns to be totaled. In Figure 58, adjacent cells L50:N50 under the SNAP, TANF, and MED columns have been selected to hold totals.

Clicking **OK** will add the totals into the cells you have selected.

Clicking **Cancel** will close the window with a confirming message box; you will remain in the Format All System Usage worksheet.

Note: The CAM-TOOL does not label the new totals. You need to create a descriptive label for the group of totals in a nearby cell, i.e., the “Totals” shown in the example was entered manually after the totals were created.

- 4) You may use the **Sum Program Values (Program Totals)** command button to create any number of totals, because the button does not automatically delete or overwrite data.
- **Sum Program Values (Subtotal)** command button.
Click this button to calculate a single total for the usage shares within a single highlighted group, whether that group is within one column, or drawn across several program columns. Use this button to total a particular set of functions in one or more program columns, such as all Alerts.

- 1) Clicking the button opens the Subtotal Selected Values window asking you to “Select the cells that you want to tally.”

To select the cells you want to tally, click into the topmost cell to tally. The cells you select must be a continuous rectangular area.

You may select all the cells in one program column, or all the cells for a particular program function, across several columns. In Figure 59 below, Security functions were selected for the SNAP, TANF, and MED programs. The selection field shows L44:N46 will be totaled.

WEIGHT_TYPE	WEIGHT	BASE_VALUE	NUM_SMALL	NUM_LARGE	SNAP	TANF	MED
	20		7	4	4.444248295	4.444248295	4.444248295
				4	2.222124148	2.222124148	2.222124148
				4	2.666548977	2.666548977	2.666548977
				4	2.222124148	2.222124148	2.222124148
				4	2.222124148	2.222124148	2.222124148
				4	2.484150282	2.484150282	2.484150282
				4	2.484150282	2.484150282	2.484150282
				4	17.77699318	17.77699318	17.77699318
	80		7	4	17.77699318	17.77699318	17.77699318
	80		7	4	17.77699318	17.77699318	17.77699318

Figure 59 Cells Selected to Tally

- Clicking OK opens the Select Output Cell window asking you to "Select one Output Cell to display the Subtotal." Click into one empty cell to display the calculated total. In the illustration below, L50 has been selected to display the total.

WEIGHT_TYPE	WEIGHT	BASE_VALUE	NUM_SMALL	NUM_LARGE	SNAP	TANF	
	20		7	4	4.444248295	4.444248295	4.44
				4	2.222124148	2.222124148	2.22
				4	2.666548977	2.666548977	2.66
				4	2.222124148	2.222124148	2.22
				4	2.222124148	2.222124148	2.22
				4	2.484150282	2.484150282	2.48
				4	2.484150282	2.484150282	2.48
				4	17.77699318	17.77699318	17.7
	80		7	4	17.77699318	17.77699318	17.7
	80		7	4	17.77699318	17.77699318	17.7

Figure 60 Usage Total for Selected Cells

Clicking **OK** will add the total into the cell you have selected.

Clicking **Cancel** will close the window with a confirming message box; you will remain in the Format All System Usage worksheet.

Note: the CAM-TOOL does not label the new total. You need to create a descriptive label for each total in a nearby cell.

- You may use the **Sum Program Values (Subtotal)** command button to create any number of totals, because the button does not automatically delete or overwrite data.

- Copy Worksheet for Backup command button.**

Clicking the button copies the entire worksheet tab, creating a new tab `FORMAT_SHARED_USAGE_(2)`. Right-click the new worksheet tab and select `Rename` to give your tab a scenario-specific name.

