

# CGI Advantage<sup>®</sup> 4

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## Budget Control User Guide



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## Budget Control Overview

Seamlessly tracking and controlling much of the accounting conducted in CGI Advantage Financial is a budgeting area that is naturally accommodating. Varying legal, policy, and procedural needs of state and local government necessitate a budgeting area where a budgeting model can be built to satisfy site-specific budget requirements. Through a series of online options and an application designed to seamlessly accept new ways of budgeting, those individual needs are met with a budget model that will work with and above a basic budgeting capability.

Budgets enable a view of money spent or collected at one or more chart-of-account element codes. Beyond just an inquiry, budgets are often used to control spending so that it does not exceed pre-defined limits put in place by a legislature, budget office, or manager.

The CGI Advantage Financial Budget Control area allows for the tracking and controlling of budgeted expenditures and revenues using budget structures and controls. It supports a wide range of public sector budgetary business requirements and allows you to:

- Track and control accounting and procurement financial events utilizing standard accepted governmental budgeting principles and guidelines;
- Track and control budgets at multiple levels of detail using any combination of Chart of Accounts elements;
- Choose from a variety of allotment options allowing you to view and control your budgets in a variety of ways;
- View budget updates in real-time as well as see details of the individual transactions that have updated any of the budgets in the system;
- Link revenue and expense budgets together to include revenues in the available budget for expenditures;
- Roll budgets from one budget fiscal year to the next;
- Control security, workflow, and approvals for making updates to budget amounts;
- Maintain an audit trail of updates through the use of budget transactions.

## Common Terminology

A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W |  
X | Y | Z |

› Allotment Level & Line

Allotment Level & Line is an additional budget level adding a time component to a combination of COA element codes defined as a budget line.

› Automatic Budget Line Generation

When the system does not find a matching budget line, then there is the option to generate the line automatically as the accounting transaction processes to pending or final. This option is used for a budget level that is for tracking purposes only and all valid chart of account combinations do not have to be pre-defined at the budget level. More information can be found in the discussion of where the feature is turned on – the Required Budget setup page.

› Budget Activity Level

Budget Activity Level is a record of accounting and budget transactions tracked at the budget line level. This is also referred to as the audit level of a budget.

› Budget Amounts

Budget Amounts are 'amounts' used system-wide to track and record different kinds of activities against budget lines.

› Budget Controlling

Budget Controlling is when rules are in place to issue messages to end users when a rule is being broken.

› Budget Formula

Budget Formula is a mathematical formula used to calculate a budget amount not directly updated by a transaction.

› Budget Journal

Budget Journal is a detailed listing containing all budget transaction details tracked at the budget line level.

› Budget Level

Budget Level is a layer of a budget structure defined by one or more chart of account elements.

› Budget Line

Budget Line is an individual record in a budget level defined by one or more chart of account element codes.



> **Budget Link**

Budget Link is a connection between a revenue budget line and an expense budget line allowing for revenues to fund spending.

> **Budget Structure**

Budget Structure is a framework of a budget determining the type of budget: expense, revenue, expense & revenue, or reimbursable.

> **Budget Tracking**

Budget Tracking is the recording of updates to various budget amounts from budget and accounting transactions for online and offline queries.

> **Calculated Bucket**

Calculated Bucket is an amount field on a budget line indirectly updated as the result of a stand alone bucket being updated.

> **Constraint**

Constraints are a budget control that controls accounting transactions.

> **Continuous Appropriation or Continuing Budget**

Certain budget lines are not just limited to activity in the originating budget year with a short period of close-out activity in the subsequent year. These budget lines extend for one or more years after the originating budget year, and are thus referred to as 'continuing'. Certain implementations choose the special 9999 budget year for these while others use an actual budget year.

> **Funding Control**

Reimbursement budget structures have optional controls that limit the amount of Awards to Funding Line budgets to an agreed upon funding amount defined on either (or both) the Funding Source Control, Funding Group Control, or Funding Allocation Control pages.

> **Guidelines**

Guidelines are a budget control that controls budgeting transactions.

> **Inquiry Page**

Inquiry Page is an online view into the budget lines and their amounts that exist on a particular budget level.

> **Parent & Child**

Parent & Child is a relationship existing between a budget line at one budget level with budget lines at a lower level that share the same key values.

> **Presence Optional**

Presence Optional is a setting so budget levels and allotment lines can be *required* or *optional* for accounting transactions.

› Required Budget

A required budget is a budget structure that is required for accounting transactions based on setup on Required Budget (REQBUD). Transactions will fail with a 'budget line not found' error unless automatic budget line generation is also enabled on Required Budget.

› Reimbursement Budget

Reimbursement is one of the four Budget Types that all budget structures must belong. This type of budget is defined to match funding structure setup for a Funding Profile, Funding Priority, and Funding Line combination in the Cost Accounting chart of accounts. Lines on this type of budget control the Front End Split of Cost Accounting.

› Stand Alone Bucket

Stand Alone Bucket is an amount field on a budget line directly updated by the processing of a budget or accounting transaction. These are often referred to as basic buckets.

› Standard/Extended Budgeting

Standard/Extended Budgeting is a control on Application Parameter (APPCTRL) that controls whether or not certain budget structures should work as standard (STD) - establish appropriations to infer and limit COA combinations - or as extended (EXT) - no inference and no limits on combinations. The parameter name for this control is EXT\_STD\_BUD.

› Summary Page

Summary Page is an online query tool that will select and summarize budget lines of a particular budget level to provide amounts at a different level of detail than exists at that budget level.

## Transaction Information

This topic includes detailed information regarding the transactions used in the Budgeting area.

- [Budget \(BG\) Transaction Type](#)

## Transaction Code Glossary

All Transactions Codes that can be utilized by the Budgeting area are listed below alphabetically by Transaction Name.

Transaction Name	Transaction Code	Transaction Type
Budget	BG	BG

Refer to the "[Delivered Budget Structures](#)" topic for the complete list of delivered budget transactions.

## Budget (BG) Transaction Type

The Budget (BG) Transaction Type is used for all of the various needs in the Budget area. Budgets are maintained through this single budget **Transaction Type** - *BG*. CGI Advantage Financial associates at least one budget **Transaction Code** with one HTML to each budget structure. More than one budget transaction and HTML combination can be associated with a budget structure to enable such things as different levels of security over different parts of the structure. All budget lines created on a budget transaction are stored in just 1 transaction tab. There are not individual transaction components for each level within a budget structure; rather all lines for all levels are stored in one place that contains Chart of Account (COA) elements that can define any budget structure. The HTML presented in the application only shows those COA that match a particular structure and level.

Most baseline budget transaction codes begin with the letters BG and then contain 2 or more characters or numbers after that. Please see the table in the "[Delivered Budget Structures](#)" topic that lists each budget structure and the corresponding transaction code. Should you choose to create a clone of one or more budget transaction codes, ensure that you do not follow the same scheme used for the delivered transaction code and use a scheme unlike any baseline transaction code such as numbers first then letters or appending a number or letter to the delivered code (for example, BGEX with BGEX1 or BGE41 with BGE41A).

Each budget transaction enables you to create new budget lines as well as to modify, deactivate, reactivate, and delete existing budget lines in a particular budget structure. With the exception of the auto generation feature on Required Budget (REQBUD), the budget transaction is the only way to create new budget lines. As mentioned earlier in the Budget Controls, Allotments, and Budget Linking topics, the budget transaction is the only means of creating these types of records.

The budget transaction is different than accounting transactions in several aspects.

- Budget transactions contain an **Increase/Decrease** field that is used in conjunction with a **Dollar Amount** field to determine how to update a budget line. That dollar amount field cannot be

negative, where on accounting transactions, negatives as well as positives are generally permitted.

- Modifications to an accounting transaction line amount require the user to enter what the amount 'should be'. The application will determine the delta to post in order to get to that amount. On a budget transaction line, users enter a 'delta' amount that is used to update the budget line. Do not enter what the final amount in a stand alone bucket should be. The behavior of accounting and budgeting transactions in this respect is quite different than in prior Advantage applications.
- Budget transactions cannot have a **Transaction Function** of *Modification* or *Cancellation*. Therefore, there will never be a version number of a budget transaction greater than one.
- Budget transactions post to the Budget Journal only - not the Accounting Journal. Additionally, they do not post to the Budget Journal with posting lines but directly from the budget transaction lines.
- The accounting and posting lines from accounting transactions infer all rollups for the COA entered. Budget transaction lines and posting lines only contain the COA and rollup values entered.
- Budget transactions do not use the COA specialty tables that define valid/invalid combinations, required elements, and COA inferences because these tables are read by the *Accounting Line Editor* and budget transactions do not have accounting lines, but rather budget lines.
- Budget transactions do not use the attachment count feature whereby the number of attachments at a transaction tab is specified. The structure of the Budget transaction type prevents this. Attachments are still allowed and can be viewed for a transaction.

Budget transactions are organized in a different way than other transactions. The common Header tab is followed by the tab for the lowest level of the budget then the next lowest level and so forth ending with the top level. This bottom- up approach fits how data is entered at a lowest (or low) level and is then rolled up to create budget lines at higher levels.

If uploading budget transactions using the Upload Transaction (UPDOCS) feature, the Structure ID column must be added and populated in order to successfully upload this type of transaction. When creating a transaction online, the Structure ID (STRU\_ID) field is set by the system. However, this field must be manually set if uploading a transaction.

The Budget Transaction includes the following tabs:

- [Header](#)
- [Budget Level \(s\)](#)

## Specialty Actions

The following actions exist for a Budget Transaction:

- › [Load Constraints & Set Line Control](#)

The *Load Constraints* action, found in the Header tab menu, retrieves all controls (constraints and guidelines) that currently apply to the lines in the budget transaction. Upon retrieval, loaded controls can be viewed for each budget line by using the *Set Line Control* action, found in the row menu, opens a page that will allow you to adjust control

settings to make the severity greater or less than the default setting, and in some cases you can turn on or off the control for the allotment lines of a budget line.

Note: When budget controls are loaded into a budget transaction and not adjusted at the line level, there will be no line level control for those constraints or guidelines. The location where constraints and guidelines were inherited will supply all control information. Upon validation of the budget transaction, there will be warning messages issued for all constraints or guidelines that were not changed so that it is clear to the user that there will be no line level controls for those. You can delete controls from within the transaction to avoid the warnings, but that will not stop the control from applying to the budget line.

› Choose Revenue Line(s), Load Links, and Link

Not all expense budget structures are linked to a revenue structure to provide spending authority, but on those that are there is a *Choose Revenue Budget Links* action, found in the row menu, that will open a page where you can search for revenue budget lines to link. The *Link* action on that page for selecting revenue lines will link the revenue budget line (s) to your expense budget line.

The *Load Links* action, found in the row menu, is used when performing maintenance on existing links as it will bring all revenue budget lines linked into the budget transaction for review.

All links created within a transaction instance and from the *Load Links* action can be viewed by using the *Links* action found in the row menu. This will open a special page for review.

› Auto Allotment Distribution

The **Auto Allotment Distribution** action is available on the Header and Budget Level tab menus. It is initially hidden, but when made visible the action creates allotment lines using the Allotment Formula ID specified in the budget line. Upon creation, the allotment lines can be verified by using the **Allotments** action, found in the row menu, which opens a page that will allow you to create/view allotment records.

› Rollup Lines

A tab menu action exists, at those levels below the top-most budget level, to aid with data entry by taking the information entered at a lower level and using it to create lines at the upper level(s). Rollup Lines check to see if the line it is creating within the transaction already exists at the upper level on the budget inquiry page (not within the transaction). If so, the line is created to modify instead of add.

This action is not intended to work with Actions values of Delete, Deactivate, and Reactivate. Also note that any descriptive field (that is, all fields other than Action, Event Type, Dollar Amount, Increase/Decrease, and COA fields) are not rolled up to higher levels.

If a user makes any changes to the transaction after the rollup, that balancing is very likely not going to be in place any longer. The most common scenario is the entry of more than one line at a lower budget level, followed by a rollup action, and then a change of Chart of Accounts (COA) on one or more of those lower-level budget lines that now exists at the upper level. Changing a COA at a lower level that does not exist at the immediate upper level is harmless.

A few examples are given below:

- **Changing COA Example:** Entering a BGEX transaction where the BFY, Fund, Department, or Appropriation is changed on a level two line after a rollup. Changing Unit or Object on a level two line does not invoke a problem because changing those two COA does not invalidate any budget line previously created at level one by the rollup action. Changing any one of those first three COA or BFY means that there will be a level 1 line that may not have a level 2 line now, and there is a level 2 line that may not have a level 1 line now. If this budget transaction were submitted without any corrections done, then there would be two parent-to-child combinations that are out of balance. A control like #26 – *Parent Current Budget Must Equal Children* – would cause the transaction to reject, but that control is not required. A control like #24 - *Parent Current Budget Must Equal Or Be Greater Than Children*, may or may not catch the out of balance conditions, depending on prior activity.
- The changing of the Event Type field is another scenario. Just like changing BFY or COA, the rollup action will not correct this scenario. If the rollup action is taken, there will still be the original parent line created with the old event type and dollar amount, but there would also be a new line with the new event type and dollar amount. A user in this situation would have to know to delete the original parent line(s) just as with the COA change.
- **Changing Event Type Example:** Entering a BGEX transaction to transfer budget from budget line #1 to budget line #2, a user realizes after performing a rollup that the from and to event types were backwards. If that user changes the event types at level 2 only and submits, then there is a transfer from #1 to #2 at level 1 with a transfer from #2 to #1 at level 2. Should the user select the rollup action again, but fails to delete the original level 1 lines, there will be a net transfer of \$0 between lines #1 and #2 at level 1.
- **Changing Dollar Amount Example:** The changing of the Dollar Amount field is another scenario. If the user does not remember to take the rollup action again, then the transaction would not result in out of balance condition. Unlike the COA change, the rollup action would correct the Dollar Amount change.
- The application will track certain changes in a budget transaction after a rollup action is taken. That tracking starts over with a subsequent rollup action. A full list of items tracked is as follows:
  - Changes made to any key fields, COA or BFY, at the budget level that started the rollup action.
  - Changes made to Event Type at the budget level that started the rollup action.
  - Changes made to Dollar Amount at the budget level that started the rollup action.
  - Changes made to Increase/Decrease indication at the budget level that started the rollup action.
  - Deletion of a budget line from the budget level that started the rollup action.
  - Addition of a budget line at the budget level that started the rollup action or a level lower the one that started the rollup action.

The Rollup Lines action performs the following when invoked:

1. Performs a save on the entire budget transaction
2. Finds if budget lines exist on the transaction for a level greater than level 1
3. Deletes all budget lines, links, and line level controls above the lowest budget level entered on the transaction
4. Saves those deletions
5. Takes the budget line(s) at the lowest budget level and summarizes those lines on key elements that match the definition of the next upper budget level, retaining unique Event Type and Action values. Descriptive fields are not retained.
6. Inserts and saves the summarized lines created automatically. Repeats steps 5 and 6 with the current summary level for each progressively higher budget levels until level 1 is finished.
7. For each parent budget line at levels higher than the lowest in the transaction with an Action of New, a lookup is performed to the respective budget level to see if the line already exists or not. If it exists, the Action is set to Modify. If not, the Action is left as New.
8. Resets all change tracking fields used by the system to prompt a user that changes made since the last rollup may require another rollup.

## Header

The Budget transaction has two rarely used reporting fields that are unique to the Budget Transaction (see below). Refer to the Header topic in the *Transactions User Guide*, for information on the common fields found on the Header of transactions.

› Field Information

Field Name	Field Description
Start Date	A date that will default to all budget lines within the transaction. The system will infer the date with the 1st day of the fiscal year equal to any value entered in the Budget FY field. If the special Budget FY value of 9999 is used or the Budget FY field is left blank, the date will not infer. A manually entered date is only allowed if the header does not contain the Budget FY field.
End Date	A date that will default to all budget lines within the transaction. The system will infer the date with the last day of the fiscal year equal to any value entered in the Budget FY field. If Budget FY field is left blank, the date will not infer.  A manually entered date is only allowed if the header does not contain the Budget FY field.

The following three reference fields are displayed on the header of the budget transactions which can be generated from a Cost Accounting Setup (CAS) or Cost Accounting Modification (CAM) transaction for research and reporting purposes.

Field Name	Field Description
Referenced Transaction Code	The transaction code (CAS or CAM) through which the Budget transaction is generated.
Referenced Transaction Department	The department code associated with the header of the CAS/CAM transaction.
Referenced Transaction ID	The ID associated with the CAS/CAM transaction.

## Budget Level

The number of these tabs will vary by budget structure as will the names for each level. Not all fields listed in the table below are found on all budget transactions or even all levels within a single budget transaction. In addition to the **common accounting line transaction fields** found on the budget level tabs, there are several that are unique to the Budget Transaction. (Refer to the “Accounting” topic of the *Transactions User Guide* for information on common accounting fields.)

› Common Budget Level Field Information

Field Name	Field Description
Action	<p>A required value that will drive many edits and updates for a budget line.</p> <ul style="list-style-type: none"> <li>• <i>New</i>, the default value will cause the creation of a budget line on a particular budget level.</li> <li>• <i>Modify</i> is used when a budget line already exists and needs to be updated other than changing the active status of line.</li> <li>• <i>Deactivate</i> and <i>Reactivate</i> support updates to the active status (an inactive line does not allow any updates by accounting transaction and only allows reactivation by a budget transaction). The appropriate Event Type must be paired with the action and the Line Amount must be \$0.00.</li> <li>• <i>Delete</i> is used to delete a budget line, only after all the stand alone budget amounts for the budget line are zero. When a budget transaction with this action submits to the <i>Final</i> transaction phase, the budget line will be deleted from the</li> </ul>



Field Name	Field Description
	<p>budget level, leaving only the Budget Journal history for the budget line. The appropriate Event Type must be paired with the action and the Line Amount must be \$0.00.</p>
<p>Budget FY</p>	<p>A required field for those budget structures that display the Budget FY field. If left blank the field will default much like accounting transactions except where an accounting transaction will only populate that default when going to final, the budget transaction does it upon the first save of the budget line. A special value of 9999 can be used to define a multi-year budget line if that feature is configured for use.</p>
<p>Budget Reference</p>	<p>An optional text field for entering a legislative ID or other descriptive information about a budget line.</p>
<p>COA</p>	<p>Each budget level tab will contain different values and all must be entered on each budget line if a budget line is to be created or updated. In certain exception cases, rollup COA are inferred as part of data entry.</p> <p>In addition to being valid codes on their respective COA reference pages, codes must have the Budgeting indication selected. The inactive COA code edits done on accounting transactions do not apply to budget transactions. COA inference, combination validation, and required element pages do not apply to budget transactions either.</p>
<p>Contact</p>	<p>An optional field for specifying an individual as the contact person for a budget line. Valid values come from the Contact (CNTAC) reference page.</p>

Field Name	Field Description
Contact Name	The name associated with the selected contact code is inferred from the Contact reference data.
Debt ID	<p>An optional field found on budget transactions that control spending to allow you to enter the Debt ID of a Bond or Loan that provided funding to the budget line. The Debt ID is informational to explain ‘where’ the increase in budget availability came from. While the field shows choices for Leases, the primary types of debt that will be chosen are Bonds and Loans. There are limits on what ID values can be entered:</p> <ul style="list-style-type: none"> <li>• An Authorization ID cannot be entered.</li> <li>• A Loan Application ID cannot be entered.</li> <li>• The Debt Instrument Status must be active and not one of the preliminary values.</li> <li>• The Debt Instrument Status should not be one that is completed or closed.</li> </ul> <p>Please see the <i>Debt Management User Guide</i> for more information on these and other topics.</p>
Description	An optional long text field for entering descriptive text about a budget line.

Field Name	Field Description
Dollar Amount	<p>A required amount that will be used to update the budget amount identified by the posting code inferred from the Event Type selected. Whether the Dollar Amount will add to or subtract from the budget amount on the budget line will depend on the next field. Negative dollar amounts are not allowed.</p> <p>Changing the Name, Contact, Description, Reservation Type, Start Date, or End Date do not require an amount other than \$0.00 as do the <i>Deactivate</i>, <i>Reactivate</i>, and <i>Delete</i> Action values.</p> <p>A budget line can also be created with a zero amount to later have amounts added or serve just to define a valid budget line that will not have any spending controls. Other situations where \$0.00 can be the Dollar Amount:</p> <ul style="list-style-type: none"> <li>• When only an allotment line is being added or modified</li> <li>• Modification of a budget control at the line level</li> <li>• Creation, modification, or deletion of a link</li> <li>• Changing the Name, Contact, Description, Reservation Type, Start Date, or End Date values of a budget line</li> <li>• The Deactivate, Reactivate, and Delete Action values are used</li> </ul>
Fiscal Year	<p>Although a common transaction field, Fiscal Year on a budget line will default upon the first save of a budget line unlike on accounting transactions when it will only default upon going to final.</p>
Increase/Decrease	<p>A required indication that will determine if the Dollar Amount will be added to or subtracted from the budget amount identified by the posting code of the event type being used. The default for this field is <i>Increase</i>. Keep in mind that increasing a budget amount that is subtracted in the calculation of budget availability is really decreasing budget availability.</p>
Name	<p>An optional text field for assigning a budget line a name for descriptive or identification purposes. If left blank upon the creation of a budget line, the application will establish a name for the budget line. That name will be a concatenation of the Chart of Account elements used to define the budget name or other customized value. If left blank with any other Action value, the existing name will remain with the budget line.</p>

Field Name	Field Description
Period	<p>Although a common transaction field, Period on a budget line will default upon the first save of a budget line unlike on accounting transactions when it will only default upon going to Final.</p>
Reservation Type	<p>This field is displayed on those budget transactions where spending is controlled with a Budget FY. The optional field serves as one of the methods for withholding budget authority, and must be defined on the Reservation Type (RSRVT) reference page.</p> <p>Please see the “<a href="#">Budget Reserve</a>” topic for more information on this feature.</p>
Start Date End Date	<p>Optional dates primarily for reporting. Unlike the corresponding header fields that can default, these dates at the individual budget line do not default from the Budget FY field. They can, however, default from the header fields when populated there or from an Appropriation Unit entered on a budget line. Please refer to the “<a href="#">Inference of Start and End Dates on Budget Line</a>” topic for instructions on how to infer dates based on a COA such as Appropriation.</p> <p>The only use of these dates beyond reporting is by the cost accounting feature known as Budget Fiscal Year Front End Split (BFY FES). That feature will compare the Record Date of a transaction to any Start or End Date specified for a budget line read in the process. If equal to either date or between them (note either could be blank), then the process will look to see if the budget line is active. If so, the feature considers the budget line. If not active, the feature skips the record.</p> <p>Refer to the "BFY Staging Configuration" topic in the <i>CGI Advantage - Financial Administration User Guide</i> for information on how to control what can and what cannot happen against a budget line based on what day is being used.</p>

› Exception Budget Field Information

Field Name	Field Description
Funding Year	<p>An optional field found only on reimbursement budget transactions that is the first of a set of fields that will trigger a funding control edits. Funding Year is only allowed if the Event Type is one that updates the Awarded budget amount. Funding Year field is required if the Region and Funding Source ID are populated, or Funding Group is populated, or Funding Allocation ID is populated.</p> <p>When Funding Year and Region are populated, those two values and the Department and inferred Funding Source ID are used to edit that the Award is possible given the Available amount of the matching Funding Source Control (FSC) record. If no match is found the transaction will reject.</p> <p>When Funding Year and Funding Group are populated, those two values and the Department are used to edit that the Award is possible given the Available amount of the matching Funding Group Control (FGC) record. If no match is found the transaction will reject.</p> <p>When Funding Year is populated and Funding Allocation ID infers, those two values and the Department are used to edit that the Award is possible, given the Available amount of the matching Funding Allocation Control (FAC) record. If no match is found the transaction will reject.</p>
Region	<p>An optional field found to invoke Funding Source Control edits. The first is a check to see combination of Department, Funding Year, Region, and inferred Funding Source ID. The second is to edit that the Award is possible given the Available amount of that matching record.</p> <p>Region is only allowed if the Event Type is one that updates the Awarded budget amount. When Region is populated and a Funding Source ID is inferred, a Funding Year is required.</p>
Funding Group	<p>An optional field to invoke Funding Group Control (FGC) edits. The first is a check to see combination of Department, Funding Year, and Funding Group exists. The second is to edit that the Award is possible given the Available amount of that matching record.</p> <p>Funding Group is only allowed if the Event Type is one that updates the Awarded budget amount. When Funding Group is populated a Funding Year is required.</p>
Funding Source ID	<p>Funding Source ID is an inferred field from the Funding Line entered on the budget line when the Event Type is one that updates the Awarded budget amount. The inference comes from the one of three fields populated for the Funding Line: Federal Appropriation Number, Debt ID, or Other Funding Source ID.</p>