3. Required Fields needed for the CAM-TOOL automated calculations. None

The Help Menu Worksheet

CAM-TOOL MENU SYSTEM		? Help Menu	
System Information	CAM TOOL - Enter Project Name on System Information Worksheet		Please report problems or question on the CAM-TOOL to your Federal analyst in CB, CMS, FNS, DSTS, or to: Director, Division of State and Tribal Systems, Office of Child Support Enforcement
Benefiting Programs	Click on the following links to access specific User Guide chapters		
Allocation Structure	WORKSHEET HELP		
Functional Modules	1.CAM-TOOL Overview.pdf		
Sub_Modules	2.System Information.pdf		
Details	3.Benefiting Programs.pdf		
Weighting System	4.Allocation Structure.pdf		
USAGE AND CAP	5.Functional Modules.pdf		
All System Usage	6.Sub Modules.pdf		
Recipient Counts	7.Details.pdf		
Shared Usage LOE	8.Weighting System.pdf		
Cost Allocation Plan	9.All System Usage.pdf		
Child Welfare CAP	10.Recipient Counts.pdf		
OPTIONAL	11.Shared Usage LOE.pdf		
Program Summary	12.Cost Allocation Plan.pdf		
Format All System Usage	13.Child Welfare Cost Allocation.pdf		
Format Shared Usage	14.Program Summary.pdf		
Help Menu	15.Format All System Usage.pdf		
	16.Format Shared Usage.pdf		

Figure 61 HELP Menu

Click on the Help Menu menu option to open the HELP_MENU worksheet.

Overview. Each chapter of this User Guide is available from within the CAM-TOOL as a Help file. This worksheet provides links to locate and open Help files when they are stored in the same directory as the CAM-TOOL software.

Using Help Files. The Help files must be located in the right directory for the CAM-TOOL software links to work properly.

- Click on the worksheet link to access the related help file.
- Help Files may also be accessed from each worksheet by clicking the “?” (i.e., question mark) in cell “B1.”
- Each help file is a chapter from this User Guide.

Downloading Help Files. Download all CAM files to a single directory on your hard drive:

- CAM TOOL (MS Excel workbook)
- CAM TOOL Examples (Simple Data Example, Complex Data Example, Data Example with Weighting)
- CAM TOOL Help Files (compressed folder)*
- CAM User Guide (PDF)
- CAM Handbook (PDF)

NOTE: Unzip the CAM TOOL Help Files into the same directory as the CAM TOOL and the CAM TOOL Examples. Do not use the CAM-TOOL directly from the website; it will not be able to access help files or save data properly.

CAM-TOOL Worksheet Data Flow and Fields

The following table lists and describes the CAM-TOOL Worksheet Data Fields and the flow of data between worksheets.

Note:

Required Fields are those needed for the automated calculations completed by the tool. A required field may be empty of data, but the field itself, i.e., the data column, must exist to allow CAM-TOOL calculations to run.

Reference Fields are necessary to describe or characterize the cost allocation scenario, but are not used in CAM-TOOL calculations.

Comments for each worksheet include identification of the worksheet from which data was copied, and the worksheet to which it will be copied.

Worksheet	Field	Status	Data Type	Entry	Comment
System Information Worksheet					
	System / Project Name	Required	Alphanumeric	Entry	Copied to header of all other worksheets
	Estimated Budget in Dollars	Reference	Numeric	Entry	Compare manually to Budget figure entered to Cost Allocation Plan Worksheet
	Project Description	Reference	Alphanumeric	Entry	Reference field.
	Project/System Type	Reference	Alphanumeric	Dropdown List	Reference field.
	Target Date of Completion	Reference	Date	Entry	Reference field.
	Current Phase	Reference	Alphanumeric	Dropdown List	Reference field.
	Project Leads / Program / Role / Title / Phone Number / Email	Reference	Alphanumeric	Entry	Reference field.
	State Contacts / Program / Role / Title / Phone Number / Email	Reference	Alphanumeric	Entry	Reference field.
	Regional Contacts / Program / Role / Title / Phone Number / Email	Reference	Alphanumeric	Entry	Reference field.
	Federal Contacts / Program / Role / Title / Phone Number / Email	Reference	Alphanumeric	Entry	Reference field.