Field Name	Field Description
Funding Allocation ID	<p>Funding Allocation ID is an inferred field from the Funding Line entered on the budget line when the Event Type is defined to update the Awarded budget amount. When Funding Allocation ID is populated a Funding Year is required.</p>
FHWA Improvement Type	<p>FHWA Improvement Type is a field only found on level 2 of the Program Phase Reimbursable Budget 40 (BGPHR) transaction. This field captures the FHWA Improvement Type entered or inferred for a budget line. A value will infer first from the Program Phase (PHPRG) record, if defined there, that matches the Program and Phase entered on the budget line. If there is no default then a value will infer from the Program (PROG) record, if defined there, that matches the Program on the budget line. If setup in neither location, a valid value from the FHWA Improvement Type (IMPTYP) reference page can be entered.</p> <p>In the event an existing value that did not default from PROG or PHPRG needs to be cleared out for a budget line, a special value of BLNK can be entered on a <i>Modify</i> budget line.</p>
Allotment Distribution Amount	<p>For those budget structures with allotment functionality, this amount is displayed on the tab of the budget level e budget level allotted. The primary use of the amount field is to facilitate the definition of allotment lines with only a percentage value and let the application determine the actual allotment line amounts by multiplying that percentage against the Allotment Distribution Amount. If that amount is \$0.00, the application will multiply the percentages against the Dollar Amount instead.</p> <p>The secondary use of the amount field is to provide an amount to edit the sum of allotment line amounts against. In the case that the allotment line amounts were manually entered, the amount serves to check that the total amount allotted was what was intended. If the amount is \$0.00, then the sum of the allotment line amounts cannot exceed the Dollar Amount.</p> <p>The amount defaults to \$0.00. It can even exceed the Dollar Amount. In the case where the full amount of a previous budget transaction was not allotted, a subsequent transaction will need to have an amount greater than the Dollar Amount to facilitate allotting the remainder.</p>
Allotment Formula ID	<p>For those budget structures that have allotment functionality on the budget level allotted, this field can be used with the Auto Allotment Distribution action (after making both visible) to automatically create allotment lines based on setup on the Allotment Formula (AFOR) page that distributes the Allotment Distribution Amount. If that amount is \$0.00 then the Line Amount is distributed.</p>

Field Name	Field Description
Transfer Limit Editing	For those budget structures designed to limit transfers out to a percentage of a 'base budget' amount, this field is used to define whether an individual budget line is subject to the edit. The choice of <i>Enabled</i> will force the budget transaction to update the Appropriation Transfer Limit. A choice of <i>Disabled</i> will cause the system to skip those updates. The third choice, <i>Unchanged</i> , is used for all budget line adjustments where the current setting is not being changed. (See the " <a href="#">Advanced - Unique Features</a> " topic for more information on this field that is initially hidden).
Text 1 Text 2 Text 3 Text 4	A number of generic, optional text fields are available for select structures to capture additional information beyond Name, Budget Reference, and Description for reporting reasons either as groupings, descriptive details, or interface needs. The values are additionally stored in the Budget Journal (JBUD) and select inquiry pages. The fields are delivered as optional and hidden, so they must first be made visible on Configure Page (DESIGNER) and then any required editing rules applied through Configurable Validations (BORULE).  The lengths of each are as follows: 250, 250, 1500, and 250. If desired, a Configurable Rule (BORULE) can be used to define a shorter maximum length, a minimum length, a data type, or even a list of valid values.
Budget Classification	An optional field, supported by the Budget Classification (BUDCLSF) page, is available for select structures to classify budget line updates using pre-defined classifications. The value is additionally stored in the Budget Journal (JBUD).  As the field is optional, a Configurable Validation is needed if it is to be required for all budget line updates based on the Line Action and perhaps the Event Type.
Decimal 1	An optional generic decimal field to capture information such as FTE on the budget line. The values are additionally stored in the Budget Journal (JBUD) and select inquiry pages.  The fields are delivered as optional and hidden, so they must first be made visible on Configure Page (DESIGNER) and then any required editing rules applied through Configurable Validations (BORULE).

Refer to the "[Specialty Actions](#)" topic for information on the actions available on this tab.

## Controls

Although not a visible tab within budget transactions, there is a page that opens from the Set Line Control choice in the row menu. The page will be empty until the *Load Constraints* action is taken from the Header tab menu.

> Field Information

Field Name	Field Description
Name	Inferred name of a budget control as defined on the Budget Control Administration reference page.
Formula	Inferred formula of a budget control as defined on the Budget Control Administration reference page.
Violation Action	The inherited violation action is displayed from the set of budget control setup pages that will be used for the budget control if not changed. Changing this action on a budget transaction is called 'setting a line control'.
Include Allotments	For those budget structures that have allotment functionality designed into them, this additional indication will exist for the control page that opens from the allotted budget level tab. When selected, the budget control will apply to the allotment lines of the budget line. This indication functions for all controls that are constraints. Not all guideline controls will use the indication and it should not be checked for those. Guidelines that ensure parent to child line amount controls will not use the indication as the budget transaction keeps allotment line amount from exceeding the parent budget line. Those guidelines that the certain budget amounts are greater than zero will use this indication.

## Allotments

Although not a visible tab within budget transactions, there is a page that opens from the *Allotments* choice found in the row menu of those expense budget levels with allotment capability.

> Field Information

Field Name	Field Description
BFY	The inferred BFY value from the budget line being allotted is displayed. From this value, the appropriate Allotment Options record will be found to provide an Allotment Frequency and Accumulation option.
Period	Each allotment line will have a required allotment period. What the value in that field can be and where it is validated is dependent on the Allotment Frequency established for the budget structure.



Field Name	Field Description
	<ul style="list-style-type: none"> <li>• <i>Accounting Period</i> - Allotment periods can be defined to the same values established on the Allotment Period (APD) reference page. When editing accounting periods entered, the Budget FY of the allotment line is used as Fiscal Year.</li> <li>• <i>Quarterly</i> - Allotment periods can be defined to the four common values for quarters: 1, 2, 3, and 4 with a special quarter of 5 for when accounting transactions have a Fiscal Year greater than Budget FY.</li> <li>• <i>Semi Annual</i> - Allotment periods can be defined to one of two semi annual values: 1 and 2 with a special period of 3 for when accounting transactions have a Fiscal Year greater than Budget FY</li> <li>• The determination of period 1 or 2 is the number of accounting periods defined for the Fiscal Year equal to the Budget FY divided by two. If there are an odd number of periods, then the extra period will go in the 1st semi annual period.</li> <li>• <i>Annual</i> - Allotment periods can be defined to the same values established on the Fiscal Year (FY) reference page.</li> </ul>
Percentage	<p>An optional field exists to define a percentage for the application to automatically calculate the Allotment Amount from the Allotment Distribution Amount (if not \$0.00) or the Dollar Amount of the budget line being allotted. If used, the sum of the percentages of all allotment lines for a budget line within the budget transaction (already established allotment lines are not considered) must total to be 100.00% or less.</p>
Allotment Amount	<p>The amount to be used to update the allotment line in the budget amount identified by the posting code inferred from the event type used on the budget line of the allotment line. This amount will default to \$0.00.</p>
Increase/Decrease	<p>A required indication that will determine if the Allotment Amount will be added to or subtracted from the budget amount identified by the posting code of the event type being used. The default for this field is <i>Increase</i>. Keep in mind that increasing a budget amount that is subtracted in the calculation of budget availability is really decreasing budget availability.</p>

## Links

Although not a visible tab within budget transactions, there is a page that opens from the *Link* choice in the row menu of those expense budget levels with linking capability.

> Field Information

Field Name	Field Description
Floor	A required amount that will establish a threshold to be met before any revenue can contribute to budget availability of a linked expense budget line. Floors cannot be negative amounts and the field is set to \$0.00 by default, which means 'no floor'.
Ceiling	An optional amount that will establish a limit where funding should stop after that amount of revenue exists. Ceilings cannot be negative and the field is blank by default, which means 'no ceiling'.
Link %	A required percentage that will allow a portion or all revenue from a revenue line to go towards funding an expense budget line. Percentages other than 100% are most commonly used when revenues go to fund more than one expense budget line, but can exist for a revenue budget line to fund a single expense budget line with a set portion of every revenue dollar. Negative percentages are not allowed and the field is set to 100.0000% by default.
Link Action	<p>One of three actions is required for each link.</p> <ul style="list-style-type: none"> <li>• <i>New</i> defaults when a link is added with the <i>Choose Revenue Line(s)</i> action and enables the creation of the link.</li> <li>• <i>Modify</i> defaults when a link loaded by the <i>Load Existing Links</i> action and enables the link updated with new values and also the old link being written to the Link History (LNKHIST) inquiry page.</li> <li>• <i>Delete</i> has to be manually chosen and enables the deletion of link and the link is written to Link History.</li> </ul>

## Choose Revenue Budgets

Although not a visible tab within budget transactions, there is a page that opens from the *Choose Revenue Line(s)* choice in the row menu of those expense budget levels with linking capability. The page displays the revenue budget lines available by key fields with the ability to select multiple lines. With your selection made, choose the *Link* action available on the page so the system brings them into your budget transaction. Additional actions on the page allow for quick selection of all rows on a page (Select All on Page) and to de-select all lines on a page (Clear All on Page.)

## Common Business Tasks

The following common business tasks can be accomplished using a budget transactions or budget inquiry page.

Once budget structures are defined and items such as budget tracking amount fields and control options have been appropriately configured, the loading of budget lines into CGI Advantage can begin. This initial loading and subsequent maintenance of those budget lines should always be done using a budget transaction. These budget transactions can be loaded in XML file format, using the System Maintenance Utility, or manually created by users online.

To demonstrate many of the features mentioned in the user guide earlier, the following sections given below will use many of the delivered budget structures and pages to provide examples. The examples will not be as detailed as a training manual, but will provide a general overview of steps along with pertinent instructions and helpful hints.

- [Budget Line Creation](#)
- [Budget Line Maintenance](#)

## Budget Line Creation

The Budget Transaction Type can be used to perform many different budget line creation activities. Each budget structure has at least one Budget Transaction Code used for those activities.

- [Create Budget Lines](#)
- [Set a Budget Line Control](#)
- [Allot a Budget Line](#)
- [Link a Revenue Budget Line to an Expense Budget Line](#)

## Create Budget Lines

The following depicts the online creation of multiple budget lines as that is the most common scenario. If creating only a single budget line, then the rollup step is not needed.

To create budget lines at multiple budget levels, perform these steps:

1. Create an instance of the desired budget transaction code.
2. Skip the Header tab and navigate to the Budget Level tab listed next.

Header information defaults normally to the current values in almost every case with the exception of a future or past Transaction Date, if allowed.

3. Insert a new line.
  1. Leave the defaulted **Action** value of *New*.
  2. Leave the **Event Type** field to default to *Adopt* (BG01 for spending budgets, BG23 for revenue budgets, or BG22 - Award for reimbursement budgets). If

there is no default or another event type is to be used, manually enter the value or use the pick.

3. Enter a **Dollar Amount** for the new budget line. That amount can even be zero if the budget line is only for tracking and not controlling.
  4. Enter values in each of the COA fields that will define the new budget line. Use any picks as necessary. None of these fields can be left blank.
  5. No other fields are mandatory but can be populated if desired.
  6. Repeat the above sub steps as needed to create additional budget lines or use *Copy* and *Paste* actions to create additional lines, changing fields on copied lines as necessary.
4. To create lines at the higher budget levels, use the *Rollup Lines* action.
  5. Validate the transaction.
  6. If errors exist, fix the errors and repeat Step 5. If no errors exist, then continue with Step 7. (See the Note below, if incorrect values were entered.)
  7. Submit the transaction.

**Note:**

If you find that the amount entered for the line at the lowest level was incorrect:

1. Enter the correct **Dollar Amount**.
2. Use the *Rollup Lines* action again.
3. Repeat Step 5 above.

If you find that an incorrect COA value was entered on the line at the lowest level:

1. Correct the COA at the lowest level budget line.
2. Use the *Rollup Lines* action again.
3. Repeat Step 5 above.

## Set a Budget Line Control

The following depicts the online creation of a budget control specific to a single budget line that is different than what is established through budget setup. This task can be a sub task to "[Create Budget Lines](#)" or "[Modify Budget Lines](#)".

To set a budget line control, perform these steps:

1. Create an instance of the desired budget transaction code.
2. Skip the Header tab and navigate to the appropriate Budget Level tab.
3. Insert a new budget line.
  1. Set the **Action** value to Modify.

2. Leave the Event Type field to default to Adopt (BG01 for spending budgets, BG23 for revenue budgets, or BG22 - Award for reimbursement budgets). If there is no default or another event type is to be used, manually enter the value or use the pick.
  3. Leave the **Dollar Amount** to default to \$0.00.
  4. Enter values in each of the COA fields that define the budget line. Use any picks as necessary. None of these fields can be left blank.
4. Navigate back to the Header tab and take the *Load Constraints* action.
  5. Navigate back to the appropriate Budget Level tab.
    1. Select the *Set Line Control* action
    2. From the listing of controls, select the row(s) which need adjusting and set the **Violation Action** to the desired value.
    3. Close the window of controls.
  6. Validate the transaction.
  7. Notice the informational message for controls not changed.
  8. Submit the transaction.

## Allot a Budget Line

The following depicts the online creation of allotment lines at the same time a budget line is created.

To allot a budget line, perform these steps:

1. Create an instance of the desired budget transaction code.
2. Skip the Header tab. Enter and navigate to the Budget Level tab that is allotted.
  1. Click **Header** from the Secondary Navigation Panel.
  2. No particular Header field is mandatory nor is any required for this task
  3. If the current Application Date should not be used, then manually enter the correct date in the **Transaction Date** field.
  4. If the default **Budget Fiscal Year** should not be used, then manually enter the correct year, (that is, prior year or next year), in the **Budget FY** field. Any manually entered year will be used on all budget lines being created unless overridden at the budget line level.
  5. If the default **Fiscal Year** should not be used, then manually enter the correct year, (that is, prior year or next year), in the **Fiscal Year** field. Any manually entered year will be used on all budget lines being created unless overridden at the budget line level.
  6. If the default Accounting Period should not be used, then manually enter the correct accounting period, (that is, prior period or next period), in the **Period**

field. Any manually entered period will be used on all budget lines being created unless overridden at the budget line level.

3. Insert a new budget line. Complete the appropriate budget level tab.
  1. Leave the defaulted **Action** value of *New*. (*Modify* if creating allotment lines for an existing budget line.)
  2. Leave the **Event Type** field to default to *Adopt* (BG01 for spending budgets, BG23 for revenue budgets, or BG22 - Award for reimbursement budgets). If there is no default or another event type is to be used, manually enter the value or use the pick.
  3. Enter a **Dollar Amount** for the new budget line. If allotting for an existing budget line where you do not wish to adjust that budget line, enter \$0.00 for Dollar Amount and enter the total amount you wish to allot in the **Allotment Distribution Amount**. If updating the budget line so that Dollar Amount is not zero but you do not wish to allot that amount, enter the total amount you wish to allot in the Allotment Distribution Amount.
    4. Enter values in each of the COA fields that will define the new budget line. Use any picks as necessary. None of these fields can be left blank.
4. Choose the *Allotments* action to open Allotments page.
  1. Insert a new allotment line.
  2. Enter the **Allotment Period**.
  3. Leave the **Increase/Decrease** field to default to *Increase*. Now for the amount of each allotment line, there are two methods that cannot be combined.
  4. Enter a percentage in the **Percentage column** of each allotment line so that the total of all lines is 100%.
  5. Enter an amount in **Allotment Amount**. Repeat these Sub Steps for each allotment line needed.
5. Validate the transaction
6. If any errors are issued, fix the errors. If no errors exist, then continue with Step 6.
7. Submit the transaction.

Note: Allotment lines can alternatively be created automatically using Allotment Formula. Please refer to the "[Allotment Formula](#)" section for more details.

## Link a Revenue Budget Line to an Expense Budget Line

The following depicts the online creation of a link between existing revenue and spending budget lines. This task can be a sub task to "[Create Budget Lines](#)", or "[Modify Budget Lines](#)".

1. Create an instance of the desired budget transaction code.
2. Complete the Header tab and navigate to the Budget Level linked.

3. Insert a new budget line.
  1. Set the **Action** value to *Modify*.
  2. Leave the **Event Type** field to default to *Adopt* (BG01 for spending budgets, BG23 for revenue budgets, or BG22 - Award for reimbursement budgets). If there is no default or another event type is to be used, manually enter the value or use the pick.
  3. Leave the **Dollar Amount** default of *\$0.00*.
  4. Enter values in each of the COA fields that will define the existing expense budget line. Use any picks as necessary. None of these fields can be left blank.
  5. Use the *Choose Revenue Line(s)* option to open the Choose Revenue Line page.
  6. Using the search window that appears, enter COA to locate the revenue budget line for linking.
  7. Select the revenue budget line.
  8. Use the *Link* action.
  9. Close the Choose Revenue Budget window.
4. Select the **Choose Revenue Line(s)** choice from the row-level menu under Related Pages.
  1. Change the **Floor** from the default of *\$0.00* if the revenue budget line has to reach a certain point before funding the expense budget line.
  2. Set the **Ceiling** to a value if the revenue budget line should stop funding the expense budget line at a certain point.
  3. Set the **Link %** field if the amount of funding from the revenue budget line should not be dollar for dollar.
5. Locate the revenue budget data you need, use the selection box to indicate which line(s) to link, then choose the *Link* action above the grid.
6. Return to your expense budget transaction.
7. Select the *Link* choice under Related Actions in the row-level menu to review and adjust the settings of your link(s).
8. Validate the transaction.
9. If any errors are issued, fix the errors and repeat Step 8. If no errors exist, then continue with Step 10.
10. Submit the transaction.

## Budget Line Maintenance

The Budget (BG) Transaction Type can be used to perform many different budget line creation activities. Each budget structure has at least one Budget Transaction Code used for those activities. Each budget structure has at least one Budget Transaction Code used for those activities. The scenarios below all build on the same ones from Budget Line Creation but diverge into a different scenario because of data differences. Each will start at that point.

- [Modify Budget Lines](#)
- [Modify an Allotment Line](#)
- [Modify a Budget Link](#)
- [Deactivate/Reactivate a Budget Line](#)
- [Delete a Budget Line](#)
- [Transfer Spending Budget Authority](#)

### Modify Budget Lines

The following depicts the online modification of amounts of budget lines at multiple budget levels. To perform the same updates to a single level structure or for a single budget line on a multi-level structure, the rollup step below would not be necessary.

To modify budget lines, perform the same steps in the [Create Budget Lines](#) task to the point of entering data on the new budget line inserted:

1. Set the **Action** to *Modify*.
2. Set the **Event Type** field to *Amend* (BG03 for spending budgets, BG25 for revenue budgets, or BG22 - Award for reimbursement budgets). If there is another event type to be used, manually enter the value or use the pick.
3. Enter a **Dollar Amount** for the modified budget line.
4. Enter values in each of the COA fields that define the existing budget line. Use any picks as necessary. None of these fields can be left blank.
5. No other fields are mandatory but can be populated if desired.
6. Repeat steps 1 to 5 as needed to create additional budget lines or use *Copy* and *Paste* actions to create additional lines, changing fields on copied lines as necessary.

The modification scenario picks back up at the 'Rollup Lines' step of the create scenario.

### Modify an Allotment Line

The following depicts the online modification of allotment lines at the same time a budget line is modified. This task can be a sub task to "[Modify Budget Lines](#)". The task can also be performed alone without a change to a budget line.



To modify allotment lines, perform the same steps in the [Allot Budget Line](#) to the point of entering data on the new budget line inserted:

1. Set the **Action** to *Modify*.
2. Set the **Event Type** field to *Amend* (BG03 for spending budgets, BG25 for revenue budgets, or BG22 - Award for reimbursement budgets). If there is another event type to be used, manually enter the value or use the pick.
3. Leave the **Dollar Amount** as the default value of \$0.00. It could be set, but in this example we will just allotting budget authority previously amended but not fully allotted.
4. Enter \$10,000 in the **Allotment Distribution Amount** field.
5. Enter values in each of the COA fields that define the existing budget line. Use any picks as necessary. None of these fields can be left blank.

Choose the *Allotments* action to open the Allotments page.

1. Insert a new allotment line.
2. Enter the **Allotment Period** of 1.
3. Leave the **Increase/Decrease** field to default to *Increase*.
4. Enter \$10,000 in the **Allotment Amount** field

The modification scenario picks back up at the 'Validate the budget transaction step of the create scenario'.

## Modify a Budget Link

The following depicts the online modification of a link between revenue and spending budget lines. This task can be combined with others as a sub task.

To modify allotment lines, perform the same steps in the [Link a Revenue Budget Line to an Expense Budget Line](#) to the point of entering data on the new budget line inserted:

1. Set the **Action** value to *Modify*.
2. Set the **Event Type** field to *Amend* (BG03 for spending budgets, BG25 for revenue budgets, or BG22 - Award for reimbursement budgets). If there is another event type to be used, manually enter the value or use the pick.
3. Leave the **Dollar Amount** as the default value of \$0.00.
4. Enter values in each of the COA fields that will define the existing expense budget line. Use any picks as necessary. None of these fields can be left blank.

At this point the steps differ.

1. Choose the *Load Existing Links* action in the row menu.
2. Choose the Link action from the row menu to open the Links window.
  1. To remove the erroneous link, select the line and set the **Link Action** to *Delete*.

2. To adjust the other link, select the line and set the **Link %** field to *50.000%* so that 50 cents of every revenue dollar can fund spending.
3. Save the update and close the Links window.

The modification scenario picks back up at the 'Validate the budget transaction step of the create scenario.

## Deactivate \ Reactivate a Budget Line

The following depicts the online deactivation and later reactivation of a single budget line:

**Part 1:** To deactivate a single budget line at a single level, follow the same set of steps as the Modify Budget Lines task except:

1. Set the **Action** to *Deactivate*.
2. Set the **Event Type** field to *Deactivate - BG08*.
3. Set the **Dollar Amount** to *\$0.00*.

**Part 2:** To reactivate a single budget line at a single level, follow the same steps as the deactivate steps above, except:

1. Set the **Action** to *Reactivate*.
2. Set the **Event Type** field to *Reactivate - BG09*.

## Delete a Budget Line

The following depicts the online deletion of a single budget line. In order to delete a budget line, all the amounts directly updated by accounting and budget transactions (not the calculated ones) must be \$0.00 for the deletion to succeed. This sample task will contain two transactions. The first to bring the only budget amount, Adopted, to \$0.00. The second transaction will delete the budget line.

**Part 1:** To bring the **Adopted Amount** to *\$0.00*, perform the same steps as Modify Budget Lines with the following exceptions:

1. Set the **Event Type** field to *Adopt* (BG01 for spending budgets, BG23 for revenue budgets, or BG22 - Award for reimbursement budgets). If there is no default or another event type is to be used, manually enter the value or use the pick. Here event type may differ depending on the amounts of a budget line, so the choice should match the budget amount that needs to be reduced to \$0.00.
2. Set the **Dollar Amount** to *\$10,000.00*. This is the amount currently adopted for the budget line.
3. Set the **Increase/Decrease** field to *Decrease*.

**Part 2:** To delete the budget line, perform the same steps as Modify Budget Lines with the following exceptions:

1. Set the **Action** to *Delete*.
2. Set the **Event Type** field to *Delete - BG10*.

## Transfer Spending Budget Authority

The following depicts the online modification of two budget lines where budget authority is transferred from one budget line to another. Please note there can be edits or approval routing in place to prevent the transfer between budget lines with different Funds or other COA values.

To transfer spending budget authority from one budget line to another budget line, perform the same steps as Modify Budget Lines with the following exceptions:

1. On the budget line losing authority, set the **Event Type** field to *Transfer Out* (BG07 or BG22 - Award for reimbursement budgets).
2. Enter a **Dollar Amount** for the modified budget line.
3. Leave the **Increase/Decrease** field to default to *Increase*.
4. Enter values in each of the COA fields that define the existing budget line to be transferred from. Use any picks as necessary. None of these fields can be left blank.
5. Click **Insert New Line** to create the second budget line.
6. Set the **Action** to *Modify*.
7. Set the **Event Type** field to *Transfer In* (BG06 or BG22 - Award for reimbursement budgets).
8. Enter a **Dollar Amount** for the modified budget line.
9. Leave the **Increase/Decrease** field to default to *Increase*.
10. Enter values in each of the COA fields that define the existing budget line to be transferred to. Use any picks as necessary. None of these fields can be left blank.
11. The scenario picks back up with the '**Rollup Lines**' step of the basic modification scenario.

## Inquiries

This topic includes all of the inquiries used in the Budgeting area.

- [Budget Structure Summary](#)
- [Budget Structure](#)
- [Budget Journal](#)
- [Budget Level Inquiries](#)
- [Budget Level Summary](#)
- [Link History](#)
- [Summarized Budget Activity](#)

## Budget Structure Summary

This Budget Structure Summary (BUDSTS) page lists the budget structures that have been designed for your implementation of CGI Advantage. On this page, you can select a budget structure and view its attributes, including budget levels by using the Budget Structure row menu option.