Worksheet	Field	Status	Data Type	Entry	Comment
Benefiting Programs Worksheet					
	Program_Abbrev	Required	Alphanumeric	Entry	Copied to All System Usage, Shared Usage LOE, Cost Allocation Plan, as well as automated calculations. This is the data item most frequently used by the CAM-TOOL
	Program	Reference	Alphanumeric	Entry	Reference field.
	Program_Size	Required	Alphanumeric	Dropdown List	Used in calculations in Recipient Counts, All System Usage, and Shared Usage LOE worksheets
	Recipient_Counts	Required	Numeric	Entry	Copied to Recipient Counts and used in automated calculations.
	Federal Program	Reference	Alphanumeric	Entry	Reference field.
	Federally Funded?	Reference	Alphanumeric	Dropdown List	Reference field.
	Match Rate	Required	Numeric	Entry	Copied to Cost Allocation Plan and used in automated calculations
Allocation Structure Worksheet					
	Functional Modules description	Reference	Alphanumeric	Entry	Reference field
	Sub_Modules description	Reference	Alphanumeric	Entry	Reference field
	Details description	Reference	Alphanumeric	Entry	Reference field.
	Allocation Base	Reference	Alphanumeric	Entry	Reference field.
	Allocation Base description	Reference	Alphanumeric	Entry	Reference field.
	Comments	Reference	Alphanumeric	Entry	Reference field.
Functional Modules Worksheet					
	Functional Module	Required	Alphanumeric	Entry	Copied to Sub_Modules worksheet.
	Description	Reference	Alphanumeric	Entry	Reference field.
	Budgeted Costs	Reference	Numeric	Entry	Reference field.
	Actual Cost	Reference	Numeric	Entry	Reference field.

Worksheet	Field	Status	Data Type	Entry	Comment
Sub_Modules Worksheet					
	Functional Module	Required	Alphanumeric	Copied Entry	Copied by the CAM-TOOL from Functional Modules spreadsheet.
	Sub Module	Required	Alphanumeric	Entry	Required field.
	Description	Reference	Alphanumeric	Entry	Reference field.
	Allocation Type	Required	Alphanumeric	Dropdown List	Required field.
	Budgeted Costs	Reference	Numeric	Entry	Reference field.
	Actual Cost	Reference	Numeric	Entry	Reference field.
Details Worksheet					
	Functional Module	Required	Alphanumeric	Copied Entry	Copied by the CAM-TOOL from Functional Modules spreadsheet. Copied to All System Usage, Recipient Counts, Shared Usage worksheets
	Sub_Module	Required	Alphanumeric	Copied Entry	Copied by the CAM-TOOL from Functional Modules spreadsheet. Copied to All System Usage, Recipient Counts, Shared Usage worksheets
	Detail	Required	Alphanumeric	Entry	Copied to All System Usage, Recipient Counts, Shared Usage worksheets
	Description	Reference	Alphanumeric	Entry	Reference field.
Weighting System Worksheet					
	No defined fields.	Reference	Alphanumeric	Entry	Reference. Documents the design and intent of weighting system, including the weight type and the and the specific weights to be used in calculating usage and a program shares
All System Usage Worksheet					
	Functional Module	Required	Alphanumeric	Copied Entry	Required field. Copied from Details worksheet.
	Sub Module	Required	Alphanumeric	Copied Entry	Required field. Copied from Details worksheet.
	Detail	Required	Alphanumeric	Copied Entry	Required field. Copied from Details worksheet.
	Program Abbrev	Required	Alphanumeric	Copied Entry	Required field. Copied from Benefiting Programs

Worksheet	Field	Status	Data Type	Entry	Comment
					worksheet.
	Usage Type	Required	Alphanumeric	Calculated	Required field. Calculated by Tally Usage by Program Size command button.
	Weight Type	Required	Alphanumeric	Entry	Required with weighting system. Entered in Enter Weights or Base Values command button.
	Weight	Required	Numeric	Entry	Required with weighting system. Entered in Enter Weights or Base Values command button.
	Base Value	Required	Numeric	Entry	Required field. Entered in Enter Weights or Base Values command button.
	Num_Small	Required	Numeric	Calculated	Required field. Calculated by Tally Usage by Program Size command button.
	Num_Large	Required	Numeric	Calculated	Required field. Calculated by Tally Usage by Program Size command button.
	Usage	Required	Alphanumeric Usage = X	Entry	Required field. Entered in Enter Usage =X command button. Indicate the programs that use each module.
Recipient Counts Worksheet					
	Functional Module	Required	Alphanumeric	Copied Entry	Required field. Copied from All System Usage worksheet.
	Sub Module	Required	Alphanumeric	Copied Entry	Required field. Copied from All System Usage worksheet.
	Detail	Required	Alphanumeric	Copied Entry	Required field. Copied from All System Usage worksheet.
	Program Abbrev	Required	Alphanumeric	Copied Entry	Required field. Copied from All System Usage worksheet.
	Usage Type	Required	Alphanumeric	Calculated	Required field. Copied from All System Usage worksheet
	Weight Type	Required	Alphanumeric	Copied Entry	Required with weighting system. Copied from All System Usage worksheet
	Weight	Required	Numeric	Copied Entry	Required with weighting system. Copied from All System Usage worksheet.
	Base Value	Required	Numeric	Copied Entry	Required field. Copied from All System Usage worksheet

Worksheet	Field	Status	Data Type	Entry	Comment
	Num_Small	Required	Numeric	Calculated	Required field. Copied from All System Usage worksheet
	Num_Large	Required	Numeric	Calculated	Required field. Copied from All System Usage worksheet
	Usage	Required	Alphanumeric	Copied Entry	Required field. Copied from All System Usage worksheet. Xs replaced with recipient counts by Assign the Benefiting Programs Worksheet Recipient Counts command button or by Assign Recipient Counts by Program command button.
Shared Usage LOE Worksheet					
	Functional Module	Required	Alphanumeric	Copied Entry	Required field. Copied from Recipient Counts worksheet.
	Sub Module	Required	Alphanumeric	Copied Entry	Required field. Copied from Recipient Counts worksheet.
	Detail	Required	Alphanumeric	Copied Entry	Required field. Copied from Recipient Counts worksheet.
	Program Abbrev	Required	Alphanumeric	Copied Entry	Required field. Copied from Recipient Counts worksheet.
	Usage Type	Required	Alphanumeric	Calculated	Required field. Copied from Recipient Counts worksheet.
	Weight Type	Required	Alphanumeric	Copied Entry	Required with weighting system. Copied from Recipient Counts worksheet.
	Weight	Required	Numeric	Copied Entry	Required with weighting system. Copied from Recipient Counts worksheet.
	Base Value	Required	Numeric	Copied Entry	Required field. Copied from All System Usage Counts worksheet.
	Num_Small	Required	Numeric	Calculated	Required field. Copied from Recipient Counts worksheet.
	Num_Large	Required	Numeric	Calculated	Required field. Copied from Recipient Counts worksheet.
	Usage	Required	Alphanumeric	Calculated	Required field. Calculated by Calculate Shared Usage Level of Effort (LOE) command button on Recipient