## Budget Structure Inquiry

This Budget Structure (BUDST) page allows you to view detailed information for each budget structure. Summary information for each of the budget structure's budget levels, including the Chart of Accounts elements that define each level, is also displayed on this page. Many options are listed in the row menu that transition to different setup pages, each described in detail in the later subsections of the Understanding Budget Components section of Advanced - Setup.

## Budget Journal

All budget transactions that reach the *Final* transaction phase make an update to the Budget Journal (JBUD) with a record of each budget line and allotment line. This journal is the primary source of information to determine budget amounts for reporting, as the budget level inquiries contain data that is current and the journal can produce totals with time ranges and as-of-dates.

As budget transactions are not intended to remain in the Transaction Catalog for very long, because they cannot be modified or cancelled like accounting transactions, the Budget Journal becomes the audit trail for a budget line.

The journal contains the chart of account elements, rollups, descriptive fields, and flags on the budget transactions so all budget transaction codes for all budget structures write to this one journal. Since all structures are recorded on a single journal, searching the Budget Journal is facilitated by fields for Structure and Level.

Unlike the Accounting Journal and other journals, determining what posts to this journal does not involve any Posting Code reference page setting. The budget transaction type automatically writes all budget and allotment lines to the journal.

When a record is written, only the COA values that defined the budget line are recorded. Unlike the Accounting Journal, the budget transaction and journal do not record the historical rollups for element codes at the time the element code was used. Also, there are no ledgers defined for the Budget Journal. The budget level pages are actually ledgers defined at either the budget fiscal year or inception-to-date level.

## Budget Level Inquiries

Each level of each budget structure above the audit level (tracking transactions which have updated the budget structure) has an online inquiry page.

Each inquiry contains a summary grid of budget lines with scalar portions that displays details of a selected budget line in the grid. Among the fields shown in the scalar sections are two sets of amounts. One is of those amounts updated by the budget transaction with calculations of those same amounts. The other section is those amounts updated by accounting transactions, calculations of those same amounts, and calculations of both types of amounts. Note: there may be amount fields that are not visible that need to be configured on Configure Page (DESIGNER). The remaining section of the inquiry page includes the key fields, descriptive fields, and flags. These sections vary by type of budget and in some cases there are unique features available to only a single budget structure. Please see the sub section called [Budget Levels](#) in the Advanced - Setup as there is a table there that describes each baseline structure and any unique features of a structure.

These inquiries are used to provide the latest totals for a budget line as they are updated in real-time with transaction processing. In addition to those totals, the budget inquiries have a number of small windows of information that open from symbols next to the amounts and items in the Related Pages section of the row menu:

- The icon following each calculated amount will show you the formula of that calculated amount.
- The icon following each stand-alone amount will show you the amount of pending increases, pending decreases, and accepted amount totals for that stand alone amount.
- Selecting the stand-alone budget amount itself will open a window that displays all non-zero transactions that have updated that stand alone amount.
- The **Budget Query \$0** listing in the row menu will transition you to the Budget Journal and perform an automatic search for all journal records against that budget line where the Dollar Amount on the budget transaction was \$0, as those cannot be seen in the window that shows non-zero transactions.
- The **Budget Line Controls** listing in the row menu will open the Control Formula View window to show you any line-level controls that have been set for a budget line.
- The **Linked Revenue** listing in the row menu will open the Link Review – Expense to Revenue window that will display all links established for an expense budget line. Not all budget inquiry pages show this option.
- The **Supported Expense Budgets** listing in the row menu will open the Link Review – Revenue to Expense window that will display all links established for an expense budget line. Not all budget inquiry pages show this option.
- The **Allotments** listing in the row menu will open the Allotments window, which closely resembles a budget inquiry, to show the allotment lines of a budget line. Not all budget inquiry pages show this option.

- The **Next Level** and **Previous Level** row menu options will transition you down or up to another budget inquiry. These are only displayed if navigation is available in either direction.

- The delivered page codes for these inquiries are all structured the same:

**BQ** (Budget Query) + **###** (Structure ID) + **LVL** (Budget Level) + **##** (Level ID) =

BQ30LV1 = Budget Structure 30 Level 1

- Download Action

There is a download action available on this page that has a 2000 line limit. Just as transactions are not listed online that have had a net impact of zero on a budget line, the download will not display those either. This is a result of the download being only the set of records returned in the online query. For example, the entry of an accrued expenditure on a payment request transaction that is then cancelled before being disbursed will not be listed as any update to accrued expenditures from the first version that was reversed on the cancellation.

The delivered template (BUD\_TMPL.xlsx) for the download can be changed to remove or add columns. When adding columns, the audit or activity budget level of the budget structure is the data source for the download.

## Budget Level Summary

A number of budget structures were designed with a summary inquiry page that is different from the normal budget inquiry page. This inquiry page is used to combine the amounts of many different budget lines to see both a summary total for a 'primary' set of keys with detail summaries at a 'secondary' key. For example you can see the total budget for a Fund and Department combination over each budget years (primary set of keys is Fund and Department) with a breakout of year-over-year amounts for the Fund and Department combination (secondary key of Budget FY). From the second set of summary records you can see how much budget availability and spending totals have fluctuated over the years.

Each summary page includes two tabs:

- The first presents the search criteria and a table of summarized data for the data values entered in the search fields. In the absence of a wildcard (\*) or comma separated values, the first grid will have only one record. Multiple records may only be returned when the wildcard or comma separated values are used to browse.
- The second presents summarized data for the different code found in the budget line field selected in the Detail dropdown. In this section, it is very likely that multiple rows will be returned.

At the bottom of each summary page is a hyperlink that will transition a user to the budget level being summarized while performing a search on that budget level for all records that match the COA of the record selected in the grid.

If a summary page exists for a budget structure, it can be found by matching the following naming conventions for the budget structure (the first ###) and the budget level (the second ##):

**SUM** (Summary) + **###** (Structure ID) + **L** (Level) + **##** (Level ID) where the \* is replaced by an E if an expense budget, R if a revenue budget, A if an appropriation budget, and P if a program budget = ESUM80L2 = Budget Structure 80 Level 2 ESUM.

## Link History

The Link History (LNKHIST) inquiry page stores all old links, deleted ones and the pre-modified state of updated ones. The inquiry is used to explain why linked revenue amounts have changed at certain times due to reasons other than accounts receivable activity. For example, an expense budget has a negative un-obligated amount. This page would show that a link was deleted for that expense budget, explaining why that budget had the money to spend at one time. In addition, this page records all modified and deleted links with a date and time stamp of when the link was modified/deleted, as well as the Transaction Code, Department, ID, and Version that performed that modify/delete action.

## Summarized Budget Activity

The Summarized Budget Activity (SBA) inquiry page is for users who want to select specific lines to roll budgets dollars. Selection on this inquiry page is done when the COA selection criteria on the Parameters for Budget Roll (PBRP) reference page will not suffice. Those records marked as 'selected' (**Selected** is Yes) will have lines created on a budget transaction to move budget dollars out of a past year and into a new year. This is not a common inquiry page used by many users.

The following three points are important to understand before searching using the Budget Line field:

- The ordering of fields in the Budget Line concatenation is according to the lowest required level of the budget structure used in the Load SBA job. See the Budget Structure page for that order.
- Searching is facilitated by the asterisk (\*) between the forward slashes (/). Entering a value and leaving slashes out, searches all fields concatenated for that value.
- There is a space after each forward slash (/). It is important to remember to include this space when searching.

The **Mark All Selected** and **Mark All Not Selected** grid level actions allow you to update all records displayed in the grid (not every record on the table). The **Save** or **Save and Close** actions then finish the update. To apply the same action to records on other pages in the grid, you must navigate to each page in the grid and apply the same action.

## Reference Pages

This topic includes the reference pages used in the budgeting area that are outside of what is considered 'budget configuration'. The reference pages considered budget configuration are included in the Advanced Setup section.

- [Reservation Type](#)
- [Parameters for Budget Roll Process](#)
- [Allotment Formula](#)
- [Budget Classification](#)

## Reservation Type

The Reservation Type (RSRVT) reference page allows you to establish and maintain reservation types. The attributes of a reservation type are its description, fiscal year and reservation rate. These values are then selected on the budget transactions of budget structures that track spending by a Budget FY. The attributes of the reservation type selected are used to calculate the Budget Reserve field found on the budget inquiry page. Use of this feature requires setup that omits that amount of Budget Reserve from what is considered available (for example, Current Budget).

Changing the percentage on a record on this reference page will result in all budget lines with that Reservation Type to be updated. For an example, a Reservation Type of 2% setup to be used on travel budget lines would hold back 2% from spending, and a change from 2% to 5% would hold back an additional 3%. Likewise a change from 2% to 0% will release all funds withheld.

## Parameters for Budget Roll Process

The Parameters for Budget Roll Process (PBRP) reference page allows you to establish and maintain a set of online parameters that will be read by the Budget Roll report job, the Budget Roll chain, and the Open Activity and Budget Roll chain. These parameters are used in addition to the ones directly entered into any of those three system processes.

## Allotment Formula

The Allotment Formula (AFOR) reference page allows you to establish and maintain allotment formulas, which are used to automatically create allotment lines. The allotment formulas can be set up for a Budget Structure and BFY while allotment frequency is inferred from the Allotment Options page. Allotment periods and percentage are defined depending on allotment frequency. The Allotment Formula ID is then selected on the budget transactions that have allotments. The formula selected on the budget transaction is used to create the allotment lines on applying the action **Auto Allotment Distribution**.

The periods should be defined matching the frequency, for example, when lines are allotted Quarterly four or five periods (in case of adjustment periods) need to be defined. Similarly, allotment percentages should total to 100%. The Budget transaction will perform the period and percentage validations. Therefore, if set up is incorrect, multiple budget transactions may fail and should be re-loaded after making updates to allotment formula.



## Budget Classification

The Budget Classification (BUDCLSF) reference page allows the definition of classifications that can be assigned to certain or all budget line updates to capture any necessary information on a reason, authority, or any other need. The Active indication can help control what classification should no longer be used with an edit and controls filtering of inactive values when picking a value. Not all budget structures include the Budget Classification field on the respective budget transaction, and when available, it is initially hidden.

## Advanced - Setup

The Budget Control feature of CGI Advantage allows the tailoring required to meet your accounting procedures, budgeting practices, and reporting requirements. Review of the various options and controls available is part of the configuration of any application before going live. What functionality will be used and how' should be decided before data conversion begins and especially before system users begin entering transactions. It is recommended that you do not change many options or controls in the middle of the fiscal year and some should never be changed after going live. If changed, the integrity of your accounting records may be jeopardized. This topic of the user's guide will detail which options can be changed at any time, only at the start of a new year, or never.

- [Budget Control Setup Overview](#)
- [How Chart of Accounts Elements Work with Budgets](#)
- [Understanding Budget Components](#)

## Budget Control Setup Overview

CGI Advantage Financial is delivered with a budget control area that satisfies a wide spectrum of public sector budgeting business requirements. This area can be customized and configured to accommodate the simplest model of a small local government up to the most complex model of a large state implementation.

**Note:** Any changes in budget configuration should be followed by a bounce of all servers used for CGI Advantage Financial. Changes to budget amount, formula, and budget controls will require the running of either of or both batch jobs: Budget Formula Recalculation and Budget Control Amounts. Please see the run sheets for each for more details when and how to run them.

Budget Control allows you to control the following types of budget activities, or a combination of these activities:

- **Appropriation** - tracks both expense and revenue activities at a common chart of account level with an application for all organizational parties.
- **Central Expense** - tracks spending activities centrally within an application for all organizational parties. "Expense" is broadly defined to include all types of spending: cash expenditures, accrued expenditures, encumbrances, and pre encumbrances. Controls are very likely applied on such a budget structure.
- **Decentralized Expense** - allows expense activities to be controlled independently by groups at various levels of an organization entity at a lower or different level than a central expense budget. Controls are optionally applied on such a budget structure, depending on the organizational entity.
- **Central Revenue** - tracks revenue activities centrally within an application for all organizational parties. "Revenue" is broadly defined to include accrued revenue as well as collected revenue. Controls are not likely applied to revenue budgets.

- **Decentralized Revenue** - allows revenue activities to be controlled independently by groups at various levels of an organizational entity at a lower or different level than a central revenue budget. Controls are not likely applied to revenue budgets.
- **Cost Accounting** - supports the CGI Advantage Cost Accounting functionality in allowing entities to track expenses and revenues related to grants, programs, and internal jobs. Such a budget may even control reimbursement activity.

## How Chart of Accounts Elements Work with Budgets

CGI Advantage Chart of Accounts (COA) elements defined at your installation are used to identify and classify all financial and budget data stored in CGI Advantage. Some of the Chart of Accounts elements that can create a budget structure include Fund, Cabinet, Appropriation Category, Department, Appropriation, and either Revenue Source or Object.

Which Chart of Accounts elements and rollups will be used and how they will be used is established before implementation with the gathering of current and near future needs from budget preparation, payroll, financial accounting, reporting, and other functions. This is not to say that additional elements and rollups can be put into use at later dates. Primary points into this planning are budget preparation and budget control. At that time one or more baseline budget structures are selected for use and possibly one or more custom structures are built with the COA combination needed.

For more detailed information about defining and configuring Chart of Accounts elements and their associated usage rules, refer to the "Delivered Chart of Accounts" topic in the *CGI Advantage - Chart of Accounts User Guide*.

## Understanding Budget Components

The premise of the CGI Advantage Budget Control area is that budget structures and their budget levels can be selected (or created) to meet your budget control needs.

Budget structures define the framework on which individual budgets can be established and controlled. Budget levels are the framework on which budget lines are created and maintained. Budget structures and budget levels can be configured to some degree through online setup pages; however, actions such as adding or dropping a COA element, adding a budget level, adding allotment capability, adding linking ability require application code changes.

Each of these online configuration options are discussed in the following sections.

- [Budget Structures](#)
- [Budget Levels](#)
  - [General Budget Level Information](#)
  - [Linking Configurations](#)
- [Delivered Budget Structures](#)
- [Allotments](#)
- [Required Budgets](#)
- [Budget Tracking Amounts](#) and [Examples of Delivered Budget Amounts](#)

- [Budget Formulas](#)
- [Budget Controls](#)
- [Budget Control Administration](#)
- [Budget Control](#)
  - [Budget Fund Control](#)
  - [Budget Level Control](#)
  - [Budget Line Control](#)
  - [Budget Control Establishment Strategies](#)
  - [Invalid Budget Control Options](#)
  - [Budget Control Evaluation](#)
  - [Structuring of the Levels of Control](#)
- [Reserving Budgets](#)
- [Memory](#)
- [Special Cost Accounting Budget Interaction](#)
- [Application Parameters](#)

## Budget Structures

Budget structures consist of one to many budget levels that correspond to increasingly more detailed levels of budgeting in the structure. Information about budget structures can be viewed on the Budget Structure (BUDST) page and updates can be made via the **Budget Structure Update** action. Only those budget structure parameters that can be configured online are editable. Those that have a design impact are protected.

- **Structure ID** - A required unique number is assigned to each budget structure when developed.
- **Structure Name** - A required text field exists for a descriptive name of the budget structure that would be used for reporting purposes.
- **Budget Type** - A required choice of different budget types -*Managerial, Program, Statutory, and Reimbursable* - exists to mark a particular budget structure as such for reporting purposes.
- **Expense/Revenue** - Each budget structure has this attribute to indicate whether the budget should support expense or revenue budgets or both.
- **Central/Decentral** - The required distinction of central or decentral for a budget structure is used for reporting purposes.
- **Inheritance Rules** - There are many locations at which budget control setups can be defined. When evaluating these controls after an update, the system has to determine which error severity setup will apply to a control when multiple locations contain the same control. The rule reads right

to the left with decreasing inheritance. Much more on the use of this field is contained in the Structuring of the Levels of Control section later.

- **Active** - The system will only consider active budget structures. Structures not being used should be deactivated.
- **Effective From / Effective To** - Currently, these dates do not have a function within the application.
- **Last Modified By / Last Modified Date** - These fields track online changes made to a budget structure through the Budget Structure Update page.
- **Budget Fiscal Year Driven** - When a budget structure is to be defined yearly, the Budget Fiscal Year (BFY) must be built into the database tables for that structure. Those budget structures that are not defined yearly are useful as 'no year' budgets, and do not have a BFY in their design. Cost Accounting budgets for reimbursement are of this no year type.
- **Transfer In and Out COA Offset** - Budget transactions have to balance when recording transfers. The sum of lines with a transfer in event type must equal those with a transfer out event type. If using only one of those two event types, the sum of all lines must be \$0.00 using the Increase/Decrease field. When one or more chart of accounts (COA) are required in this balancing edit, enter them as by data attribute (for example, DEPT\_CD), separating multiple values with a comma. One attribute that is not a COA is available – BFY.
- **Enable Dollar Rounding for Allotment Lines** - When allotments lines are required to be rounded down to the previous dollar level, it is enabled for Dollar Rounding. This will instruct the system to round down allotment lines to the previous dollar and adjust the last allotment line with the remaining amount. If the last allotment line has 0% the system will inform the user about adjustment amount, which can be manually adjusted if that allotment line should remain zero.

Please note that a bounce is required after most fields on this page.

This page contains several other related pages in the row menu that transition to budget configuration pages that will be covered in later sections.

## Budget Levels

A budget level is part of a budget structure. Each budget structure must have at least one budget level. Each budget level is comprised of one to many Chart of Accounts elements that are grouped together to determine how individual budgets are defined at that level. For example, a budget level can consist of a Fund, Department, and Object. Budget levels form a strict hierarchy such that lower budget levels must contain all of the Chart of Accounts elements of the higher level, as well as at least one additional defining Chart of Accounts element.

The defined budget levels for a structure can be viewed in a summary on the second tab of the Budget Structure (BUDST) page. Updates are not allowed to levels on that tab, but can be accomplished by using the *Budget Level Update* listing in the Related Pages section of the row menu. As with the definition of a structure, there are items in the definition of a level that can and cannot be changed.

The configuration of a budget level is spread across multiple tabs, where the first one – Level – is the only one that applied to every budget level in every budget structure. The other four tabs apply to only those expense budget levels linked to a revenue budget level.

## General Budget Level Information

- **Level Name** - A required text field is provided to supply a level name to be used in reporting. It is helpful for this name to match the name displayed in the online query for the budget level. Changes to the name field on the Budget Level Update page do not flow through to the entry for the budget level found on Page Search or to the title seen at the top of the inquiry page for that budget level. Changing those items is a different effort. The first can be done on the Application Page Registration (APGS) page. The second is an HTML change.
- **Level Short Name** - A required short text field is provided to supply a level short name to be used in reporting. It is helpful for this name to match the name displayed in the online query for the budget level, or at least be an abbreviation for that online name.
- **Presence Optional** - When a level of a budget structure should not be required to be found by accounting transactions, it is marked as Presence Optional. This will instruct the system to not return the 'budget line not found' error for an accounting transaction that does not match a budget line at this level. If there is a matching budget line, it will be updated.

This indication is allowed at any budget level except the first level of a structure. If the option is selected for a budget level, all levels below that level must be marked presence optional, as updates cannot skip budget levels.

- **Auto Generate when Presence Optional** - If a level marked as Presence Optional needs to be changed to *Required*, steps have to be taken besides just changing the level option. Systems Assurance 1 will report false out of sync conditions at the upper levels higher than the newly required level without work. One way to avoid the additional step is to not run SA1 for prior Budget Fiscal Years, while making the budget level change at the beginning of a BFY before any updates in that BFY. If that is not possible, then budget lines have to be rebuilt at the newly required budget level in prior budget years that are still being assured. This does require that the new COA at that budget level has always been used, although not required for budgeting.
- **Auto Generate Severity** - This field is an optional severity set at a budget level to alter the base severity of message generation for A2538 – 'New Budget Line Created'. Values include: *Information*, *Warning*, and *Error*. *Severe* is shown but is not allowed. A blank value is also available when the option is not taken at a particular budget level and setup on the Messages (MMSG) page will be used. If set to *Error* and that error should be an overrideable one, then the Auto Generate Override Level field should be set. Use of this severity allows for greater or lesser control for budget line generation at a particular budget level. If generation should be easy except for a certain level, then the MMSG page should be set to *Informational* or *Warning*. Then settings for that level should be *Error* with an override level. All other levels would be left blank, or set to equal the MMSG page. Setup can be done in reverse if desired as well.
- **Auto Generate Override Level** - This field is an optional override level set at the budget level to alter the base severity of message generation for A2538. Values include integers between 0 and 10 as well as (blank), which is the default. Use if this field is only made when the Auto Generate Severity field is also populated for the budget level with a value of *Error*. If that severity field is left blank or set to another value, then the override level field will not be allowed.
- **COA Elements** - This column seen on the Budget Structure Summary page does not have an equivalent on the Budget Level Update page because the list of elements is an item that was defined during the construction of that budget structure and cannot be changed by an online field.
- **Bud Name COA Table** - When budget lines are created without anything specified as the Budget Line Name, the system will default one of two things for the name. This field and the next two are used to define a descriptive value from a key chart of account (COA) field of the budget line. If all three are blank, then the system will concatenate all key fields for the budget line as the name. If

the name of the appropriation unit on the budget line should be the Budget Line Name, then enter R\_APPR in this field.

A bounce is required after updating these three related fields. Also, please note that the inference occurs not on the transaction but on the budget inquiry page when the new budget line is inserted.

- **Bud Name COA Primary Key** - The system needs the full key to a COA code to look up and infer a descriptive field. Enter all key fields necessary, separating by commas when there are multiple keys. Continuing the appropriation example, enter FY and APPR\_CD. The BFY from the budget line will be used to lookup the appropriation as fiscal year. This accounts for when budget lines are created where FY < BFY, FY = BFY, and in the event a line is created with FY > BFY. If the BFY of the budget line was 9999, the system gets the current fiscal year from the Application Date.
- **Bud Name COA Name Field** - With the table name and the key fields defined, the last piece of information is what descriptive field to infer. Typically, it is the 'full' name that is 60 characters in length, but it could be the short name that is only 15 characters. Fields larger than the budget line name should not be used or the description will be cut off.
- **Enable Start and End Date Tracking** - Enable to infer the Start and End Dates fields on the budget line using Reporting Start and End Dates from the Appropriation Unit entered on a budget line for reporting purposes only. Actual control of when a budget can and cannot be used is a function of the Active status of the budget line, budget availability, and BFY Staging.

The Fiscal Year of the budget line upon creation is used to infer the dates and not the Budget Fiscal Year. The inference is a soft one in that a value can be entered before the inference that will remain and the dates can be changed after inferring.

Please ensure that Appropriation is present on a given budget level when enabling.

- **Validate COA Combination** - Enter the valid COA combination data object if budget lines need to be validated with a valid COA combination. For example, if the Fund and Department combination on the budget line needs to be validated against Valid Fund Department (VFD) data, then enter CVIN\_FUND\_DEPT in this field. This feature will allow budget lines to validate against the same combinations that accounting lines validate to prevent a budget line from being created that cannot be used. It is useful when such combinations are not pre-defined into the budget preparation process.

Please note that when using such an edit that all valid combinations budgeted must be defined on the COA valid combination validation table as the partial key logic used by accounting transactions is not used by the budget transaction. Further, the Budget Level where COA valid combination page is defined should have the COA element/s that are primary key from the combination page along with FY/BFY. Also, the COA invalid combination pages should not be entered for this feature.

- **COA Combination Message ID** - Optionally enter a Message ID from Messages (MMSG) to be issued on budget transactions when the COA combination is invalid when the one issued on accounting transactions is not desired.

## Linking Configurations

A link's purpose is to provide the ability to fund spending for an expense budget line from an area other than (or in addition to) budget transactions recording adoptions, amendments, transfers in, and carry

forwards of budget authority. As with building structures, levels, and allotments, linking also requires work to be done in the Advantage Design Studio before use, when a baseline structure is not sufficient. All fields in the configuration of linking are protected and self-explanatory; thus are not listed here.

> More Info

Links are primarily on budget structures that are strictly expense or revenue. Structures that are both expense and revenue naturally have revenue on a budget line along with expenditures to aid in funding. The big difference between linking and a grouped expense and revenue structure is that the COA for revenue and expenditures recorded on both structures has to be the same; where with linking there are no matching COA rules unless designed into the linking development. One such edit may be that the Department codes between linked revenue budgets and expense budgets must match, but the Fund and Appropriations do not have to match.