Worksheet	Field	Status	Data Type	Entry	Comment
					Counts worksheet.
Cost Allocation Plan Worksheet					
	Program Abbrev	Required	Alphanumeric	Copied Entry	Required field. Copied from Shared Usage LOE worksheet.
	Program Share of Cost	Required	Numeric	Calculated	Required field. Calculated by Create Cost Allocation Plan Summary command button on Shared Usage LOE worksheet.
	Allocated Budget or Allocated Section Amount	Required	Numeric	Entry	Required field. Amount of total budget cost to be allocated, or total section cost to be allocated.
	Share Amount	Required	Numeric	Calculated	Required field. Calculated by Cost Allocation Worksheet upon entry of Budget Amount.
	Match Rate	Required	Numeric	Copied Entry	Required. Copied by Create Cost Allocation Plan Summary command button on Shared Usage LOE worksheet.
	Federal Share (\$) FFP	Required	Numeric	Calculated	Required field. Calculated by Cost Allocation Worksheet upon entry of Budget Amount.
	State Share (\$)	Required	Numeric	Calculated	Required field. Calculated by Cost Allocation Worksheet upon entry of Budget Amount.
Child Welfare CAP Worksheet					
	No defined fields.	Reference	Alphanumeric	Entry	Reference. Documents breakdown by Child Welfare cost center, and the overall resulting single figure to be used by the CAM-TOOL in high level calculations at the program level.
Program Summary Worksheet					
	When populated from Create Program Base Summary (ALL) command button on All System Usage worksheet:				
	Program Abbrev	Required	Alphanumeric	Copied Entry	Required field. Copied from All System Usage worksheet.

Worksheet	Field	Status	Data Type	Entry	Comment
	Functional Module	Required	Alphanumeric	Copied Entry	Required field. Copied from All System Usage worksheet.
	Sub Module	Required	Alphanumeric	Copied Entry	Required field. Copied from All System Usage worksheet.
	Detail	Required	Alphanumeric	Copied Entry	Required field. Copied from All System Usage worksheet.
	Usage Type	Required	Alphanumeric	Copied Entry	Required field. Copied from All System Usage worksheet.
	Base Value	Required	Numeric	Copied Entry	Required field. Copied from All System Usage worksheet.
	When populated from Create Program Base Summary (Shared) command button on Shared Usage LOE worksheet:				
	Program Abbrev	Required	Alphanumeric	Copied Entry	Required field. Copied from Shared Usage LOE worksheet.
	Functional Module	Required	Alphanumeric	Copied Entry	Required field. Copied from Shared Usage LOE worksheet.
	Sub Module	Required	Alphanumeric	Copied Entry	Required field. Copied from Shared Usage LOE worksheet.
	Detail	Required	Alphanumeric	Copied Entry	Required field. Copied from Shared Usage LOE worksheet.
	Usage Type	Required	Alphanumeric	Copied Entry	Required field. Copied from Shared Usage LOE worksheet.
	Base Value	Required	Numeric	Copied Entry	Required field. Calculated from Shared Usage LOE worksheet.
	Final Value	Required	Numeric	Calculated	Required field. Calculated from Shared Usage LOE worksheet.
Format All Systems Usage Worksheet					
	Program Abbrev	Required	Alphanumeric	Copied Entry	Required field. Copied from All System Usage worksheet.
	Functional Module	Required	Alphanumeric	Copied Entry	Required field. Copied from All System Usage worksheet.