A link can be defined to a single revenue budget amount or to multiple amounts. Multiple amounts are often used when the expense budget line should be funded by one of two revenue amounts (normally estimated and some type of actual amount). Which will contribute depends on the advanced budget constraint being used. It may be the greater or the lesser of the two. When defining a link to a calculated revenue amount, such as *Total Revenue*, care should be exercised in setting the pending amount rules for those amounts that make up Total Revenue. If pending increases are defined as part of Collected Earned Revenue, then a pending Cash Receipt transaction will contribute to the Total Revenue amount in addition to the Collected Earned Revenue amount. In doing so, any link established to that revenue budget line will be increased and an expense budget will give spending authority on a pending amount. The same concern does not exist when a link is defined to a stand alone budget amount.

Once built, there are places within an application where that linking setup can be seen, but without any online options. Linking setup can be seen on the multi-section page for *Budget Level Update*, which is found under the transition with the same name on the Budget Structure (BUDST) table. One must highlight the row of the linked budget level on the BUDST page before navigating to the Budget Level Update page. The *From Link*, *From Buckets*, *To Link*, and *To Buckets* sections display all linking setup fields.

As linking is often desired to only active revenue budget lines in order for the lines to supply spending authority, error A6826 exists to catch when a link is being created to an inactive revenue budget line. This error can have the severity reduced to warning in the event links are often established to inactive revenue budget lines that are in this state because the transaction creating them is pending final approval.

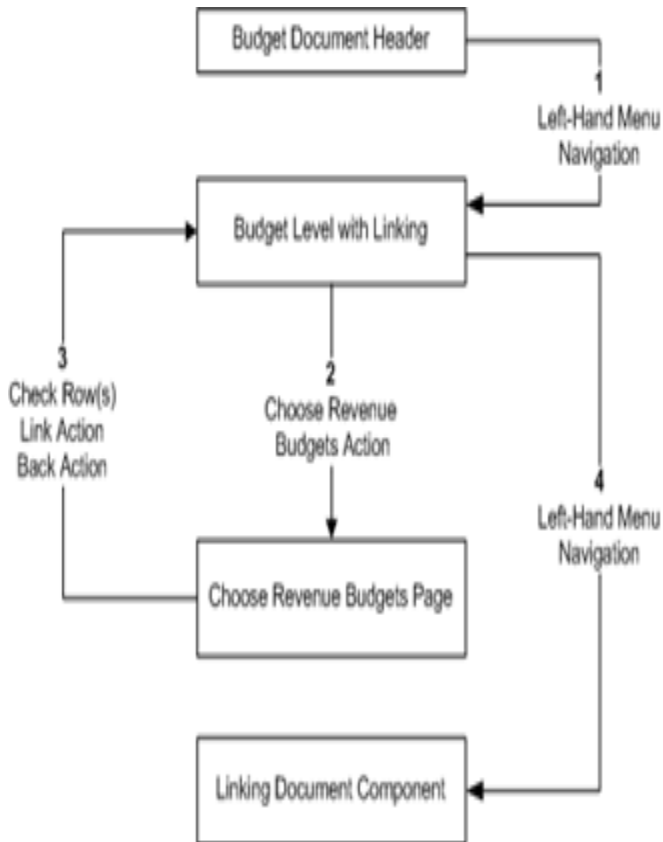
When updates to the revenue budget occur, those updates are simultaneously transferred to the expense budget line. Such revenue updates are made by revenue budget transactions, accounts receivable transactions, or any other transaction using a posting code that updates revenue budgets. If the amount in the linked amount field of a revenue budget line goes negative, the expense budget will not have budget availability taken away. This is not saying that a reduction in a revenue budget line will not reduce the linked revenues on an expense budget line, it will. What it does mean is that an expense budget line will lose budget availability if the linked revenue amount goes down towards \$0.00, but it will not lose authority if the revenue budget goes negative in the linked bucket.

When spending transactions edit an expense budget line that is linked to a revenue budget line, its available amount uses a budget constraint or formula that includes the amount of linked revenue. Links are naturally defined after revenue budgets are established, when



expense budget transactions are being processed. However, links can be maintained throughout the life of an expense budget line. New links will likely increase funding and the removal of links will decrease funding.

The following diagram illustrates how Budget Links are established on Expense Budget transactions.



> Sample link calculation

Revenue Amount	Floor	Ceiling	Percentage	Linked Amount
0.00	0.00		100.0000	0.00
100.00	0.00		100.0000	100.00
100.00	500.00		100.0000	0.00
100.00	20.00		100.0000	80.00

Revenue Amount	Floor	Ceiling	Percentage	Linked Amount
100.00	100.00		100.0000	0.00
100.00	0.00	75.00	100.0000	75.00
100.00	20.00	80.00	200.0000	12.00
100.00	20.00	500.00	50.0000	40.00
100.00	20.00	500.00	100.0000	80.00
100.00	0.00		100.00	0.00

## Delivered Budget Structures

CGI Advantage is delivered with a number of budget structures of various types. Development of these structures has occurred as the software has grown. That development has followed a set of baseline standards, which also have grown as new functionality has been developed in the budgeting area.

Below is a list of the recommended budget structures available. The first table contains information on the type of budget structure, number of levels and key values that define those levels. Information in this first table is a combination of data from the Budget Structure and Budget Level tables discussed in the previous topics. As there are cases where budget levels have been added to existing structures as hidden levels to not impact those using the original levels, if you do not see online what is shown below, then look to the Configure Page (DESIGNER) to display hidden tabs on transactions and update Application Page Registration (APGS) to make inquiry pages searchable. Furthermore, there may be amounts and other types of information not visible initially on an inquiry page, that are listed on Configure Page, which would have to be made visible if they are needed.

The second table contains information for any unique features available in a structure that vary from standards. For this reason, the second table does not contain a listing of every budget structure.

ID	Name (Transaction Code)	Type	Level	Keys
3	KY Expense Budget (BGE3)	Exp	1	BFY, ACFR Fund Type, Cabinet, Function Group
			2	BFY, ACFR Fund Type, Cabinet, Function Group, Function Type, Fund Type
			3	BFY, ACFR Fund Type, Cabinet, Function Group, Function Type, Fund Type, Object Type

ID	Name (Transaction Code)	Type	Level	Keys
11	Phase-Specific Reimbursable (BGRE)	Reimb	1	Department, Major Program, Program, Phase, Funding Profile, Funding Priority
			2	Department, Major Program, Program, Phase, Funding Profile, Funding Line
29	Expense Budget 29 (BGEX)	Exp	1	BFY, Fund, Department, Appropriation
			2	BFY, Department, Appropriation, Unit, Object
30	Revenue Budget 30 (BGRV)	Rev	1	BFY, Fund, Department, Unit, Revenue Source
			2	BFY, Fund, Department, Unit, Revenue Source, Activity
			3	BFY, Fund, Department, Unit, Revenue Source, Activity, Function
31	Appropriation Budget 31 (BGAA)	Exp & Rev	1	BFY, Fund, Department, Appropriation
32	Expense Budget 32 (BGEB)	Exp	1	BFY, Fund, Department, Appropriation
			2	BFY, Fund, Department, Appropriation, Object Class
33	Revenue Budget 33 (BGREV)	Rev	1	BFY, Fund, Department, Appropriation
			2	BFY, Fund, Department, Appropriation, Revenue Class
34	Revenue Budget 34 (BGRVSR)	Rev	1	BFY, Fund, Department, Unit, Appropriation
			2	BFY, Fund, Department, Unit, Appropriation, Revenue Source
35	Appropriation Budget 35 (BGAB)	Exp & Rev	1	BFY, Fund, Department, Division
			2	BFY, Fund, Department, Division, Appropriation
36	Program Expense Budget 36 (BGPE)	Program	1	Department, Major Program
			2	Department, Major Program, Program
37	Program Phase Budget 37 (BGPHE)	Program	1	Department, Major Program
			2	Department, Major Program, Program
			3	Department, Major Program, Program, Phase
38	Program Period Budget 38 (BGPDE)	Program	1	Department, Major Program

ID	Name (Transaction Code)	Type	Level	Keys
			2	Department, Major Program, Program
			3	Department, Major Program, Program, Program Period
			4	Department, Major Program, Program, Program Period, Object Class
			5	Department, Major Program, Program, Program Period, Object Class, Object
39	Reimbursable Grant Budget (BGPDR)	Reimb	1	Department, Major Program, Program, Program Period, Funding Profile, Funding Priority
			2	Department, Major Program, Program, Program Period, Funding Profile, Funding Priority, Funding Line
40	Program Phase Reimbursable Budget 40 (BGPDR)	Reimb	1	Department, Major Program, Program, Phase, Funding Profile, Funding Priority
			2	Department, Major Program, Program, Phase, Funding Profile, Funding Priority, Funding Line
41	Expense Budget 41 (BGE41)	Exp	1	BFY, Fund, Department
			2	BFY, Fund, Department, Unit, Object
42	Revenue Budget 42 (BGR42)	Rev	1	BFY, Fund, Department
			2	BFY, Fund, Department, Revenue Source
43	Expense Budget 43 (BGE43)	Exp	1	BFY, Fund, Department, Appropriation
			2	BFY, Fund, Department, Appropriation, Bureau, Object
44	Expense Budget 44 (BGE44)	Exp	1	BFY, Fund, Department, Appropriation
			2	BFY, Fund, Department, Appropriation, Group, Object
			3	BFY, Fund, Department, Appropriation, Group, Object, Unit
45	Revenue Budget 45 (BGR45)	Rev	1	BFY, Fund, Department, Appropriation
			2	BFY, Fund, Department, Appropriation, Group, Revenue Source
			3	BFY, Fund, Department, Appropriation, Group, Revenue Source, Unit
46	Revenue Budget 46 (BGR46)	Rev	1	BFY, Fund, Department, Revenue Source

ID	Name (Transaction Code)	Type	Level	Keys
			2	BFY, Fund, Department, Revenue Source, Sub Revenue Source
			3	BFY, Fund, Department, Revenue Source, Sub Revenue Source, Function
47	Task Order Budget 47 (BGP47)	Program	1	Department, Major Program
			2	Department, Major Program, Program
			3	Department, Major Program, Program, Task Order
48	Revenue Budget 48 (BGR48)	Rev	1	BFY, Fund, Sub Fund, Department, Appropriation
			2	BFY, Fund, Sub Fund, Department, Appropriation, Unit, Revenue
49	Expense Budget 49 (BGE49)	Exp	1	BFY, Fund, Sub Fund, Department, Appropriation
			2	BFY, Fund, Sub Fund, Department, Appropriation, Unit, Object
			3	BFY, Fund, Sub Fund, Department, Appropriation, Unit, Object, Activity
			4	BFY, Fund, Sub Fund, Department, Appropriation, Unit, Object, Activity, Function
50	Expense Budget 50 (BGE50)	Exp	1	BFY, Fund, Department, Division
			2	BFY, Fund, Department, Division, Activity, Appropriation
			3	BFY, Fund, Department, Division, Activity, Appropriation, Group
			4	BFY, Fund, Department, Division, Activity, Appropriation, Group, Object Category
51	Expense Budget 51 (BGE51)	Exp	1	BFY, Fund, Sub Fund, Department, Appropriation
			2	BFY, Fund, Sub Fund, Department, Appropriation, Activity, Unit
			3	BFY, Fund, Sub Fund, Department, Appropriation, Activity, Unit, Object Category
			4	BFY, Fund, Sub Fund, Department, Appropriation, Activity, Unit, Object Category, Object
52	Expense Budget 52 (BGE52)	Exp	1	BFY, Department, Fund, Appropriation Unit, Reporting
53	Contract Budget 53 (BGC53)	Exp & Rev	1	Reporting, Sub Reporting

ID	Name (Transaction Code)	Type	Level	Keys
			2	Reporting, Sub Reporting, Department
54	Activity Budget 54	Exp & Rev	1	BFY, Fund, Department, Activity Group, Activity Category
			2	BFY, Fund, Department, Activity Group, Activity Category, Activity
55	Expense Budget 55 (BGE55)	Exp	1	BFY, Fund, Appropriation Unit
			2	BFY, Fund, Appropriation Unit, Department, Unit, Object
			3	BFY, Fund, Appropriation Unit, Department, Unit, Object, Activity
			4	BFY, Fund, Appropriation Unit, Department, Unit, Object, Activity, Function
56	Appropriation Budget 56 (BGA56)	Exp & Rev	1	BFY, Department, Appropriation
			2	BFY, Department, Appropriation, Fund
			3	BFY, Department, Appropriation, Fund, Object Class
60	Appropriation and Allotment (BGA60)	Exp	1	BFY, Fund Group, Department, Appropriation Category
61	Expense Budget 61 (BGE61)	Exp	1	BFY, Department, Appropriation Category, Fund
			2	BFY, Department, Appropriation Category, Fund, Appropriation Unit, Division
			3	BFY, Department, Appropriation Category, Fund, Appropriation Unit, Division, Bureau
			4	BFY, Department, Appropriation Category, Fund, Appropriation Unit, Division, Bureau, Department Object Group
62	Expense Budget 62 (BGE62)	Exp	1	BFY, Fund, Department, Appropriation Unit
			2	BFY, Fund, Department, Appropriation Unit, Division
			3	BFY, Fund, Department, Appropriation Unit, Division, District
			4	BFY, Fund, Department, Appropriation Unit, Division, District, Object Class

ID	Name (Transaction Code)	Type	Level	Keys
63	Expense Budget 63 (BGE63)	Exp	1	BFY, Fund, Dept, Appropriation Unit
			2	BFY, Fund, Dept, Appropriation Unit, Division,
			3	BFY, Fund, Dept, Appropriation Unit, Division, Object Class
64	Revenue Budget 64 (BGR64)	Rev	1	BFY, Fund, Department, Revenue Class
			2	BFY, Fund, Department, Revenue Class, Revenue
			3	BFY, Fund, Department, Revenue Class, Revenue, Dept Revenue
65	Expense Budget 65 (BGE65)	Exp	1	BFY, Fund, Department, Appropriation Unit
			2	BFY, Fund, Department, Appropriation Unit, Division
			3	BFY, Fund, Department, Appropriation Unit, Division, District
			4	BFY, Fund, Department, Appropriation Unit, Division, District, Bureau
			5	BFY, Fund, Department, Appropriation Unit, Division, District, Bureau, Section
			6	BFY, Fund, Department, Appropriation Unit, Division, District, Bureau, Section, Unit
			7	BFY, Fund, Department, Appropriation Unit, Division, District, Bureau, Section, Unit, Object Class
66	Program Period Expense Budget 66 (BGP66)	Exp	1	Department, Major Program, Program Period, Task
67	Appropriation Budget 67 (BGA67)	Exp & Rev	1	Fund, Department, Appropriation Category, Appropriation Unit
			2	Fund, Department, Appropriation Category, Appropriation Unit, Function Group
			3	Fund, Department, Appropriation Category, Appropriation Unit, Function Group, Function Type
			4	Fund, Department, Appropriation Category, Appropriation Unit, Function Group, Function Type, Function
68	Expense Budget 68 (BGE68)	Exp	1	Fund, Department, Appropriation Category, Appropriation Unit, Function Class, Object Class, District

ID	Name (Transaction Code)	Type	Level	Keys
			2	Fund, Department, Appropriation Category, Appropriation Unit, Function Class, Object Class, District, Division
			3	Fund, Department, Appropriation Category, Appropriation Unit, Function Class, Object Class, District, Division, Section
			4	Fund, Department, Appropriation Category, Appropriation Unit, Function Class, Object Class, District, Division, Section, Unit
69	Program Expense Budget 69 (BGP69)	Exp	1	Department, Program, Phase
			2	Department, Program, Phase, Fund
			3	Department, Program, Phase, Fund, Appropriation Category, Appropriation Unit, Function, Sub Function
			4	Department, Program, Phase, Fund, Appropriation Category, Appropriation Unit, Function, Sub Function, Sub Fund
70	Expense Budget 70 (BGE70)	Exp	1	BFY, Fund, Department, Appropriation Group, Appropriation Type
			2	BFY, Fund, Department, Appropriation Group, Appropriation Type, Object Group
			3	BFY, Fund, Department, Appropriation Group, Appropriation Type, Object Group, Appropriation Unit
			4	BFY, Fund, Department, Appropriation Group, Appropriation Type, Object Group, Appropriation Unit, Object Type
			5	BFY, Fund, Department, Appropriation Group, Appropriation Type, Object Group, Appropriation Unit, Object Type, Task
			6	BFY, Fund, Department, Appropriation Group, Appropriation Type, Object Group, Appropriation Unit, Object Type, Task, Sub Task
71	Revenue Budget 71 (BGR71)	Rev	1	BFY, Fund, Department, Appropriation Group, Appropriation Type
			2	BFY, Fund, Department, Appropriation Group, Appropriation Type, Minor ACFR Revenue Type
			3	BFY, Fund, Department, Appropriation Group, Appropriation Type, Minor ACFR Revenue Type, Revenue Source Type
			4	BFY, Fund, Department, Appropriation Group, Appropriation Type, Minor ACFR Revenue Type, Revenue Source Type, Appropriation Unit



ID	Name (Transaction Code)	Type	Level	Keys
72	Expense Budget 72 (BGE72)	Exp	1	BFY, Fund, Department, Appropriation Group, Appropriation Type
			2	BFY, Fund, Department, Appropriation Group, Appropriation Type, Object Group
			3	BFY, Fund, Department, Appropriation Group, Appropriation Type, Object Group, Appropriation Unit
			4	BFY, Fund, Department, Appropriation Group, Appropriation Type, Object Group, Appropriation Unit, Object Type
			5	BFY, Fund, Department, Appropriation Group, Appropriation Type, Object Group, Object Type, Appropriation Unit, Task
			6	BFY, Fund, Department, Appropriation Group, Appropriation Type, Object Group, Object Type, Appropriation Unit, Task, Sub Task
73	Revenue Budget 73 (BGR73)	Rev	1	BFY, Fund, Department, Appropriation Group, Appropriation Type
			2	BFY, Fund, Department, Appropriation Group, Appropriation Type, Minor ACFR Revenue Type
			3	BFY, Fund, Department, Appropriation Group, Appropriation Type, Minor ACFR Revenue Type, Revenue Source Type
			4	BFY, Fund, Department, Appropriation Group, Appropriation Type, Minor ACFR Revenue Type, Revenue Source Type, Appropriation Unit
74	Program Expense Budget 74 (BGP74)	Exp	1	Department, Major Program, Program, BFY, Appropriation
			2	Department, Major Program, Program, BFY, Appropriation, Object Type
			3	Department, Major Program, Program, BFY, Appropriation, Object Type, Task
			4	Department, Major Program, Program, BFY, Appropriation, Object Type, Task, Sub Task
75	Program Expense Budget Structure 75 (BGP75)	Exp	1	Department, Major Program, Program, Phase, BFY, Appropriation
			2	Department, Major Program, Program, Phase, BFY, Appropriation, Object Type
			3	Department, Major Program, Program, Phase, BFY, Appropriation, Object Type, Task

ID	Name (Transaction Code)	Type	Level	Keys
			4	Department, Major Program, Program, Phase, BFY, Appropriation, Object Type, Task, Sub Task
80	Expense Budget 80 (APEB)	Exp	1	BFY, Fund, Department, Appropriation
			2	BFY, Fund, Department, Appropriation, Unit, Object
			3	BFY, Fund, Department, Appropriation, Unit, Object, Activity
			4	BFY, Fund, Department, Appropriation, Unit, Object, Activity, Function
81	Expense Budget 81 (BGE81)	Exp	1	BFY, Appropriation Unit, Fund, Sub Fund
			2	BFY, Appropriation Unit, Fund, Sub Fund, Department
			3	BFY, Appropriation Unit, Fund, Sub Fund, Department, Object Class
82	Revenue Budget 82 (BGR82)	Rev	1	BFY, Fund, Sub Fund
			2	BFY, Fund, Sub Fund, Department
			3	BFY, Fund, Sub Fund, Department, Revenue
83	Expense Budget 83 (BGE83)	Exp	1	BFY, Appropriation Unit, Department, Division
			2	BFY, Appropriation Unit, Department, Division, District
			3	BFY, Appropriation Unit, Department, Division, District, Object
84	Expense Budget 84 (BGE84)	Exp	1	BFY, Appropriation, Department, Object Class, Division
			2	BFY, Appropriation, Department, Object Class, Division, District
			3	BFY, Appropriation, Department, Object Class, Division, District, Object
86	Program Expense Budget 86 (BGP86)	Program	1	BFY, Appropriation Type, Appropriation Group
			2	BFY, Appropriation Type, Appropriation Group, Major Program Category
			3	BFY, Appropriation Type, Appropriation Group, Major Program Category, Department

ID	Name (Transaction Code)	Type	Level	Keys
			4	BFY, Appropriation Type, Appropriation Group, Major Program Category, Department, Appropriation Unit
87	Program Expense Budget 87 (BGP87)	Exp & Rev	1	Program Class
			2	Program Class, Department, Program
			3	Program Class, Department, Program, Phase
			4	Program Class, Department, Program, Phase, Activity
88	Program Reimbursable Budget (BGPR88)	Reimb	1	Department, Major Program, Program, Funding Profile, Funding Priority
			2	Department, Major Program, Program, Funding Profile, Funding Priority, Funding Line
89	Expense Budget 89 (BGE89)	Exp	1	BFY, Fund, Sub Fund, Appropriation Unit
			2	BFY, Fund, Sub Fund, Appropriation Unit, Department
90	Appropriation Budget 90 (BGA90)	Exp & Rev	1	BFY, Fund, Department, Appropriation Group
			2	BFY, Fund, Department, Appropriation Group, Appropriation Unit
			3	BFY, Fund, Department, Appropriation Group, Appropriation Unit, Function
91	Revenue Budget 91 (BGR91)	Rev	1	BFY, Fund, Department, Appropriation
			2	BFY, Fund, Department, Appropriation, Unit, Revenue
			3	BFY, Fund, Department, Appropriation, Unit, Revenue, Activity
			4	BFY, Fund, Department, Appropriation, Unit, Revenue, Activity, Function
92	Expense Budget 92 (BGE92)	Exp	1	BFY, Fund, Sub Fund, Department
			2	BFY, Fund, Sub Fund, Department, Major Program, Program
			3	BFY, Fund, Sub Fund, Department, Major Program, Program, Appropriation

ID	Name (Transaction Code)	Type	Level	Keys
			4	BFY, Fund, Sub Fund, Department, Major Program, Program, Appropriation, Object, Unit
			5	BFY, Fund, Sub Fund, Department, Major Program, Program, Appropriation, Object, Unit, Activity
100	Expense Budget 100 (BGE100)	Exp	1	BFY, Fund, Department, Appropriation, Activity Category
			2	BFY, Fund, Department, Appropriation, Activity Category, Activity Class, Object Class
101	Expense Budget 101 (BGE101)	Exp	1	BFY, Fund, Department, Appropriation, Activity Class, Object Class, Section
			2	BFY, Fund, Department, Appropriation, Activity Class, Object Class, Section, Function Class
			3	BFY, Fund, Department, Appropriation, Activity Class, Object Class, Section, Function Class, Unit
			4	BFY, Fund, Department, Appropriation, Activity Class, Object Class, Section, Function Class, Unit, Sub Unit
102	Expense Budget 101 (BGE102)	Exp	1	BFY, Department, Activity Class, Activity, Function Class, Unit
			2	BFY, Department, Activity Class, Activity, Function Class, Unit, Sub Unit
110	Appropriation Budget 110 (BGA110)	Exp & Rev	1	BFY, Fund, Department, Division, Appropriation, Unit
			2	BFY, Fund, Sub Fund, Department, Division, Appropriation, Unit
120	Expense Budget 120 (BGE120)	Exp	1	BFY, Fund, Department, Division, Appropriation, Unit
			2	BFY, Fund, Department, Division, Appropriation, Unit, Object Class
			3	BFY, Fund, Department, Division, Appropriation, Unit, Object Class, Object
			4	BFY, Fund, Sub Fund, Department, Division, Appropriation, Unit, Object Class, Object
121	Revenue Budget 121 (BGR121)	Rev	1	BFY, Fund, Department, Division, Appropriation, Unit

ID	Name (Transaction Code)	Type	Level	Keys
			2	BFY, Fund, Department, Division, Appropriation, Unit, Revenue Class
			3	BFY, Fund, Department, Division, Appropriation, Unit, Revenue Class, Revenue
			4	BFY, Fund, Sub Fund, Department, Division, Appropriation, Unit, Revenue Class, Revenue
190	Appropriation Budget 190 (BGA190)	Statutory	1	BFY, Cabinet, Appropriation Category, Appropriation Type
			2	BFY, Cabinet, Appropriation Category, Appropriation Type, Appropriation Unit
			3	BFY, Cabinet, Appropriation Category, Appropriation Type, Appropriation Unit, Fund
191	Appropriation Budget 191 (BGA191)	Statutory	1	BFY, Cabinet, Appropriation Category, Appropriation Group
			2	BFY, Cabinet, Appropriation Category, Appropriation Group, Appropriation Class
			3	BFY, Cabinet, Appropriation Category, Appropriation Group, Appropriation Class, Appropriation Unit, Fund
192	Expense Budget 192 (BGE192)	Exp	1	BFY, Department, Appropriation Category, Fund, Appropriation, Unit
			2	BFY, Department, Appropriation Category, Fund, Appropriation, Unit, Object Group
			3	BFY, Department, Appropriation Category, Fund, Appropriation, Unit, Object Group, Activity
			4	BFY, Department, Appropriation Category, Fund, Appropriation, Unit, Object Group, Activity, Location
193	Program Budget 193 (BGP193)	Program	1	BFY, Department, Major Program
			2	BFY, Department, Major Program, Program
			3	BFY, Department, Major Program, Program, Phase
			4	BFY, Department, Major Program, Program, Phase, Appropriation Unit
194	Program Budget 194 (BGP194)	Program	1	BFY, Department, Major Program

ID	Name (Transaction Code)	Type	Level	Keys
			2	BFY, Department, Major Program, Program
			3	BFY, Department, Major Program, Program, Program Period
			4	BFY, Department, Major Program, Program, Program Period, Appropriation Unit

Not all structures are listed in the next table that gives a high-level update for unique features a structure may have and other features that a structure may not support.

ID	Name	Notes
3	KY Expense Budget	<p>Budget levels 1 and 2 display Total Current (Budget) and Total Adopted amounts lower level lines, which summarize like amounts from lower level lines.</p> <p>Level 2, which has allotment functionality, shows three unique amounts that do not use system functionality for formula definition:</p> <p>YTD Unexpended Accrued amount that is the summary of the like amount on allotment lines up through the current allotment period.</p> <p>Total Allotted - sum of Current Budget from allotment lines.</p> <p>YTD Allotments - sum of Current Budget from allotment lines through the current allotment period.</p> <p>Summary pages exist for levels 1, 2, and 3 (ESUM3L1, 2, &amp; 3).</p> <p>Without Fund, Appropriation, Appropriation Type, or Department to define budget lines, selection criteria on the Parameters for Budget Roll Process table are limited.</p>
11	Phase-Specific Reimbursable	<p>Structure 40 is similar in structure, with the only difference being that structure 11 shows only Awarded and Expected Revenue amounts in the Budget Amounts tab as the reimbursement process uses only Awarded, and Expected Revenue is often used for reporting purposes.</p> <p>Federal Appropriation is displayed and inferred from Funding Line.</p> <p>A calculated amount, Split Availability, is displayed to provide online information that matches the available amount calculated by the Cost Accounting "Split Routine" for both Front-End-Split (FES) and Back-End-Split (BES).</p>

ID	Name	Notes
29	Expense Budget 29	<p>This budget supports two different types of operation based on the EXT_STD_BUD option on Application Parameter (APPCTRL).</p> <ul style="list-style-type: none"> <li>Extended (EXT): Budgeting where appropriations are shared and typically entered. Multi-year budgeting is supported by the Budget Fiscal Year Inference (BFYINF) page.</li> <li>Standard (STD): Budgeting where appropriations are uniquely defined to a combination of Fund, Department, Unit, and Object. Appropriations are inferred with this type of budgeting with the Appropriation Inference (APPRINF) page. Multi-year budgeting is supported by the BFY and Appropriation Inference (APBYINF) page.</li> </ul> <p>A summary page exists for level 2 (ESUM29L2).</p> <p>Text 1,2,3 and 4 fields are available on Budget Transaction and Inquiry page and are initially hidden.</p> <p>Only a single 'Transfers' amount, the Transfers Out amount with a different label, is displayed so no event type should be used that uses a posting code that will update Transfers In.</p> <p>Budget Linking is available to link Collected Earned Revenue from structure 30.</p>
30	Revenue Budget 30	<p>A summary page exists for level 1 (RSUM301).</p> <p>Additional budget levels of 2 and 3 exist for more COA detail, but are initially marked non-searchable on Application Page Registration (APGS) and levels are hidden on the Budget Transaction (BGRV).</p> <p>Only a single 'Transfers' amount, the Revenue Transfers Out amount with a different label, is displayed so no event type should be used that uses a posting code that will update Revenue Transfers In.</p> <p>Budget Linking is available to link Collected Earned Revenue to structure 29.</p> <p>Supports multi-year budgeting with the Revenue BFY Inference (BFYINFRV) page.</p> <p>Text 1,2,3 and 4 fields are available on Budget Transaction and Inquiry pages and are initially hidden.</p> <p>Level 1 has Allotment functionality that is not enabled by default. To enable it, add the Allotment Data Object table names of ALOT_STRU_30_LVL_1 and ALOT_STRU_30_LVL_2 into the ALOT_DO_NM fields of Structure 30 level 1 and the activity level records, respectively, in GN_BUD_LVL.</p>

ID	Name	Notes
		<p>Roll-ups of Division, Group, Revenue Class and Revenue Category are available in Level 1 (BQ30LV1) and RSUM301 for reporting purposes only as descriptive, not key, fields. These fields are initially hidden from view as they are not always used. The Budget Rollup Update Job exists to refresh these rollups should they change.</p>
31	Appropriation Budget 31	<p>Supports multi-year (BFY 9999) budgeting.</p> <p>An amount, Total Budget, exists to summarize Original Budget and Current Expected Revenue.</p> <p>Record Creation Date and Last Adjustment Date fields are available on Level 1 (BQ31LV1) but initially hidden. They record the budget line creation date and latest budget transaction update. Decimal 1 and Text 1, 2, 3, and 4 fields are available and are initially hidden.</p> <p>The Inference of Start and End Dates, discussed in the Advanced – Unique Features section, is available for reporting information.</p> <p>Allotment functionality exists.</p>
32	Expense Budget 32	<p>This budget supports two different types of operation based on the EXT_STD_BUD option on Application Parameter (APPCTRL).</p> <ul style="list-style-type: none"> <li>• Extended (EXT): Budgeting where appropriations are shared and typically entered. Multi-year budgeting is supported by the Budget Fiscal Year Inference (BFYINF) page.</li> <li>• Standard (STD): Budgeting where appropriations are uniquely defined to a combination of Fund, Department, and Unit. Appropriations are inferred with this type of budgeting with the Organizational Appropriation Inference (ORGAPINF) page. Multi-year budgeting is also supported in Standard mode with an update to BFYINF and ORGAPINF.</li> </ul> <p>Care should be taken with either option that every Unit for a Fund, Department and Appropriation combination uses BFY 9999 as BFYINF does not contain Unit.</p> <p>Decimal 1 and Text 1, 2, 3 and 4 fields are available on the inquiry pages and are initially hidden.</p>
33	Revenue Budget 33	<p>This budget supports two different types of operation based on the EXT_STD_BUD option on Application Parameter (APPCTRL).</p> <ul style="list-style-type: none"> <li>• Extended (EXT): Budgeting where appropriations are shared and typically entered. Multi-year budgeting is supported by the Budget Fiscal Year Inference (BFYINF) page.</li> <li>• Standard (STD): Budgeting where appropriations are uniquely defined to a combination of Fund, Department, and Unit.</li> </ul>



ID	Name	Notes
		<p>Appropriations are inferred with this type of budgeting with the Organizational Appropriation Inference (ORGAPINF) page. Multi-year budgeting is also supported in Standard mode with an update to BFYINF and ORGAPINF.</p> <p>Care should be taken with either option that every Unit for a Fund, Department and Appropriation combination uses BFY 9999 as BFYINF does not contain Unit.</p> <p>Decimal 1, Budget Classification Code, Budget Classification Name, and Text 1, 2, 3, and 4 fields are available on the inquiry pages and are initially hidden.</p>
34	Revenue Budget 34	<p>Supports multi-year (BFY 9999) budgeting.</p> <p>Only a single 'Transfers' amount, the Revenue Transfers Out amount with a different label, is displayed so no event type should be used that uses a posting code that will update Revenue Transfers In.</p>
35	Appropriation Budget 35	<p>Supports multi-year (BFY 9999) budgeting.</p>
39	Reimbursable Grant Budget 36	<p>Federal Appropriation is displayed and inferred from Funding Line.</p> <p>A calculated amount, Split Availability, is displayed to provide online information that matches the available amount calculated by the Cost Accounting "Split Routine" for both Front-End-Split (FES) and Back-End-Split (BES).</p>
40	Program Phase Reimbursable Budget 40	<p>A calculated amount, Split Availability, is displayed to provide online information that matches the available amount calculated by the Cost Accounting "Split Routine" for both Front-End-Split (FES) and Back-End-Split (BES).</p> <p>FHWA Improvement Type exists at level 2 to capture any default from Program Phase (PHPRG) or Program (PROG). If there is no default, the field can be completed manually on the BGPFR.</p> <p>Funding Year, Region, Funding Source, Funding Group, and Funding Allocation exist at level 2 to reflect the latest values entered on the BGPFR with an Award.</p> <p>Federal Appropriation Number is available on the BQ40LV2 inquiry page. This field displays the current Federal Appropriation Number for a funding line. The Funding Source ID will also display the same information. If desired on the inquiry, make it visible as it is delivered as hidden.</p>
41	Expense Budget 41	<p>Level 2 has Allotment functionality that is not enabled by default. To enable it, add the Allotment Data Object table names of</p>

ID	Name	Notes
		<p>ALOT_STRU_41_LVL_2 and ALOT_STRU_41_LVL_3 into the ALOT_DO_NM fields of Structure 41 level 2 and the activity level records, respectively, in GN_BUD_LVL.</p> <p>Supports multi-year (BFY 9999) budgeting.</p> <p>The roll-ups of Division, Group, Object Class and Object Category are available only in Level 2 (BQ41LV2) for reporting purposes only as descriptive fields. They are inferred at the time of budget line creation. They are initially hidden from view as they are not always used.</p> <p>Budget Linking is available to link Collected Earned Revenue from structure 42 level 2.</p> <p>A summary page exists for level 2 (ESUM41L2). In addition to the COA elements, the records can be detailed by the roll-ups Division, Group, Object Class, and Object Category if used. They are initially hidden from view and search as they are not always used.</p>
42	Revenue Budget 42	<p>Record Creation Date and Last Adjustment Date fields are available on both the levels (BQ42LV1 &amp; BQ42LV2) but initially hidden. They record the budget line creation date and latest budget transaction update.</p> <p>Linked to budget structure 41 level 2 for Collected Earned Revenue.</p> <p>Only a single 'Transfers' amount, the Revenue Transfers Out amount with a different label, is displayed so no event type should be used that uses a posting code that will update Revenue Transfers In.</p>
43	Expense Budget 43	<p>Supports multi-year (BFY 9999) budgeting.</p>
44	Expense Budget 44	<p>This budget supports two different types of operation based on the EXT_STD_BUD option on Application Parameter (APPCTRL).</p> <ul style="list-style-type: none"> <li>• Extended (EXT): Budgeting where appropriations are shared and typically entered. Multi-year budgeting is supported by the Budget Fiscal Year Inference (BFYINF) page.</li> <li>• Standard (STD): Budgeting where appropriations are uniquely defined to a combination of Fund, Department, Group, Unit, and Object. Appropriations are inferred with this type of budgeting with the Appropriation Inference (APPRINF) page. Multi-year budgeting is supported by the BFY and Appropriation Inference (APBYINF) page.</li> <li>• Must not have level 3 as presence optional if Standard</li> </ul> <p>Summary pages exist for levels 2 &amp; 3 (ESUM44L1 &amp; 2)</p>

ID	Name	Notes
		Ability to leave level 3 presence optional, but require for certain Groups with the Budget 44 Level 3 Requirements (RB44L3) page.
45	Revenue Budget 45	<p>Supports multi-year (BFY 9999) budgeting.</p> <p>Summary pages exist for levels 2 &amp; 3 (RSUM45L1 &amp; 2).</p> <p>Ability to leave level 3 presence optional, but require for certain Groups with the Budget 45 Level 3 Requirements (RB45L3) page.</p> <p>Only a single 'Transfers' amount, the Revenue Transfers Out amount with a different label, is displayed so no event type should be used that uses a posting code that will update Revenue Transfers In.</p>
46	Revenue Budget 46	Only a single 'Transfers' amount, the Revenue Transfers Out amount with a different label, is displayed so no event type should be used that uses a posting code that will update Revenue Transfers In.
48	Revenue Budget 48	<p>This budget supports two different types of operation based on the EXT_STD_BUD option on Application Parameter (APPCTRL).</p> <ul style="list-style-type: none"> <li>• Extended (EXT): Budgeting where appropriations are shared and typically entered.</li> <li>• Standard (STD): Budgeting where appropriations are uniquely defined to a combination of Fund, Sub Fund Department, Unit, and Revenue. Appropriations are inferred with this type of budgeting with the Sub Fund Revenue Appropriation Inference (SFRAPINF) page.</li> </ul>
49	Expense Budget 49	<p>This budget supports two different types of operation based on the EXT_STD_BUD option on Application Parameter (APPCTRL).</p> <ul style="list-style-type: none"> <li>• Extended (EXT): Budgeting where appropriations are shared and typically entered. Multi-year budgeting is not supported in an automated fashion.</li> <li>• Standard (STD): Budgeting where appropriations are uniquely defined to a combination of Fund, Sub Fund, Department, Unit, and Object. Appropriations are inferred with this type of budgeting with the Sub Fund Object Appropriation Inference (SFOAPINF). Multi-year budgeting is supported by the Sub Fund Object Appropriation and BFY Inference (SFOABINF) page.</li> </ul>
50	Expense Budget 50	<p>Does not read the Extended/Standard Budget option.</p> <p>Supports multi-year (BFY 9999) budgeting.</p>

ID	Name	Notes
		<p>Allotments exist at level 4</p> <p>Budget Linking is available to link Total Revenue from structure 34.</p>
51	Expense Budget 51	<p>Does not read the Extended/Standard Budget option.</p> <p>Does not support multi-year (BFY 9999) budgeting.</p> <p>Allotments exist at level 3.</p> <p>Object Category inference at level 4 from the Object and FY at budget line creation. If Object Category is supplied, it is verified as the correct rollup for the Object and FY.</p> <p>Summary inquiry at level 4.</p>
52	Expense Budget 52	<p>Supports multi-year (BFY 9999) budgeting.</p> <p>Summary inquiry at level 1.</p> <p>Record Creation Date and Last Adjustment Date fields are available on Level 1 (BQ52LV1) but initially hidden. They record the budget line creation date and latest budget transaction update.</p> <p>On the Budget Transaction (BGE52) Contact is inferred from Reporting.</p>
53	Contract Budget 53	<p>This cost budget structure is not Budget Fiscal Year driven and is intended to control contract spending and revenues where the contract is not just a procurement transaction but a Reporting code COA value with a breakout into at least one Sub Reporting code. Multiple departments can share the same contract, as defined by level 2 of the structure.</p> <p>Summary inquiry at level 2.</p> <p>Record Creation Date, Last Adjustment Date and % Committed fields are available on inquiry pages but initially hidden. The dates record the budget line creation date and latest budget transaction update. Please note for the formula field % Committed, the formula, <math>(\text{Pre-Encumbrance} + \text{Encumbrance} + \text{Actual Expenses}) / \text{Current Budget} * 100</math>, cannot be changed since it does not use Formula ID.</p> <p>On the Budget Transaction (BGC53) Contact is inferred from Reporting. Vendor code is required on Level 1 on budget line creation and cannot be modified after a transaction has updated the budget line. The Vendor code from level 1 additionally updated on BQ53LV2 records though the Budget transaction (BGC53) does not have Vendor code in Level 2. If Vendor code is not needed please reduce the severity of error codes A8719 and A8916 on Messages (MMSG) page.</p>
54	Activity Budget 54	<p>Supports multi-year (BFY 9999) budgeting.</p>

ID	Name	Notes
		<p>Two-levels with Summary pages at level 2 for Expense (ESUM54L2) and Revenue (RSUM54L2).</p> <p>Record Creation Date, Last Adjustment Date, % Committed, YTD Uncommitted, YTD % Committed, Total Allotted, and YTD Allotments are available on inquiry pages but initially hidden. The dates record the budget line creation date and latest budget transaction update. Please note for the formula fields % Committed, YTD Committed, YTD % Committed, Total Allotted, YTD Allotments, and YTD Unexpected Accrued, the formula cannot be changed since it does not use Formula ID. The pre-defined formulas are:</p> <ul style="list-style-type: none"> <li>• % Committed = (Pre-Encumbrance + Encumbrance + Actual Expenses) / Current Budget * 100</li> <li>• YTD Uncommitted = YTD Allotments – (Pre-Encumbrance + Encumbrance + Actual Expenses)</li> <li>• YTD % Committed = When YTD Allotment is \$0 then 100% else (Pre-Encumbrance + Encumbrance + Actual Expenses) / YTD Allotments * 100</li> <li>• Total Allotted = Sum of Current Budget amounts at Level 2</li> <li>• YTD Allotments = Sum of Current Budget from allotment lines through the current allotment period</li> </ul> <p>Two generic fields, Text 1 and Text 2, are also available to capture non-financial information such as Interface ID and so forth are initially hidden. Validation exists on the Budget (BGA54) transaction to ensure that the Activity Group and Category specified are valid for the Activity specified on the budget line.</p>
55	Expense Budget 55	<p>This structure is very similar to structure 80, with an important difference of department not being on level 1 so that budget controls can be placed at that level above individual departments.</p> <p>This budget supports two different types of operation based on the EXT_STD_BUD option on Application Parameter (APPCTRL).</p> <ul style="list-style-type: none"> <li>• Extended (EXT): Budgeting where appropriations are shared and typically entered. Multi-year budgeting is supported by the Budget Fiscal Year Inference (BFYINF) page.</li> <li>• Standard (STD): Budgeting where appropriations are uniquely defined to a combination of Fund, Department, Unit, and Object. Appropriations are inferred with this type of budgeting with the Appropriation Inference (APPRINF) page. Multi-year budgeting is supported by the BFY and Appropriation Inference (APPRINF) page.</li> </ul>

ID	Name	Notes
		Text 1, 2, 3, and 4 fields are available on Budget Transaction and Inquiry pages and are initially hidden.
56	Appropriation Budget 56 (BGA56)	<p>Supports multi-year (BFY 9999) budgeting.</p> <p>Allotments exist at level 3.</p> <p>Additional drilldown exists for allotment and pending amounts.</p>
60	Appropriation Budget 60	<p>Unlike other appropriation budgets that track both spending and revenues, this one only tracks spending.</p> <p>Allotment capability is available.</p> <p>Summary page exists for level 1 (ESUM60L1).</p> <p>Record Creation Date and Last Adjustment Date fields are available on Inquiry pages but initially hidden. These fields record the budget line creation date and latest budget transaction update.</p> <p>Budget Classification Code, Budget Classification Name, Decimal 1, Text 1, 2, 3, and 4 fields are available on Budget Transaction and Inquiry pages.</p>
61	Expense Budget 61	<p>Supports multi-year (BFY 9999) budgeting.</p> <p>Summary page exists for level 2 (ESUM61L2).</p>
62	Expense Budget 62	<p>Does not support multi-year (BFY 9999) budgeting.</p> <p>Summary page exists for level 4 (ESUM62L4).</p>
63	Expense Budget 63	<p>Does not support multi-year (BFY 9999) budgeting.</p>
64	Revenue Budget 64	<p>Allotments exist for Level 1.</p> <p>Summary pages exist for Level 1 and 3 (RSUM64L1 and 3) .</p> <p>Revenue Source is inferred at Level 3 from Revenue Source Inference when not creating a new budget line.</p> <p>Revenue Class is inferred from Revenue Source at levels 2 and 3.</p>
65	Expense Budget 65	<p>Does not support multi-year (BFY 9999) budgeting.</p> <p>Summary page exists for levels 2, 3 &amp; 7 (ESUM65L2, ESUM65L3 &amp; ESUM65L7).</p>

ID	Name	Notes
66	Expense Budget 66	<p>This cost budget structure is not Budget Fiscal Year driven as it is intended to control spending on a Task used in a Program Period.</p> <p>Summary inquiry (CSUM66L1)</p>
67	Appropriation Budget 67	<p>The Budget Structure is not BFY driven.</p> <p>The Budget Transaction validates that the Appropriation Category is defined for the Appropriation Unit entered. When not specified, Appropriation Category is inferred using FY and Appropriation Unit.</p> <p>Function Group and Function Type are inferred from Function at Level 4.</p> <p>Record Creation Date and Last Adjustment Date fields are available on Inquiry pages but initially hidden. They record the budget line creation date and latest budget transaction update.</p> <p>Budget Classification Code, Budget Classification Name, Decimal 1, Text 1, 2, 3, and 4 fields are available on Budget Transaction and Inquiry pages but initially hidden.</p> <p>Summary pages exist for levels 2, 3, and 4 (ESUM67L2, 3, &amp; 4).</p>
68	Expense Budget 68	<p>The Budget Structure is not BFY driven.</p> <p>The Budget Transaction validates that the Appropriation Category is defined for the Appropriation Unit entered. When not specified, Appropriation Category is inferred using FY and Appropriation Unit.</p> <p>District, Division and Section are inferred from Unit at level 4.</p> <p>Record Creation Date and Last Adjustment Date fields are available on Inquiry pages but initially hidden. They record the budget line creation date and latest budget transaction update.</p> <p>Budget Classification Code, Budget Classification Name, Decimal 1, Text 1, 2, 3, and 4 fields are available on Budget Transaction and Inquiry pages but initially hidden.</p> <p>Summary pages exist for all levels (ESUM68L1, 2, 3, &amp; 4).</p>
69	Expense Budget 69	<p>This budget structure is not BFY driven.</p> <p>The Budget Transaction validates that the Appropriation Category is defined for the Appropriation Unit entered. When not specified, Appropriation Category is inferred using FY and Appropriation Unit.</p> <p>The Budget Transaction validates that the Phase defined is valid on Program Phase using Department, Program and Phase.</p>

ID	Name	Notes
		<p>Record Creation Date and Last Adjustment Date fields are available on Inquiry pages but initially hidden. They record the budget line creation date and latest budget transaction update.</p> <p>Budget Classification Code, Budget Classification Name, Decimal 1, Text 1, 2, 3, and 4 fields are available on Budget Transaction and Inquiry pages but initially hidden.</p> <p>Summary pages exist for level 3 (ESUM68L3).</p>
70	Expense Budget 70	<p>This budget structure will edit that the appropriation rollups are in fact those for the appropriation unit entered.</p> <p>Summary pages exist for levels 1 and 4 (ESUM70L1 &amp; 4).</p> <p>Budget Linking is available to link Total Revenue from structure 71 level 3. When linking the revenue budget to the expense budget, an edit validates that the COA values for BFY, fund, department, appropriation group, and appropriation type match on both lines.</p> <p>There are several unique fields on this structure that are hidden, but can be made visible using the Configure Page.</p>
71	Revenue Budget 71	<p>This budget structure will edit that the appropriation rollups are in fact those for the appropriation unit entered.</p> <p>Summary page exists for level 4 (RSUM71L4).</p> <p>Several unique fields on this structure are hidden, but can be made visible using the Configure Page.</p>
72	Expense Budget 72	<p>This budget structure will edit that the appropriation rollups are in fact those for the appropriation unit entered.</p> <p>Summary pages exist for levels 1 and 4 (ESUM72L1 &amp; 4).</p> <p>Budget Linking is available to link Total Revenue from structure 73 level 3. When linking the revenue budget to the expense budget, an edit validates that the COA values for BFY, fund, department, appropriation group, and appropriation type match on both lines.</p> <p>Several unique fields on this structure are hidden, but can be made visible using the Configure Page.</p> <p>This budget structure is a duplicate of 70 so that different controls can be applied using Budget Level Control between the two.</p>
73	Revenue Budget 73	<p>This budget structure will edit that the appropriation rollups are in fact those for the appropriation unit entered.</p>



ID	Name	Notes
		<p>Several unique fields on this structure are hidden, but can be made visible using the Configure Page.</p> <p>This budget structure is the same as 71 to match the same duplicity of 70 and 72 for linking purposes.</p> <p>Summary page exists for level 4 (RSUM73L4).</p>
74	Program Expense Budget 74	<p>Several unique fields on this structure are hidden, but can be made visible using the Configure Page.</p>
75	Program Expense Budget 75	<p>Several unique fields on this structure are hidden, but can be made visible using the Configure Page.</p>
80	Expense Budget 80	<p>This budget supports two different types of operation based on the EXT_STD_BUD option on Application Parameter (APPCTRL) and supports two types of Standard budgeting with the STD_EXTENSION option on APPCTRL.</p> <ul style="list-style-type: none"> <li>• Extended (EXT): Budgeting where appropriations are shared and typically entered. Multi-year budgeting is supported by the Budget Fiscal Year Inference (BFYINF) page.</li> <li>• Standard (STD Type 1): Budgeting where appropriations are uniquely defined to a combination of Fund, Department, Unit, and Object. Appropriations are inferred with this type of budgeting with the Appropriation Inference (APPRINF) page. Multi-year budgeting is supported by the BFY and Appropriation Inference (APPRINF) page.</li> <li>• Standard (STD Type 2): Budgeting where appropriations are uniquely defined to a combination of Fund, Department, Unit, Object and Activity. Appropriations are inferred with this type of budgeting with the Appropriation Inference with Activity (APPRINF2) page. Multi-year budgeting is supported by the BFY and Appropriation with Activity Inference (APBYINF2) page. To enable Type 2, the STD_EXTENSION record on APPCTRL should be set from a blank Parameter Value to STD2.</li> </ul> <p>Text 1, 2, 3, and 4 fields are available on Budget Transaction and Inquiry pages and are initially hidden. Summary pages exist for all four levels (ESUM80L1, 2, 3, &amp; 4). The Adopted field is available on all summary pages and is initially hidden.</p> <p>An additional summary page for level 2 that combines data with structure 91 level 2 (SUM8091).</p>