Worksheet	Field	Status	Data Type	Entry	Comment
	Sub Module	Required	Alphanumeric	Copied Entry	Required field. Copied from All System Usage worksheet.
	Detail	Required	Alphanumeric	Copied Entry	Required field. Copied from All System Usage worksheet.
	Usage Type	Required	Alphanumeric	Copied Entry	Required field. Copied from All System Usage worksheet.
	Weight Type	Required	Alphanumeric	Copied Entry	Required field. Copied from All System Usage worksheet.
	Weight	Required	Numeric	Copied Entry	Required field. Copied from All System Usage worksheet.
	Base Value	Required	Numeric	Copied Entry	Required field. Copied from All System Usage worksheet.
	Num_Small	Required	Numeric	Copied Entry	Required field. Copied from All System Usage worksheet.
	Num_Large	Required	Numeric	Copied Entry	Required field. Copied from All System Usage worksheet.
	Program Usage	Required	Alphanumeric	Copied Entry	Required field. Copied from All System Usage worksheet.
Format Shared Usage Worksheet					
	Program Abbrev	Required	Alphanumeric	Copied Entry	Required field. Copied from Shared Usage LOE worksheet.
	Functional Module	Required	Alphanumeric	Copied Entry	Required field. Copied from Shared Usage LOE worksheet.
	Sub Module	Required	Alphanumeric	Copied Entry	Required field. Copied from Shared Usage LOE worksheet.
	Detail	Required	Alphanumeric	Copied Entry	Required field. Copied from Shared Usage LOE worksheet.
	Usage Type	Required	Alphanumeric	Copied Entry	Required field. Copied from Shared Usage LOE worksheet.
	Weight Type	Required	Alphanumeric	Copied Entry	Required field. Copied from Shared Usage LOE worksheet.
	Weight	Required	Numeric	Copied Entry	Required field. Copied from Shared Usage LOE worksheet.
	Base Value	Required	Numeric	Copied Entry	Required field. Copied from Shared Usage LOE worksheet.
	Num_Small	Required	Numeric	Copied Entry	Required field. Copied from Shared Usage LOE

Worksheet	Field	Status	Data Type	Entry	Comment
					worksheet.
	Num_Large	Required	Numeric	Copied Entry	Required field. Copied from Shared Usage LOE worksheet.
	Program Usage	Required	Alphanumeric	Copied Entry	Required field. Copied from Shared Usage LOE worksheet.

Glossary of Terms

	Term	Definition
1.	All Usage:	Type of usage for each system function, as either Direct (used by only one benefiting program) or shared (used by two or more benefiting programs)
2.	Allocation Base:	The cost allocation measurement selected to track and calculate the cost allocation for all benefiting programs. Allocation bases used for software development could include development hours, lines of code (LOC), number of screens, etc.
3.	Allocation Hierarchy:	The categorization of system functionality into levels of detail for cost allocation purposes. The CAM-TOOL provides for three levels of allocation hierarchy: Functional Module, Sub_Module, and Detail.
4.	Base Value	A numeric value representing the level of effort estimated to complete a specific system function. Base Value relates directly to the chosen Allocation Base. Where the allocation base is software development hours, a specific system function may have a base value = 100. In this case, the 100 represents the 100 software development hours required to complete that system functionality.
5.	Benefiting Program:	Any state or federal program that will use one or more system functions.
6.	Direct Usage:	System functionality used by only one benefiting program.
7.	Level of Effort:	The development work or value estimated for completion of a specific system functionality.
8.	Program Usage Assignment:	An indicator that a benefiting program uses a specific system functionality. On the All System Usage worksheet, program usage is indicated by a capital "X" for each system function used by each benefiting program.
9.	Shared Usage:	System functionality used by two or more benefiting programs
10.	System Functionality:	Specific components of the system for which development effort can be tracked. System functionality is mapped to the allocation hierarchy in the tool.
11.	Recipient Counts:	The number of duplicated recipients that represent the size of benefiting programs. This number is used to determine an adjusted cost allocation share for small programs. Basis for number should be documented as part of CAM-TOOL System Information.
12.	Weight	The specific value (from the scale of values) assigned to each system function. Weight value represents the level of effort estimated to complete a specific system function where development hours is not the measure. For example, where code complexity is the weight type, weights might be a numeric scale of 1 (low complexity) to 5 (high complexity).

	Term	Definition
13.	Weight Type	The numeric scale of values representing the level of effort needed to complete a specific system function where development hours is not the measure. For example, where the allocation base is lines of code, the number of lines of code does not necessarily reflect the work effort involved, but the code could be evaluated for code complexity (low to high on a scale of 1 to 5). Number of use cases might be evaluated in use case complexity (low to high on a scale of 1 to 3). The factor and weighting scale must be documented on the Weighting System worksheet.