ID	Name	Notes
		Transfer Limit Editing, a Special control of transfers out at level 2 is available. (See the “ <a href="#">Advanced - Unique Features</a> ” topic for more information.)
81	Expense Budget 81	<p>Does not support multi-year (BFY 9999) budgeting.</p> <p>Record Creation Date and Last Adjustment Date fields are available on Inquiry pages but initially hidden. They record the budget line creation date and latest budget transaction update.</p> <p>Budget Classification Code, Budget Classification Name, Decimal 1, Text 1, 2, 3, and 4 fields are available on Budget Transaction and Inquiry pages but initially hidden.</p> <p>Allotments exist at level 3.</p>
82	Revenue Budget 82	<p>Does not read the Extended/Standard Budget option.</p> <p>Does not support multi-year (BFY 9999) budgeting.</p> <p>Record Creation Date and Last Adjustment Date fields are available on inquiry pages, but initially hidden. They record the budget line creation date and latest budget transaction update.</p> <p>Budget Classification, Budget Classification Name and Decimal 1, and Text 1, 2, 3, and 4 fields are available on Budget Transaction and Inquiry pages, but initially hidden.</p>
83	Expense Budget 83	<p>Does not support multi-year (BFY 9999) budgeting.</p> <p>Record Creation Date and Last Adjustment Date fields are available on Inquiry pages but initially hidden. They record the budget line creation date and latest budget transaction update.</p> <p>Budget Classification Code, Budget Classification Name, Decimal 1, Text 1, 2, 3, and 4 fields are available on Budget Transaction and Inquiry pages but initially hidden.</p>
84	Expense Budget 84	<p>Does not support multi-year (BFY 9999) budgeting.</p> <p>Record Creation Date and Last Adjustment Date fields are available on inquiry pages, but initially hidden. They record the budget line creation date and latest budget transaction update.</p> <p>Budget Classification, Budget Classification Name and Decimal 1, and Text 1, 2, 3, and 4 fields are available on Budget Transaction and Inquiry pages, but initially hidden.</p> <p>Budget Linking is available to link Collected Earned Revenue and Net Collected Earned Revenue for structure 84 level 1 and level 2. When</p>

ID	Name	Notes
		linking the revenue budget to the expense budget, an edit validates that the COA values for BFY, Fund, Appropriation, Department match on both lines. Level 2 has two unique amounts for linking: Summary Link Floor and Summary Link Ceiling fields.
86	Program Expense Budget 86	<p>Does not support multi-year (BFY 9999) budgeting.</p> <p>Does not read the Extended/Standard Budget option.</p> <p>Appropriation Type and Appropriation Group are inferred by Appropriation Unit.</p> <p>Record Creation Date and Last Adjustment Date fields are available on inquiry pages, but initially hidden. They record the budget line creation date and latest budget transaction update.</p> <p>Budget Classification, Budget Classification Name, Decimal 1, and Text 1, 2, 3, and 4 fields are available on Budget Transaction and Inquiry pages, but initially hidden.</p>
87	Program Expense Budget 87	<p>Record Creation Date and Last Adjustment Date fields are available on Inquiry pages but initially hidden. They record the budget line creation date and latest budget transaction update.</p> <p>Budget Classification Code, Budget Classification Name, Decimal 1, Text 1, 2, 3, and 4 fields are available on Budget Transaction and Inquiry pages but initially hidden.</p>
88	Program Reimbursable Budget 88	A calculated amount, Split Availability, is displayed to provide online information that matches the available amount calculated by the Cost Accounting "Split Routine" for both Front-End-Split (FES) and Back-End-Split (BES).
89	Expense Budget 89	<p>Does not support multi-year (BFY 9999) budgeting.</p> <p>Record Creation Date and Last Adjustment Date fields are available on Inquiry pages but initially hidden. They record the budget line creation date and latest budget transaction update.</p> <p>Budget Classification Code, Budget Classification Name, Decimal 1, Text 1, 2, 3, and 4 fields are available on Budget Transaction and Inquiry pages but initially hidden.</p> <p>Allotments exist at level 2.</p>
90	Appropriation Budget 90	<p>Supports multi-year (BFY 9999) budgeting.</p> <p>Allotment functionality exists.</p>

ID	Name	Notes
		<p>Summary pages exist for revenue and for spending at level 2 (ASUM902R and ASUM90L2).</p> <p>Several unique fields on this structure are hidden but can be made visible.</p> <p>BQ90LV2 contains a Related Page link of FY Drilldown that navigates to the Budget Structure 90 Detail Inquiry showing budget and actuals by Fiscal Year and Accounting Period, for the selected budget line.</p>
91	Revenue Budget 91	<p>This budget supports two different types of operation based on the EXT_STD_BUD option on Application Parameter (APPCTRL).</p> <ul style="list-style-type: none"> <li>• Extended (EXT): Budgeting where appropriations are shared and typically entered. Multi-year budgeting is supported by the Budget Fiscal Year Inference (BFYINF) page.</li> <li>• Standard (STD): Budgeting where appropriations are uniquely defined to a combination of Fund, Department, Unit, and Revenue. Appropriations are inferred with this type of budgeting using the Revenue Source Appropriation Inference (RSAPRINF) page. Multi-year budgeting is not supported in an automated fashion.</li> </ul> <p>Summary pages exist for levels 1, 2, 3, &amp; 4 (RSUM91L1, 2, 3, &amp; 4).</p> <p>Additional summary page for level 2 that combines data with structure 80 level 2 (SUM8091).</p>
92	Expense Budget 92	<p>Supports multi-year (BFY 9999) budgeting.</p> <p>Summary pages exist for levels 2, 3, 4 &amp; 5 (ESUM92L2, 3, 4, 5).</p>
100	Expense Budget 100	<p>Does not support multi-year (BFY 9999) budgeting.</p> <p>Allotments exist at level 2.</p> <p>Record Creation Date and Last Adjustment Date fields are available on Inquiry pages but initially hidden. They record the budget line creation date and latest budget transaction update.</p> <p>Budget Classification, Budget Classification Name, Decimal 1, and Text 1, 2, 3, and 4 fields are available on Budget Transaction and Inquiry pages but initially hidden.</p>
101	Expense Budget 101	<p>Does not support multi-year (BFY 9999) budgeting.</p> <p>Record Creation Date and Last Adjustment Date fields are available on inquiry pages, but initially hidden. They record the budget line creation date and latest budget transaction update.</p>

ID	Name	Notes
		Budget Classification, Budget Classification Name, Decimal 1, and Text 1, 2, 3, and 4 fields are available on Budget Transaction and Inquiry pages, but initially hidden.
102	Expense Budget 102	<p>Does not support multi-year (BFY 9999) budgeting.</p> <p>Record Creation Date and Last Adjustment Date fields are available on inquiry pages, but initially hidden. They record the budget line creation date and latest budget transaction update.</p> <p>Budget Classification, Budget Classification Name, Decimal 1, and Text 1, 2, 3, and 4 fields are available on Budget Transaction and Inquiry pages, but initially hidden.</p>
110	Appropriation Budget 110	<p>Allotment functionality exists at level 1.</p> <p>Does not support multi-year (BFY 9999) budgeting.</p>
120	Expense Budget 120	<p>Does not read the Extended/Standard Budget option.</p> <p>Does not support multi-year (BFY 9999) budgeting.</p> <p>Object Class is inferred at level 3 from Object and Division is inferred from Unit at all levels.</p>
121	Revenue Budget 121	<p>Does not read the Extended/Standard Budget option.</p> <p>Does not support multi-year (BFY 9999) budgeting.</p> <p>Revenue Class is inferred at level 3 from Revenue and Division is inferred from Unit at all levels.</p>
190	Appropriation Budget 190	<p>Does not support multi-year (BFY 9999) budgeting.</p> <p>Appropriation Type and Appropriation Category infer at Levels 2 and 3 using Fiscal Year and Appropriation Unit for all budget line actions.</p> <p>Two pre-defined formula fields, Expenditure Available and Encumbered Available, are available on inquiry pages but initially hidden. The formula cannot be changed since it does not use Formula ID. The pre-defined formulas are:</p> <ul style="list-style-type: none"> <li>• Expenditure Available = When Total Revenue is less than Current Budget, Total Revenue – Actual Expense, else Current Budget – Actual Expense.</li> <li>• Encumbered Available = When Total Revenue is less than Current Budget, Total Revenue – Actual Expense + Encumbrance, else Current Budget – Actual Expense + Encumbrance.</li> </ul>

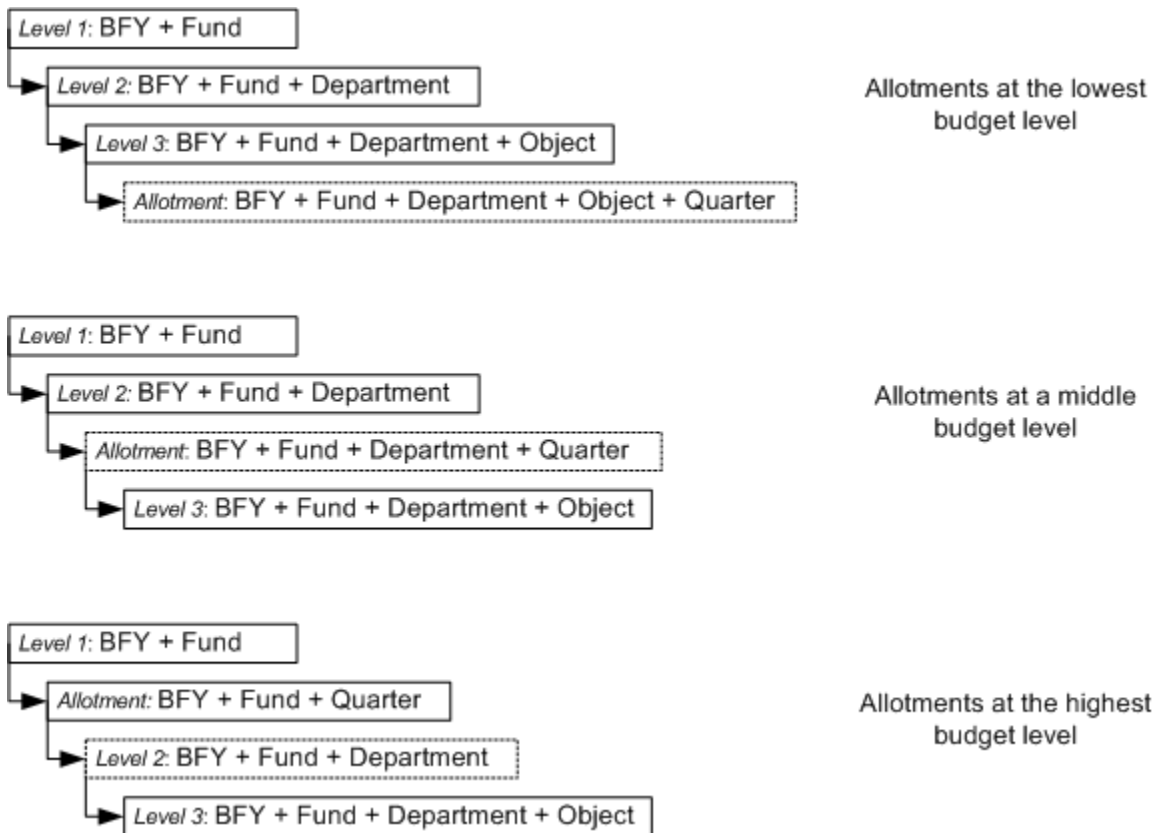
ID	Name	Notes
191	Appropriation Budget 191	<p>Does not support multi-year (BFY 9999) budgeting.</p> <p>Appropriation Category, Appropriation Group, and Appropriation Class infer at Level 3 using Fiscal Year and Appropriation Unit for all budget line actions.</p> <p>Two pre-defined formula fields, Expenditure Available and Encumbered Available, are available on inquiry pages but initially hidden. The formula cannot be changed since it does not use Formula ID. The pre-defined formulas are:</p> <ul style="list-style-type: none"> <li>• Expenditure Available = When Total Revenue is less than Current Budget, Total Revenue – Actual Expense, else Current Budget – Actual Expense.</li> <li>• Encumbered Available = When Total Revenue is less than Current Budget, Total Revenue – Actual Expense + Encumbrance, else Current Budget – Actual Expense + Encumbrance.</li> </ul>
192	Expense Budget 192	Does not support multi-year (BFY 9999) budgeting.
193	Program Budget 193	<p>Does not support multi-year (BFY 9999) budgeting.</p> <p>Two pre-defined formula fields, Expenditure Available and Encumbered Available, are available on inquiry pages but initially hidden. The formula cannot be changed since it does not use Formula ID. The pre-defined formulas are:</p> <ul style="list-style-type: none"> <li>• Expenditure Available = When Total Revenue is less than Current Budget, Total Revenue – Actual Expense, else Current Budget – Actual Expense.</li> <li>• Encumbered Available = When Total Revenue is less than Current Budget, Total Revenue – Actual Expense + Encumbrance, else Current Budget – Actual Expense + Encumbrance.</li> </ul> <p>Summary page exists for level 2 (SUM193L2)</p>
194	Program Budget 194	<p>Does not support multi-year (BFY 9999) budgeting.</p> <p>Summary page exists for level 3 (SUM194L3).</p>

## Allotments (Allotment Options)

Allotments are a budget tool that allows the control of spending against a budget over defined time periods. As with budget structures and levels, allotments must also be designed into a structure. Online setup pages will not enable allotments to exist for a structure that does not have them designed.

Allotment lines are just like a budget line in almost every respect. They both are defined by COA elements, contain multiple budget amounts that correspond to the type of budget (expense or revenue), are created by budget transactions, have an online query, are tracked in the budget journal, and have an audit level. The only three differences are: they are stored in a separate allotment structure; are never automatically generated; and are required to have a time component in their definition.

Allotments are always designed to be for just one budget level. The budget level for allotment attachment does not have to be the lowest or highest level, but can be in between the two. Sample structures would be:



> More Info

Determination of where allotments should exist rests on the question of what level should be broken down into time components. Budget levels below the one allotted will be eligible for funding on a first-come first-serve basis. For example, in the 3<sup>rd</sup> diagram above, if \$10,000.00 is allotted to the 1<sup>st</sup> quarter for a line at level 1, then spending of that money will be done by the department or departments that process spending transactions to that sum.

Just like budget lines, allotment lines are defined on budget transactions. A more in depth discussion on that procedure is located in the Budget Transaction topic. When an allotment line is created, the amount updated on that allotment will be the same one updated on the budget line. The Event Type ID on the budget line will call a posting code that directs the system to update a particular stand alone budget amount. Therefore a

budget line that adopts \$10,000.00 with four equal quarterly allotments will update the Adopted amount on the budget line for the \$10,000.00 and the Adopted amount on each of the four allotment lines for \$2,500.00. If a budget control exists to keep spending in check using that Adopted amount, then if that control is also checked to *Include Allotments*, then the most that can be spent out of the first quarter is \$2,500.00 and not the \$10,000.00 at the budget line. The "[Budget Control](#)" topic contains more information on budget controls and their application to allotment lines.

When creating or maintaining an allotment line, an update to the budget line is not required - the dollar amount can be zero, however an event type must be entered so the allotment line can be created or updated. Having that amount set to zero will require the use of the allotment distribution amount. There is an edit that prevents the sum of allotment lines on a budget transaction from exceeding the distribution amount if that amount is not zero. If it is zero, then the sum of allotment lines cannot exceed the dollar amount.

Given that only 1 choice of frequency can be made within a BFY and budget structure combination, the need often arises to allot certain budget lines differently than others. In such a case, the allotment frequency must be the most detailed. Additionally, accumulation must be used. Not every frequency combination will work. Annual and accounting period frequencies will work not because a frequency of accounting period does not allow for the definition of any accounting periods outside of the fiscal year, which is the budget fiscal year of the allotted budget line. The following example shows allotments for three different budget lines with the same total allotted amount using an allotment frequency of accounting period. The first line allots by accounting period, the second by quarter and the third by semi annual periods.

The annual allotment frequency provides the ability for a multi year budget, such as a capital spending budget, to be defined by no particular budget fiscal year and maintain the ability to track and control spending by allotments defined by a fiscal year. Without the Inception-to-Date accumulation option, spending in a fiscal year can be capped, thus controlled. With that accumulation option, spending in one fiscal year will be limited to the amount allotted to that year and any in any previous year that is still available, thus partially capped.

1	2	3	4	5	6	7	8	9	10	11	12
1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
3000	0	0	3000	0	0	3000	0	0	3000	0	0
6000	0	0	0	0	0	6000	0	0	0	0	0

Samples are provided below depicting the logic used by the system to determine what allotment period should be found when making an update with an accounting transaction that has a budgetary impact. Sample dates have been given for clarity. For the semi annual calculation, accounting periods 0 to 7 will be in period 1 and 8 to 99 will be in period 2. The Accounting Period page has 13 as the highest numbered Adjustment Period besides 99, which is for annual closing purposes.

**Fiscal Year = Budget Fiscal Year**



An accounting transaction with:

Record Date of 12/31/2004

Fiscal Year (FY) 2005

Budget Fiscal Year (BFY) 2005

Quarter (QTR) 2

Accounting Period (APD) 6

Semi Annual 1

Allotment Frequency	Allotment Period
Accounting Period	6
Quarter	2
Semi Annual	1
Yearly	2005

**Fiscal Year < Budget Fiscal Year**

An accounting transaction with:

Record Date of 06/15/2004

Fiscal Year (FY) 2004

Budget Fiscal Year (BFY) 2005

Quarter (QTR) 4

Accounting Period (APD) 12

Semi Annual 2

Allotment Frequency	Allotment Period
Accounting Period	1
Quarter	1
Semi Annual	1
Yearly	2004

**Fiscal Year > Budget Fiscal Year**

An accounting transaction with:

Record Date of 07/15/2005

Fiscal Year (FY) 2006

Budget Fiscal Year (BFY) 2005

Quarter (QTR) 1

Accounting Period (APD) 1

Semi Annual 1

Allotment Frequency	Allotment Period
Accounting Period	13
Quarter	5
Semi Annual	3
Yearly	2006

From the above rules it can be seen that if the Allotment Frequency is:

- *Accounting Period*, then the APD from the accounting transaction's posting line will be the one used to find the allotment line as long as FY = BFY on that posting

line. When the FY < BFY, then APD 1 is used. When the FY > BFY, then the highest APD marked as an Adjustment Period on the APD page other than APD 99 will be used.

- *Quarterly*, then the QTR from the accounting transaction's posting line will be the one used to find the allotment line as long as FY = BFY on that posting line. Quarter is not displayed on the posting line, but is determined by taking the APD of that posting line and looking up the Quarter on the APD page. When the FY < BFY, then QTR 1 is used. When the FY > BFY, then Quarter 5 will be used.
- *Semi Annual*, then the system takes the FY from the posting line and finds the total number of Accounting Periods defined to the FY on the APD page. That number is divided by 2 to determine which APD's are in Semi Annual periods 1 or 2. When there is an odd number of periods, then Semi Annual Period 1 has one more APD than 2. Semi Annual period is not displayed on the posting line. When the FY < BFY, then Semi Annual 1 is used. When the FY > BFY, then Semi Annual 3 will be used.
- *Fiscal Year*, then the FY from the accounting transaction's posting line will be the one used to find the allotment line. This is true for all three situations: FY = BFY, FY < BFY, and FY > BFY.

Within CGI Advantage, rules used to define allotments can differ across budget structures and budget fiscal years. Setup of these rules is on a page accessed through the *Allotment Options* listing in Related Pages in the row menu on the Budget Structure page.

- **BFY** - All allotment options for a budget structure are defined by Budget Fiscal Year (BFY), allowing for the flexibility of changing options in different years. Valid values are those years defined on the Fiscal Year table along with the value of 9999, which is for multi-year budgets.
- **Allotment Frequency** - Five different frequencies are allowed and one must be chosen if allotments are to be defined in a BFY. The default for this field is *Accounting Period* and the field cannot be left blank. This choice should not be changed after allotment lines have been entered for a structure. Such a change may make the allotment periods already established invalid, with no way to change them as this frequency is used to edit budget transactions.
  - *Accounting Period* - Allotment periods can be defined to the same values established on the Allotment Period (APD) reference page.
  - *Quarterly* - Allotment periods can be defined to the four common values for quarters: 1, 2, 3, and 4 with a special quarter 5 where the FY is greater than the BFY on the accounting transaction.
  - *Semi Annual* - Allotment periods can be defined to one of two semi annual values: 1 and 2 with a special period of 3 where the FY is greater than the BFY on the accounting transaction.
  - *Annual* - Allotment periods can be defined to the same values established on the Fiscal Year (FY) reference page. Budget levels lines with no BFY and budget lines with BFY of 9999 have to use this frequency.
  - *No Allotments* - When allotment lines are to be turned off on a budget level to prevent use, this selection will prevent their creation.

- **Allotment Accumulation** - Three rules prescribe whether unused allotment spending authority for one allotment period is available in subsequent period(s). The default for this field is No Accumulation.
  - *No Accumulation* - Any budget availability must be used in the period allotted. Any remainder will not be automatically carried forward. To perform that carry forward would require a budget transaction to move money between allotment lines.
  - *Year-to-Date Cumulative* - A choice used for allotments defined by accounting periods, quarters, and on a semi annual basis to allow for budget availability not used in prior periods to be considered available in the current allotment period.
  - *Inception-to-Date Cumulative* - A choice used for allotments defined by Fiscal Years to allow for budget availability not used in prior Fiscal Years to be considered available in the current Fiscal Year.
- **Allotment Presence Optional** - For a BFY and structure combination, allotment lines can be required for any accounting transaction to successfully process against a budget line by not making this indication. If made then allotment lines will not be required for any budget line. However, if just one allotment line does exist for the budget line being updated, then the accounting transaction must find a matching allotment line. When allotment lines are optional for a budget level in a BFY, if at least one allotment line is created for a budget line in that BFY then allotment lines will be required for the budget line.

## Required Budgets

Although budget control is an essential feature of CGI Advantage, there are cases where accounting transactions with event types that are constructed to make budget updates do not find a matching budget line, and that is acceptable. The control of trust fund activity done by cash availability instead of budget is one example.

When CGI Advantage processes a financial transactions, the system attempts to find and update a budget line in each active budget structure that is applicable to the activity of the transaction. If the system does not find a budget line in a particular budget structure and budget level combination, the system checks the [Required Budget \(REQBUD\)](#) setup page to determine if a match on the budget structure must be present for this transaction. If no requirement rule exists and no matching line is found, then no error is issued because the activity on the transaction was 'optional' for budgeting. However, if a matching budget line was found, an update will be made even if the structure is not required, but is 'optional'.

## Required Budget Configuration

As the rules for when a budget tracking spending, tracking revenues, or recording both types of accounting activity can vary, CGI Advantage provides the means to define the criteria for those rules. The Required Budget Configuration (REQBUDC) page provides that definition in a single record established before any accounting activity is processed. This page then controls what is available to use on the Required Budget (REQBUD) page.

In addition to Budget Fiscal Year, which is always a part of a Required Budget rule, there can be from one to five additional criteria used. Each of the five Criteria fields has a pick that displays all the valid choices. Data entry must not skip over a Criteria field. When defining values, if the criteria selected has multiple keys (for example, Department keys Major Program Group), enter those keys in the proper order. Keep in

mind that the criteria selected will not apply to all types of budgets and later setup on the Required Budget page will allow you to wildcard the criteria fields so it is not used in system evaluation.

Please note that once records have been inserted to the Required Budget page, updates to the Required Budget Configuration page cannot be made. In this event, the Required Budget records must be deleted and added back after updates to the configuration page have been completed.

## Required Budget

The Required Budget (REQBUD) page can be opened directly or from the Required Budget listing under the Related Pages of the row level menu on the Budget Structure page. As mentioned in the “[Required Budget Configuration](#)” topic, the Required Budget page reflects the setup from the configuration.

- **Structure** – Each rule must be associated with a single budget structure ID. Structures that are optional need not be entered unless auto generation of budget lines is desired when a matching budget line is not found. Reimbursement budget structures need not be entered as setup on the Major Program reference page amounts to a required budget rule.
- **Budget FY** – Each rule must be associated with a budget fiscal year, including 9999 if that special year is used on a budget structure where budget fiscal year is a key. Unlike budget control rules where the budget fiscal year is 9999 for controls used on budget structures without a budget fiscal year, on Required Budget the budget fiscal year is matched to the budget fiscal year found on posting lines. This means for a cost accounting structure like 38 there may be a rule for Budget FY 9999 and 2021 to account for both values found on posting lines, whereas on Budget Level Control the budget fiscal year would have been 9999.
- **Criteria 1 to 5** – If the corresponding field on Required Budget Configuration was used, this Required Budget field is ‘activated’. If not used, the field is protected. Configuration could be that all five criteria fields are protected, as the rule for what activity has to be budgeted is ‘all activity,’ in which case just Budget FY and Structure will be used. Enter valid values on the respective criteria reference page. Invalid values will not issue an error; however, such a rule will never be used by successful transaction processing.

Required Budget is not a list of exception rules but rather a list of inclusion rules. For this reason, wildcards are available for all parameters except BFY.

- *N/A* represents any value for the parameter, even a blank transaction field meets this rule. This wildcard effectively defines the criteria as not being used for a BFY and budget structure combination. Use this value when the criteria does not apply to the structure.
- *ALL* represents a non-blank value will meet the rule.
- *BLNK* represents a blank value only will meet the rule.

An optional configuration step in required budget definition would be to use Configure Page (DESIGNER) to give the column headings names that match the reference data defined as that criteria for users that will consume Required Budget data.

- **Auto Generate** – This indication will trigger the system to auto generate a budget line at each required budget level (i.e. those budget levels not setup as presence optional) and even those that are not required if setup to auto generated even when optional. The generation will not be successful if there is not enough COA to create a budget line.
- More Info

However, before that determination of what budget structures have to be updated begins, the application determines if the transaction will have a budget impact. Such a determination comes from the posting codes used on the posting lines of the transaction. Those posting codes defined on the Posting Code (PSCD) page have 3 different types of budget update settings:

- No Budget Structures
- Expense & Both Budget Structures
- Revenue & Both Budget Structures

Once it has been determined that a posting line is to update a type of budget structure, the system will search for a matching line on all active budget structures of that type for all budget levels and make updates. Then the system will read Required Budget to evaluate if it made an update to all required budget structures for their required budget levels. That evaluation starts with the required field of Budget FY. Very simple rules can require a budget structure based on just a Budget FY. A more complex rule can be established using one or more of the Criteria fields. One such situation would be that a department expense budget is required by combining the Budget FY and a department code as Criteria 1. Posting lines with those two would require a matching budget line be found on that department structure, but the same Budget FY and another department code would not require a match.

When a match is found, an update to that structure must be made or a 'budget line not found' error is returned to the user. When there is not enough chart of account (COA) codes on the transaction to make an update to a required budget structure, the same error is issued. This feature makes Required Budget another means of requiring COA values and makes it, in conjunction with the budget structure, another means of defining valid COA combinations. Both of these features make up what is often called Presence Control. Such control required there to be a budget line defined for the COA, but not necessarily available budget. To add the availability requirement to a budget structure/level/line would make it Full Control. The combination of Required Budget and one or more budget controls put into place with an error level of reject or overrideable (at the least) provides for this full control.

There was a third type of control in prior Advantage applications, No Control, which could mean two things. First, the COA combination did not have to be on a valid budget line because that COA was non-budgeted. Second, it would mean that if the COA combination did not exist, then a budget line would be automatically created. When not enough COA exists to generate a budget line, there will be a message issued for each element required but not present. That message is issued for each budget level that is not optional, including the audit level.

› Setup Recommendations

- Budget controls should not be utilized for those budget structures that use the automatic budget line generation feature. If controls are employed, then budget control errors will be issued along with the informational messages that lines are being automatically generated. Such controls with a violation action of reject would actually prohibit the line(s) from being generated. There are times when controls and automatic generation can work together. Given a two level budget structure where lines are only created by the budget office for level 1 and level 2 is just for tracking, would be such a situation. A control would be placed only on level 1 and

Required Budget would be set to Auto Generate. Then if an accounting transaction used a combination of COA that did not match an existing line at level 1, the transaction would reject upon auto generating that line because it would immediately go negative. If a line had been found at level 1, but it did not have enough authority, the transaction would still fail. However, if the line at level 1 had enough authority and no level 2 line existed, the accounting transaction would update the level 1 line and generate a level 2 line.

- Be careful not to establish rules that would require a structure when all activity that meets the rule will not contain enough COA to meet the budget. Required Budget is useful in requiring COA in this manner, but may conflict with other COA rules like the Event Requirements (ERQ) page, for example.
- Structures not required will require the establishment of budget lines before their COA combinations are used. When this does not happen, the systems assurance job for budgets will find the accounting activity that matches the budget line with no matching update on the budget line. As that program does not compare the date of the accounting activity to the date of budget line creation, it will evaluate the line as being out of sync.

## Budget Tracking Amounts

As part of the initial analysis necessary to configure budget control an effort to determine, define, and configure the types of accounting and procurement transactions that need to be controlled or tracked on budgets is required. CGI Advantage includes over 30 pre-defined budget tracking amount fields for budget tracking purposes. Examples of delivered budget tracking amount fields include Adopted, Current Budget, Pre-Encumbered, and Cash Expenses.

Budget tracking amount fields often called "buckets" are used to track different kinds of activities such as budget modifications, accumulation of accounting transactions, and calculated amounts of transactions posted against a budget amount. Each pre-defined budget amount field is defined on the Budget Tracking Amount (BUDTAM) configuration page. Not all budget amounts are displayed online and many should not have the online options changed because the online options do not apply to all amounts. A filter on the page selects only amounts that are stand alone and updated by only final transactions. Also displayed are calculated amounts that have a formula that can be defined. Other amounts that are automatically calculated by the application without formula variants are not displayed. Not all fields are editable as those that should not be changed are protected.

- **Field ID** – A required identification number that defines the budget amount with an ID that is then used in other budget configurations.
- **Field Name** – A required text description that identifies the amount online and in reports.
- **Field Type** – A required classification of budget amount – *Budget*, *Expense*, or *Revenue* – that is used by system processing when making budget updates and control evaluations.
- **Formula ID** – An identification assigned to a calculated budget amount formula on the Budget Formula Administration configuration page, which is associated with the calculated budget amount on the Budget Tracking Amounts configuration page in order to define how the system should calculate the amount.
- **Include Pending Increases** – A flag to select when pending increases to a stand alone budget amount are to be considered as actual budget line updates. If checked, the system will reflect that

pending increase amount plus the accepted amount when viewing a Budget Level Inquiry page. Also, the system will evaluate future constraint checks with that budget amount with both the accepted and the pending increase included.

- **Include Pending Decreases** – A flag to select when pending decreases to a stand alone budget amount are to be considered as actual budget line updates. If checked, the system will reflect that pending decrease amount plus the accepted amount when viewing a Budget Level Inquiry page. Also, the system will evaluate future constraint checks with that budget amount with both the accepted and the pending decrease included.
- **Needs Initialization** – An indication that something fundamental with how the application determines what the amount represents has changed and needs to be addressed by a system administrator.

> More Info

For every stand alone budget amount, there are two accompanying amounts. Pending Increases and Pending Decreases. Transactions with the *Pending* submit phase will update one of these amounts upon validation and not the 'accepted' amount, even if a workflow rule is not met. The system will then execute all controls that apply to the budget line. If those controls are to consider the amount from that transaction upon validation, then the include flag should be selected. Additionally, if a workflow rule is met and the transaction does go to pending status and the budget line should be increased or decreased by the amount of that pending transaction, then the include flag should be selected.

The functionality just described would be put to use if there was \$1000 available on a budget line and five payment requests were to be entered against that budget line for \$300 each. Given a pending submit phase on the Transaction Control (DCTRL) page and a workflow rule being met on each, then the first three transactions will accept and the last two will fail. This functionality must be weighed against the desire to get all five transactions into workflow and let the approvers decide which three will be submitted to final for disbursement and which two will not. Additionally, when approvals are slow in being applied, one transaction that is eventually rejected will withhold funds from others that would be approved if allowed to get to pending.

**Note:** If a pending amount is to be considered for an amount that is often updated by a transaction that would be closing out part or all of a referenced transaction that updated another bucket, then the opposite pending flag should be selected for the referenced bucket. If not, then the liquidation of that budget amount will not be considered with the recording of the new budget amount.

## Examples of Delivered Budget Amounts

Each description of a budget amount given in the next section is put in terms of the most prevalent types of updates. As updates to any stand-alone budget amount is determined by the posting code used, there may be situations other than those described where updates are made to the amount field. Please note that some budget inquiry pages may not display all amounts in the following table for a given type of budget. Please verify on Configure Page (DESIGNER) whether there are any hidden amounts that need made visible (that is, Priority Extension changed from *Tertiary* to *Primary* or *Secondary*).

Name	Attribute Name	ID	Type	Pending Amounts Attribute (ID)
Adopted	ADPT_AM	1	Budget	PEND_INCR_1 (101), PEND_DCRS_1 (201)
Allocated	ALOC_AM	2	Budget	PEND_INCR_2 (102), PEND_DCRS_2 (202)
Amendments	AMND_AM	3	Budget	PEND_INCR_3 (103), PEND_DCRS_3 (203)
Carry Forward	CF_AM	4	Budget	PEND_INCR_4 (104), PEND_DCRS_4 (204)
Original Budget	ORIG_BUD_AM	5	Budget	
Current Budget	CURR_BUD_AM	6	Budget	
Reversions	RVRS_AM	8	Budget	PEND_INCR_8 (108), PEND_DCRS_8 (208)
Transfer Out	XFERO_AM	9	Budget	PEND_INCR_9 (109), PEND_DCRS_9 (209)
Transfer In	XFERN_AM	10	Budget	PEND_INCR_10 (110), PEND_DCRS_10 (210)
Purchase Reservation	PRCH_RSRV_AM	11	Expense	PEND_INCR_11 (111), PEND_DCRS_11 (211)
Pre Encumbered	PENC_AM	12	Expense	PEND_INCR_12 (112), PEND_DCRS_12 (212)



Encumbered	ENC_AM	13	Expense	PEND_INCR_13 (113), PEND_DCRS_13 (213)
Accrued Expenses	ACRD_EXP_AM	14	Expense	PEND_INCR_14 (114), PEND_DCRS_14 (214)
Cash Expenses	CASH_EXP_AM	15	Expense	PEND_INCR_15 (115), PEND_DCRS_15 (215)
Uncommitted	UCOMIT_AM	16	Expense	
Unobligated	UOBLG_AM	17	Expense	
Charges	CHRG_AM	18	Expense	PEND_INCR_18 (118), PEND_DCRS_18 (218)
Back End Splits	BACK_END_SPLT	19	Expense	PEND_INCR_19 (119), PEND_DCRS_19 (219)
Expected Revenue	EXPT_REV_AM	20	Budget	PEND_INCR_20 (120), PEND_DCRS_20 (220)
Awarded	AWD_AM	21	Budget	PEND_INCR_21 (121), PEND_DCRS_21 (221)
Billed Earned Revenue	BILL_EARN_REV_AM	22	Revenue	PEND_INCR_22 (122), PEND_DCRS_22 (222)

Unbilled Earned Revenue	UBILL_EARN_REV_AM	23	Revenue	PEND_INCR_23 (123), PEND_DCRS_23 (223)
Collected Earned Revenue	COLL_EARN_REV_AM	24	Revenue	PEND_INCR_24 (124), PEND_DCRS_24 (224)
Billed Unearned Revenue	BILL_UERN_REV_AM	25	Revenue	PEND_INCR_25 (125), PEND_DCRS_25 (225)
Collected Unearned Revenue	COLL_UERN_REV_AM	26	Revenue	PEND_INCR_26 (126), PEND_DCRS_26 (226)
Total Revenue	TOT_REV_AM	27	Revenue	
Revenue Credits	REV_CR_AM	28	Expense	PEND_INCR_28 (128), PEND_DCRS_28 (228)
Adopted	ADPT_REV_AM	29	Budget	PEND_INCR_29 (129), PEND_DCRS_29 (229)
Allocated	ALOC_REV_AM	30	Budget	PEND_INCR_30 (130), PEND_DCRS_30 (230)
Amendments	AMND_REV_AM	31	Budget	PEND_INCR_31 (131), PEND_DCRS_31 (231)
Carry Forward	CF_REV_AM	32	Budget	PEND_INCR_32 (132), PEND_DCRS_32 (232)

Original Budget	ORIG_REV_BUD_AM	33	Budget	
Current Budget	CURR_REV_BUD_AM	34	Budget	
Reversions	RVRS_REV_AM	35	Budget	PEND_INCR_35 (135), PEND_DCRS_35 (235)
Transfer Out	XFERO_REV_AM	36	Budget	PEND_INCR_36 (136), PEND_DCRS_36 (236)
Transfer In	XFERN_REV_AM	37	Budget	PEND_INCR_37 (137), PEND_DCRS_37 (237)
Unrecognized Revenue	UNREC_REV_AM	38	Budget	
Actual Expenses	ACTU_EXP_AM	39	Budget	
Unexpended Cash	UNEXP_CASH_AM	40	Expense	
Unexpended Accrued	UNEXP_ACRD_AM	41	Expense	
Linked Expected Revenue	LNK_EXPT_REV_AM	42	Budget	
Linked Total Revenue	LNK_TOT_REV_AM	43	Budget	
Linked Collected Revenue	LNK_COLLERN_REV_AM	44	Budget	

Amended Expected Revenue	AMND_EXP_REV_AM	45	Budget	PEND_INCR_45 (145), PEND_DCRS_45 (245)
Current Expected Revenue	CURR_EXP_REV_AM	46	Budget	
Total Budget	TOT_BUD_AM	47	Budget	
Split Availability	SPLIT_AVAIL_AM	48	Budget	
Sum of Child Adopted	CHILD_SUM_1	301	Expense	PEND_INCR_SUM_1 (401), PEND_DCRS_SUM_1 (501)
Sum of Child Allocated	CHILD_SUM_2	302	Expense	PEND_INCR_SUM_2 (402), PEND_DCRS_SUM_2 (502)
Sum of Child Original Budget	CHILD_SUM_3	303	Budget	
Sum of Child Current Budget	CHILD_SUM_4	304	Budget	
Sum of Child Current Budget	CHILD_REV_SUM	305	Budget	
Available Balance	AVAIL_BAL	503	Budget	
Uncommitted (Alternate)	UCOMIT_AM_1	504	Budget	
Unobligated (Alternate)	UOBLG_AM_1	505	Budget	

Revenue Budget Reserve	RS_REV_AM	506	Budget	PEND_INCR_506 (507), PEND_DCRS_506 (508)
Expense Budget Reserve	RS_EXP_AM	509	Budget	PEND_INCR_509 (510), PEND_DCRS_509 (511)
Tolerance Adjustment	TOL_ADJ	512	Revenue	PEND_INCR_512 (513), PEND_DCRS_512 (514)
Available Balance (Alternate)	AVAIL_BAL_1	515	Budget	
Special Expense Credit	SPL_EXP_CR_AM	516	Expense	PEND_INCR_516 (517), PEND_DCRS_516 (518)
Authorized Restricted Revenue In	AUT_RSTREV_IN_AM	519	Expense	PEND_INCR_519 (520), PEND_DCRS_519 (521)
Authorized Restricted Revenue Out	AUT_RSTREV_OUT_AM	522	Expense	PEND_INCR_522 (523), PEND_DCRS_522 (524)
Unauthorized Restricted Revenue In	UAUT_RSTREV_IN_AM	525	Expense	PEND_INCR_525 (526), PEND_DCRS_525 (527)
Unauthorized Restricted Revenue Out	UAUT_RSTREV_OUT_AM	528	Expense	PEND_INCR_528 (529), PEND_DCRS_528 (530)
Available Resources	AVAL_RSRC_AM	531	Budget	

Excess Revenue	EX_REV_AM	532	Budget	
Current Budget w/Excess Revenue	CUR_BUD_WEX_REV_AM	533	Budget	
Uncommitted w/Excess Revenue	UCOMIT_WEX_REV_AM	534	Expense	
Unobligated w/Excess Revenue	UOBLG_WEX_REV_AM	535	Expense	
Unexpended Accrued w/Excess Revenue	UEXP_ACR_WEXREV_AM	536	Expense	
Unexpended Cash w/Excess Revenue	UEXP_CSH_WEXREV_AM	537	Expense	
Variance	VARIANCE_AM	538	Expense	
Encumbrance Revenue Roll In	ENC_REV_RL_IN_AM	539	Budget	PEND_INCR_539 (540), PEND_DCRS_539 (541)
Encumbrance Revenue Roll Out	ENC_REV_RL_OUT_AM	542	Budget	PEND_INCR_542 (543), PEND_DCRS_542 (544)
Unallotted	UNALOT_AM	545	Budget	
Total Allotment Amount	TOT_ALOT_AM	546	Budget	PEND_INCR_546 (547), PEND_DCRS_546 (548)

## Budget Formulas

The formulas used by those calculated amounts designed with flexibility in their calculation are defined on the Budget Formula Administration (BFADM) configuration page. Each formula is defined to just one calculated budget amount. Each formula is defined to just one calculated budget amount.

This page allows you to add, modify, or delete budget formulas that are used with modifications and deletions being actions generally discouraged. Adding new records should use a formula ID greater than 1100 as delivered formulas will never use an ID that large. The Greater Than (<) and Less Than (>) operators cannot be used in the Formula field on this page.

- **Formula ID** – A required identification number that defines the budget formula with an ID that is then used in other budget configurations.
- **Formula Name** – A required text description that identifies the formula online and in reports.
- **Formula Definition** – A required description of the formula in mathematical terms that is visible on budget level inquiry pages for informational purposes. This formula is not used in system calculations.
- **Formula** – A required description of the formula in reverse Polish notation that is used by the system in the calculation of an amount.
- **Field ID** – The ID of the Budget Tracking Amount record for which the budget formula applies.
- **Needs Initialization** – An indication that something fundamental with how the application determines the calculation has changed and needs to be addressed by a system administrator.

## Budget Controls

Budgets have been described up to this point as having two major functions: defining valid chart of account code (COA) combinations and tracking transaction activity. *Presence Control* is the term used to refer to the COA combination editing. Under this control level, an accounting transaction that will update a budget must have matching COA to an existing budget line. If not, a 'budget line not found' error will be issued.

While those abilities are very important, certain budget structures have to possess the ability to control the updates from budget and accounting transactions. This type of control is often referred to as *Full Control*.

## Budget Control Administration

Online definition of a budget control is performed on the Budget Control Administration (BCADM) configuration page. Changes to the delivered records can be done and tracked as a modification to delivered data for future upgrades to re-apply. New records can also be added to meet any controlling needs.

- **Control ID** - The required unique number assigned to a control for identification.
- **Control Name** - The required short descriptive name used in conjunction with the ID when viewing control records.

- **Control Description** - The required full description of a control to explain in accounting and budgeting terms how a control functions.
- **Control Formula** - The required descriptive field to explain a control with budget amount names, operands, and amounts.
- **Formula Type** - Controls are either one of two types: Constraint or Guideline. Constraints are always fired when a budget line is updated, which means that a constraint error can be issued on an accounting or a budgeting transaction. Guidelines are only fired when a budget transaction updates a budget line.
- **Expense/Revenue** - A single control never applies to all types of budgets. Most controls are for regulating either an expense budget or a revenue budget. A small number of controls will actually apply to a third type of budget - both expense and revenue budgets. This required setting for a budget control enables the system to only evaluate controls that should apply to a type of structure.
- **Left Hand Side (LHS)** - The required left hand side of a budget control's formula defined by using reverse Polish notation. Budget amount fields are denoted by their ID values with a 'B' preceding that ID. Other values such as numbers and operands (+, -, \*, /) can also be used to define the LHS of a formula. When < or > is used, the budget control is an 'advanced control'.
- **Right Hand Side (RHS)** - The required right hand side of a budget control's formula defined by using Reverse Polish Notation. Budget amount fields are denoted by their ID values with a 'B' preceding that ID. Other values such as numbers and operands (+, -, \*, /) can also be used to define the RHS of a formula. When < or > is used, the budget control is an 'advanced control'.
- **Operator** - A required choice of greater than (>), greater than or equal to (>=), less than (<), less than or equal to (<=), equal to (=), and not equal to (<>) are used to compare the LHS and RHS values.
- **Bucket Triggers** - When an update is made by a line on an accounting or budgeting transaction, not every bucket is changed on a budget line. When evaluating controls, the system will fire all controls that are applicable to a budget line. However, it will only issue errors for controls that had one or more of their Budget Triggers changed. When a budget bucket ID is used in either the LHS or RHS fields, it is to be listed again in the Budget Triggers field, but without the 'B' in front of the ID. Multiple values are separated by commas. This is a required field and must match the LHS and RHS for all budget amounts
- **Error Code** - Each budget control has to point to one error message. The ID for that error message is defined as the Code on the Messages (MESG) reference page. Budget control error messages do not use the Severity Field on the Messages page, but rather severity is set online within one or more budget control configuration locations. However, the Severity Field on Messages should be set to Error for budget control messages. The Override Level field on the Messages record should be the appropriate value between 1 and 10. If set to 0, the message cannot be overridden even given that the severity level is chosen on a budget control configuration. Any custom error messages should begin with the letter 'W' to differentiate them from delivered messages and ensure that the data is not overlaid with data from an upgrade that may have created a new error message with the same ID.
- **Advanced Budget Control** - When a budget control uses the < or > within a LHS or RHS value, the control cannot be tracked the same way as others. Such controls are marked as an Advance Budget Control so that the system can handle them correctly.



## Budget Control

The highest level of control is at the system wide level, which is set on the Budget Control (BUDCON) configuration page. All constraints and guidelines in an application appear on this page as it is really a different view of the same data seen on the Budget Control Administration configuration page. Where the administration page is for defining a control, the Budget Control page is for turning on or off a control as well as setting what severities are allowed at other locations.

Only those fields not displayed on the Budget Control Administration control page are listed below.

- **Default Violation** - The value selected in this field will be the level of error issued for the control if no level below system wide is used to set a different level of control. One choice in the pick list for the field is different on BUDCON than the other levels of control application. *Not Selected* indicates that the control is not used by the application at all. It is recommended that any control you will not use should have this setting. Furthermore, it is recommended that the controls you will use are set to *No Action* with the actual setting to come from Budget Line Controls (next configuration page discussed).
- **Allow Reject, Allow Override, Allow Warning, and Allow No Action** - These flags have two purposes. The first purpose is to edit lower areas of control application to prevent the choice of a default action or allowed action not available system wide use. When checked, that error level will be in the list of choices at the budget line level, given that choice is not restricted at a lower level.
- **Include Allotments** - Selection of this flag will indicate that the constraint should apply to allotments of a budget line by default, unless the flag with the same name is unchecked at a lower level.

## Budget Fund Control

The second place for control management is at the Fund level, which is set on the Budget Fund Control (BUDFCON) configuration page. This page is used to make 'fund exceptions to the rule.' Although the second location discussed for configuring budget controls, this page is not necessarily the second location the system looks as that ordering is control by the Inheritance Rule field on Budget Structure.

Budget lines without a fund code will not be able to read controls from BUDFCON. Budget lines without a BFY displayed will read BUDFCON with a BFY of 9999. Those budget lines with a BFY and Fund will read BUDFCON with the Fund and the BFY found on the line, whether that BFY is a single year or multi year (9999).

There is not a field listing as the fields other than Budget FY and Fund (which are self-explanatory) are listed in the Budget Control section.

## Budget Level Control

The third place for control management is the Budget Level Control (BUDLCON) configuration page. This area of control settings will apply to all budget lines within a particular budget structure and budget level combination unless specified otherwise at a lower control level.

Budget lines without a displayed BFY value (structures 11 and 37 - 40 for example) will read the page with a BFY value of 9999. Those budget lines with a BFY value displayed, will read the page with that BFY whether it is a regular year or multi year (9999).

There is not a field listing as the fields other than Structure ID, Level ID, and BFY (which are self-explanatory) are listed in the Budget Control section.

## Budget Line Control

The fourth place for control management is at the budget line level. There is no configuration page to setup or view of all these controls. Line level controls are added on budget transactions and reviewed from the individual budget inquiry pages.

## Budget Control Establishment Strategies

When setting up custom controls there are several points to remember in addition to those mentioned in the previous discussions of the configuration pages:

- Insert constraints on Budget Level Control for the lowest required budget level of a structure that should control spending and not upper levels as those levels will only issue duplicate errors. This guidance assumes you have guidelines in place to prevent more budget authority to be given at lower levels than at the parent upper levels.
- Do not place parent to child amount guidelines on the lowest budget level as there is no level below that one for the system to accurately calculate the guideline so that the system will always issue the guideline error.
- Ensure that control ID #13, #14 or #29 is inserted on Budget Level Controls for the each level in a reimbursement budget structure with a default violation of Reject with none of the Allow flags checked. This control ID on Budget Level Controls should be the same one that is the Application Parameter for Reimbursement Budget Availability (REIM\_BUD\_AVAIL).
- Give security access to the *Load Constrains* action in a very restricted fashion for better budget control.
- Where possible, build with calculated amounts instead of stand alone amounts for performance reasons.
- Do not change delivered controls unless you will track the change and reapply with an upgrade, or when upgrading you will not be taking delivered controls. The recommended approach is to copy the constraint you want to change and create a new one with an ID that is four-digits.
- Do not include the same budget amount twice within a side or in the left and right sides simultaneously, unless intended. This may sound simplistic if only stand alone amounts are used, but calculated amounts may cause this mistake if the full calculation formula is not evaluated.
- Avoid recursive formulas where the application will get caught in a loop trying to calculate a control. This problem can occur within the LHS or RHS definitions or be inherited from faulty Budget Formula setup. To create an example, the following letters were used to denote budget amount fields. The following example shows a recursive problem as A has to be calculated from an amount (F) that already includes A.

LHS:            A (calculated amount)

Operator:      >=

RHS:            0

Formula for A = B (calculated amount) - C - D - E (C, D, & E are stand alone)

Formula for B = F (calculated Amount) - G

Formula for  $F = A + H$

- When determining the settings for the **Include Pending Increases** and **Decreases** flags on Budget Tracking Amount, remember that most transactions perform a liquidation of another. If the pending increases for the referencing transaction and not the pending decreases for the referenced transaction are checked, a budget error could be issued in the situation where the liquidation is needed to cover the liquidating entry.
- > More Info

<b>Budget Control Severity of WARNING</b>					
<b>Transaction Control Submit Phase of FINAL</b>					
<b>Workflow Rule</b>	<b>Pending Included</b>	<b>Over Pending Phase</b>	<b>Validate</b>	<b>Submit</b>	<b>Final Approval</b>
n/a	Yes	n/a	Warning	Final with Warning	n/a
n/a	No	n/a	Warning	Final with Warning	n/a
<b>Transaction Control Submit Phase of PENDING</b>					
<b>Workflow Rule</b>	<b>Pending Included</b>	<b>Over Pending Phase</b>	<b>Validate</b>	<b>Submit</b>	<b>Final Approval</b>
Met	Yes	n/a	Warning	Pending with Warning	Final with Warning
Met	No	n/a	No Warning	Pending with Warning	Final with Warning
Not Met	Yes	n/a	Warning	Final with Warning	n/a
Not Met	No	n/a	No Warning	Final with Warning	n/a
<b>Budget Control Severity of REQUIRE OVERRIDE</b>					

Transaction Control Submit Phase of FINAL					
Workflow Rule	Pending Included	Over Pending Phase	Validate	Submit	Final Approval
n/a	Yes	n/a	Overrideable Error	Final with Warning	n/a
n/a	No	n/a	Overrideable Error	Final with Warning	n/a

Transaction Control Submit Phase of PENDING					
Workflow Rule	Pending Included	Over Pending Phase	Validate	Submit <sup>1</sup>	Final Approval
Met	Yes	Required Before	Overrideable Error	Pending with Warning <sup>1</sup>	Final with Warning
Met	No	Required Before	No Error	Pending with No Errors	Rejects <sup>2</sup>
Not Met	Yes	Required Before	Overrideable Error	Final with Warning <sup>1</sup>	n/a
Not Met	No	Required Before	No Error	Final with Warning <sup>3</sup>	n/a
Met	Yes	Allowed Only After	Overrideable	Pending with Warning <sup>4</sup>	Final with Warning
Met	No	Allowed Only After	No Error	Pending with No Errors	Rejects <sup>5</sup>
Not Met	Yes	Allowed Only After	Overrideable Error	Fails <sup>6</sup>	n/a

Not Met	No	Allowed Only After	No Error	Fails <sup>6</sup>	n/a
<b>Budget Control Severity of REJECT</b>					
<b>Transaction Control Submit Phase of FINAL</b>					
Workflow Rule	Pending Included	Over Pending Phase	Validate	Submit	Final Approval
n/a	Yes	n/a	Reject Error	Reject Error	n/a
n/a	No	n/a	Reject Error	Reject Error	n/a
<b>Transaction Control Submit Phase of PENDING</b>					
Workflow Rule	Pending Included	Over Pending Phase	Validate	Submit	Final Approval
Met	Yes	n/a	Reject Error	Reject Error	
Met	No	n/a	No Error	Reject Error	
Not Met	Yes	n/a	Reject Error	Reject Error	n/a
Not Met	No	n/a	No Error	Reject Error	n/a

**Note 1:** Overrides were applied when issued after the validate action before the first submit.

**Note 2:** Upon final approval, an overrideable error will be issued and the transaction rejects back to draft as this is the first time the transaction has updated an accepted budget amount instead of a pending amount. Overrides can be applied and the transaction sent back into workflow, but it will continue to reject until there is budget authority sufficient for the transaction to accept or the Violation Action is relaxed for that budget control on that budget line. Another alternative is to have a user with security rights to use the *Bypass Approvals* action on the transaction to force the transaction to final.

**Note 3:** Overrides were applied before the second submit action when not issued from validate but from first submit.

**Note 4:** Overrides were applied after reaching pending status but before final approval.

**Note 5:** Upon final approval, an overrideable error will be issued and the transaction rejects back to draft as this is the first time the transaction has updated an accepted budget amount instead of a pending amount. Overrides cannot be applied given the setting of *Allow only after reaching*. The error goes away upon the next validate or submit, but will continue to return upon final approval until there is budget authority sufficient for the transaction to accept or the Violation Action is relaxed for that budget control on that budget line.

**Note 6:** Overrides cannot be applied given the setting of *Allow only after reaching*. Thus a submit to final is not possible and the transaction remains with the overrideable error. Such a combination should not exist where workflow rule(s) established for a transaction's code will not always be met, the choice of *Allowed before or after reaching* option should be selected.

## Invalid Budget Control Options

This page allows you to view and edit the violation actions that have been prohibited from being selected as either default violation actions or allowed alternative violation actions for any budget control formula in the system. Excluded violation actions for decentralized budget structures can be specified separately from those of centralized budget structures. Excluded violation actions can also be separately specified for budget constraints and budget guidelines. You can use this page to ensure, for example, that no budget constraint attached to a decentralized budget could reject a transaction.

Excluded violation action options prevent violation actions from being selected at the System-Wide and Fund levels only if a violation action is excluded for use in both centralized and decentralized budgets. Otherwise, all violation actions are allowed when you set up budget constraints at the system-wide and fund levels.

No violation action can be excluded for both centralized and decentralized budget constraints or guidelines if that violation action is selected as either a default or an allowed violation action for a budget constraint or guideline already selected for use as a system-wide control formula.

Note that excluding violation actions on this page after budgets have been established in the system may effectively deactivate some budgets by excluding all possible violation actions from a budget line.

## Budget Control Evaluation

When an accounting transaction goes through budget control evaluation, the application takes all posting lines from the transaction and consolidates them down to the keys of a budget level and budget amount being updated. With that consolidation, a single update is made before evaluation begins. This way liquidations and new accounting updates are made simultaneously so that, for example, encumbrances are reduced and accrued expenditures are increased at the same time. Likewise, if there was a negative accrued expenditure and a positive one on the same transaction, then the update would be made with the difference.

Budget control editing for constraints and guidelines are not always executed by the application. Please see the two following tables for when certain types of updates trigger evaluation.

Constraints				
Type of Amount	Pending Increase	Pending Decrease	Accepted Amount	
			Increase	Decrease
<b>Spending:</b> Pre Encumbrance, Encumbrance, Accrued Expenditure, Cash Expenditure	Edits when increasing only	Edits when increasing only	Edits	Edits
<b>Revenues:</b> Billed Earned, Unbilled Earned, Unbilled Unearned, Collected Earned, & Collected Unearned	Edits when decreasing only	Edits when increasing only	No Edits	Edits
<b>Budget Amounts:</b> Adopted, Amendment, Allocated, Awarded, Carry Forward, Reversion, Transfer Out, Transfer In, Expected Revenue, Amended Expected Revenue	Edits when decreasing only	Edits when increasing only	No Edits	Edits

Guidelines				
Type of Amount	Pending Increase	Pending Decrease	Accepted Amount	
			Increase	Decrease
<b>Spending:</b> Pre Encumbrance, Encumbrance, Accrued Expenditure, Cash Expenditure	No Edits	No Edits	No Edits	No Edits
<b>Revenues:</b> Billed Earned, Unbilled Earned, Unbilled Unearned, Collected Earned, & Collected Unearned	No Edits	No Edits	No Edits	No Edits
<b>Budget Amounts:</b> Adopted, Amendment, Allocated, Awarded, Carry Forward, Reversion, Transfer Out,	Edits Always	Edits Always	Edits	Edits

Transfer In, Expected Revenue, Amended Expected Revenue				
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> No Worse Off Logic

There is an exception to the budget control evaluation that can be viewed as 'no worse off than before'. There is an Application Parameter (APPCTRL) to turn on or off this feature called BUD\_NO\_WORSE\_OFF.

With this exception, the system provides the capability to only issue a budget control error when the activity from a transaction has caused a budget control to be in *further* violation of a budget control. To determine this, the application compares the calculated control after an update with the calculated control before the update. If the record is more in violation after, then logic to issue the error with the appropriate severity occurs. However, if the constraint is found to not have changed or is in better shape but not completely out of a violated state, then no error is issued for the constraint and budget line.

> Pending Evaluations

The system invokes budget control errors when a validation or submit action is performed. When the Submit Phase is *Pending*, the system reads the Include Pending flags on Budget Tracking Amounts. If a relevant flag is not checked, evaluation of a control with updates from a current transaction uses all amounts defined into the control plus the amount of that current transaction as if it were not going to workflow. If the flag is checked, then in addition to the amounts in the prior scenario, the current amount of all pending updates from other transactions is used. Note: It is important not to select an Include Pending flag and define that same pending amount into a control. This double counts pending dollars.

If transaction infrastructure does find a matching workflow rule for the current transaction, then the application records a pending update and not an accepted one for the current transaction. The transaction will then exist in *pending* transaction phase. If an approver chooses the reject action, the pending amount update is backed out. When final approval is applied, the pending amount is backed out and the budget control evaluation process re-evaluates the control.

If the Submit phase on Transaction Control for the given Transaction code is set to *Pending*, then errors related to the below scenarios will not be issued on validate, until the final approval is applied. This means that errors will be issued only when transaction is transitioning from *pending* to *final*.

The scenarios in which errors will not be issued on validate, when the Submit phase is *Pending* is as follows:

- Controls that are marked Advanced Controls on the Budget Control Administration (BCADM) page. These controls have a greater than (>) or lesser than (<) in the calculation such as Control ID 4.
- The control has a linked amount, such as Linked Collected Earned Revenue, directly in the control or included in another amount in the control.



- The control has child sum amount from budget lines at a lower level or allotment lines such as Child Current Budget (Control ID 24 and 33 as examples).

› Allotment Evaluations

If allotment accumulation is set up and if a transaction is processed against an earlier allotment period than the current one, the application steps through the budget control evaluation process for two or more allotment lines: from the allotment period of the transaction and the current allotment period.

## Structuring of the Levels of Control

Part of determining the management of budget controls is a determination of what areas of the four are necessary to regulate accounting and budget transactions. The Inheritance Rule field was introduced on the Budget Structure page. The choice made in that field determines the structure of the various levels of control. The valid choices are listed below. When the application is evaluating controls, it will use the default violation set on the area furthest to the right in the listing. If there is nothing in that right-most area for the control, it will precede 1 area to the left, continuing to the left until the System Wide area is reached.

System-wide → Budget Line

System-wide → Budget Level → Budget Line

System-wide → Fund → Budget Line

System-wide → Fund → Budget Level → Budget Line

System-wide → Budget Level → Fund → Budget Line

Choice of the proper Inheritance Rule is not only a means of controlling where in the application that budget controls can be established, it also will enhance performance by not requiring the application to look at areas that are not used.

## Reserving Budgets

The concept of holding back budget authority for future needs is a very common requirement of the budgeting area. Exactly how that authority is withheld can vary, with each method having certain benefits and drawbacks when compared to each other. Listed below are the various methods with examples of when each is the best method to use and implementation steps.

- [Allocation](#)
- [Budget Reserve](#)
- [Allotments](#)
- [Pre Encumbrance & Encumbrance](#)
- [Purchase Reservation](#)
- [Withholding at the Parent Line](#)

## Allocation

When the total amount adopted or amended for a budget line should not increase availability, but a portion should that is often not a consistent percentage, the Allocation amount is a good option for reserving budget authority. Implementing this type of reservation involves using a formula for Original Budget or Current Budget that does not add in amounts for Adopted, Amended, or both. Instead the Allocated amount is added.

> More Info

To make this type of reservation requires a budget transaction to allocate the portion that should be available, as opposed to specifying how much should be reserved. To release the amount reserved requires another budget transaction to allocate the remainder. A guideline is recommended to keep allocations from exceeding the amount field being allocated.

The following example provides steps to establish the budget with baseline Event Type ID's and the amount of availability at each step for Original Budget and Current Budget. The sample demonstrates that this type of reserve is one done by users with budget transaction security. The calculation of Original Budget in this example is the sum of Allocated. Adopted amounts should not increase Original Budget. The calculation of Current Budget is Original Budget plus Amendments.

Budget Transaction 1		
Line #	Budget Event Type	Amount
1	Adopt Expense Budget (BG01)	\$10,500.50

Budget Line				
Adopted	Allocated	Amendments	Original Budget	Current Budget
\$10,500.50	\$0.00	\$0.00	\$0.00	\$0.00

Budget Transaction 2		
Line #	Budget Event Type	Amount
1	Allocate Expense Budget (BG02)	\$7,500.00

Budget Line				
Adopted	Allocated	Amendments	Original Budget	Current Budget
\$10,500.50	\$7,500.00	\$0.00	\$7,500.00	\$7,500.00

Budget Transaction 3		
Line #	Budget Event Type	Amount
1	Amend Expense Budget (BG03)	\$2,000.00

Budget Line				
Adopted	Allocated	Amendments	Original Budget	Current Budget
\$10,500.50	\$7,500.00	\$2,000.00	\$7,500.00	\$9,500.00

Budget Transaction 4		
Line #	Budget Event Type	Amount
1	Allocate Expense Budget (BG02)	\$3,000.50

Budget Line				
Adopted	Allocated	Amendments	Original Budget	Current Budget

\$10,500.50	\$10,500.50	\$2,000.00	\$10,500.50	\$12,500.50
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## Budget Reserve

When a standard percentage of a budget amount should be withheld for a budget line, the Budget Reserve amount is a good option for reserving budget authority. Users with this method are not burdened with having to compute the amount to be withheld because the application will do that using the Reservation Type entered on a budget transaction for a budget line. Implementing this type of reservation requires the choice of just one budget amount for the percentage to apply. As delivered, formulas for the Budget Reserve field allow for reservations to Adopted, Allocated, Original Budget, and Current Budget. If one of the two calculated amounts is chosen, then the stand alone amounts used in the calculated amount should be reviewed to ensure the proper formula for that calculated amount is selected.

> More Info

Making the reservation requires a budget transaction to have a Reservation Type entered for the budget line. This can but is not required to happen when any stand-alone budget amount such as Adopted is being changed by the budget transaction. The budget transaction will then save the Reservation Type to the budget line and force the application to populate the Budget Reserve amount as directed by the formula chosen for that field. With this method, the formula for either Current or Original Budget will then subtract the Budget Reserve amount in order to reduce availability. When the time comes to release the reserved amount (part or in total), the Percent field on the Reservation Type (RSRVT) record is modified. Saving the updated record will force the recalculation of Budget Reserve on all budget lines with that Reservation Type in that year.

This type of reserve also has the ability to increase the amount reserved across budget lines with the Reservation Type and year combination with the increasing of the percentage field. As a result, some budget lines could actually become negative, but no errors will be issued. A complication with this type of reserve is when it is desired to release authority for just some budget lines. In such a case it would take a budget transaction to associate those budget lines with a different Reservation Type (likely 0% but not necessarily) instead of changing the Percent field.

Below is a sample of an implementation where the Budget Reserve formula involves the Original Budget Amount field and Original Budget has the following formula: Adopted + Carry Forward. Current Budget has the following formula: Original Budget - Budget Reserve + Amendments + Transfers In - Transfers Out - Reversions. The sample demonstrates that this type of reserve is one done by users with budget transaction security.

No Reservation Type		10% Reservation	
Adopted	\$100,000.00	Adopted	\$100,000.00
Carry Forward	\$15,500.00	Carry Forward	\$15,500.00
Budget Reserve	\$0.0	Budget Reserve	\$11,550.00
Amendments	\$25,000.00	Amendments	\$25,000.00
Transfers In	\$2,000.00	Transfers In	\$2,000.00
Transfers Out	\$10,000.00	Transfers Out	\$10,000.00
Reversions	\$5,000.00	Reversions	\$5,000.00
Original Budget	\$115,500.00	Original Budget	115,500.00
Current Budget	\$127,500.00	Current Budget	\$115,950.00

If Current Budget is to be multiplied by the reservation percentage, then the formula for Current Budget or Original Budget must not include the Budget Reserve amount. To do so would put the system into a loop. What has to be done in this case is that any budget controls used for available budget must subtract Budget Reserve as part of its formula, or a calculated amount field in such a budget control must subtract Budget Reserve. For example, the baseline constraint #1 would have to have the Left Hand Side field changed to subtract Budget Reserve on the Budget Control Administration record. Alternatively, a formula could be used for Uncommitted that subtracts Budget Reserve from Current Budget.

**Allotments**

There are two ways in which allotment lines can be used to reserve budget authority. The first method is the natural use of allotment lines where authority is spread out across some time frame so that availability

is only what is defined to that time frame. Optionally, availability can also be cumulative making available any remaining amounts from prior time frames. The second is very similar to the allocated method, but does not require additional budget lines on a budget transaction. Here authority is added to the current allotment period with a budget transaction, as needed, just like an allocation is done. As the first allotment method does not require the full allotment of authority granted to the budget line, a combination of these two methods can be put into place. Implementing allotments requires that the budget structure have allotment capability designed into it as well as completion of the Allotment Options page.

The first method of using allotments has benefits over the reservation and allocation methods in that it requires no action on the part of any user as a new allotment period begins. It does require more effort in the beginning, however, especially depending on the allotment frequency to establish the allotment lines. The second allotment method has the same benefits and limitations as the allocation method. Compared to the reservation method, both methods of allotment reserves allow for very specific reservation amounts instead of established percentages. However, releasing reserves with allotment method two requires a budget transaction.

> More Info

Below are samples of both allotment methods using two different allotment periods. The first set is a sample of allotment method 1 where a sample budget line of \$100,000 is fully allotted. Spending will be restricted to the amount available in an allotment period plus unused amounts from prior periods. The second set is a sample of allotment method 2 where only \$25,000 of the budget line is allotted and made available. The rest will be determined later as necessary. The sample demonstrates that this type of reserve is one done by users with budget transaction security.

Quarterly Allotments	
Allotment Period	Current Budget
Qtr 1	\$25,000.00
Qtr 2	\$25,000.00
Qtr 3	\$25,000.00
Qtr 4	\$25,000.00
Qtr 5	\$0.00

Yearly Allotments	
Allotment Period	Current Budget
FY 2004	\$0.00
FY 2005	\$85,000.00
FY 2006	\$15,000.0

Quarterly Allotments	
Allotment Period	Current Budget
Qtr 1	\$25,000.00
Qtr 2	\$0.00
Qtr 3	\$0.00
Qtr 4	\$0.00
Qtr 5	\$0.00

Yearly Allotments	
Allotment Period	Current Budget
FY 2004	\$0.00
FY 2005	\$25,000.00
FY 2006	\$0.0

## Pre Encumbrance & Encumbrance

These two budget amount fields are common to governmental budget control. Both commodity and non-commodity based requisitions and purchase orders update them early in the procurement life cycle to reserve funding so it is available for later disbursements. Payroll and Cost Allocation can also use them to reserve funding availability as well.

## Purchase Reservation

The Purchase Reservation budget amount does not have any delivered posting code or event type to update the amount. The use is open to match any budget reservation need. One possible use of the amount is to provide an additional amount similar to Pre Encumbrances and Encumbrances that can be subtracted from budget availability or not. When not subtracted, the amount would be just for tracking and reporting.

### > More Info

To make use of the amount first requires the creation of a posting code to update the amount field. Second an offset posting code has to be created or selected from existing ones. Together, these two posting codes are then placed on an event type created to use them. Then that event type is then made allowed for one or more transaction types and then codes. Next BFY Staging is to be established to govern when the event type and transaction code(s) can be processed. Lastly, if the amount field is to be used for reserving budget authority and not just for tracking, budget amount formulas must be chosen or constraints configured that will use Purchase Reservations. After that setup, to reserve and release Purchase Reservations is similar to Pre Encumbrances and Encumbrances.

Purchase Reservations are unlike Pre Encumbrances and Encumbrances in every respect. Year-end programs for lapsing and rolling do not handle this type of budget activity. Purchase Reservations must either be lapsed or rolled manually or left open to be referenced in a subsequent year.

Below is a sample of Purchase Reservations being used for both tracking and controlling. For that control, the amount has been included in the formula for Uncommitted but not Unobligated. Pre Encumbrances has also been setup this way. In this situation, there is likely a control using Uncommitted that has a lesser degree of error than one that uses Unobligated. The sample demonstrates that this type of reserve is one done by users without budget transaction security but rather procurement transaction security.

<b>Current Budget</b>	\$100,000.00
<b>Purchase Reservations</b>	\$10,000.00
<b>Pre Encumbrances</b>	\$750.00
<b>Encumbrances</b>	\$25,000.00
<b>Accrued Expenditures</b>	\$45,250.00
<b>Cash Expenditures</b>	\$19,000.00
<b>Uncommitted</b>	\$0.00
<b>Unobligated</b>	\$10,750.00

## Withholding at the Parent Line

One method of reserves applies to multi-level budget structures where other methods do not provide an exact fit or seem too complex. Withholding budget authority at a parent budget line by not passing all of it onto child lines requires specific budget control setup. First, is that controls on spending (constraints) must be placed on the child budget level. Second, is that controls on budget amounts (guidelines) must be placed on the parent budget level where children do not have to equal their parent, but cannot exceed them in total.

> **More Info**

To reserve budgets with this method, the Line Amounts on the parent budget lines of a budget transaction are created with a higher value than the sum of the amounts for child budget lines of that parent. To release this type of reserve, another budget transaction is created with only lines at the child level increasing funding for those lines.

This method of reserving for users with budget transaction security may seem the most straight forward to budget users and end users of those budgets. The following sample shows a parent line with more adopted and amended than the two child lines. It also shows that not every budget amount has to be reserved at the parent level. Original Budget has the following formula: Adopted + Carry Forward. Current Budget has the



following formula: Original Budget - Budget Reserve + Amendments + Transfers In - Transfers Out - Reversions.

Parent		Child 1	Child 2
Adopted	\$100,000.00	\$40,000.00	\$40,000.00
Carry Forward	\$15,500.00	\$10,500.00	\$5,000.00
Budget Reserve	\$0.0	\$0.0	\$0.0
Amendments	\$25,000.00	\$5,000.00	\$5,000.00
Transfers In	\$2,000.00	\$2,000.00	\$0.00
Transfers Out	\$10,000.00	\$0.00	\$10,000.00
Reversions	\$5,000.00	\$2,500.00	\$2,500.00
Original Budget	\$115,500.00	\$50,500.00	\$45,000.00
Current Budget	\$127,500.00	\$55,000.00	\$37,500.00

## Budget Memory

To increase performance, many of the budget configuration pages are put into a type of memory known as the *Budget Flex Server*. The following chart shows all tables that are involved in budgeting by their page codes and names along with whether or not they are in memory. Note, not all pages in the budgeting area have a page code as they are navigated to using a link on another page.

Page Code	Page Name	Memory
BUDST	Budget Structure	Yes
	Budget Structure Update	Yes
	Budget Level Update	Yes

Page Code	Page Name	Memory
	Allotment Option	Yes
BUDSTS	Budget Structure Summary	Yes
BCADM	Budget Control Administration	Yes
BFADM	Budget Formula Administration	Yes
BUDCON	Budget Controls	Yes
BUDFCON	Budget Fund Controls	Yes
BUDLCON	Budget Level Controls	Yes
BUDTAM	Budget Tracking Amounts	Yes
	Budget Formulas	Yes
BUDTYP	Budget Type	No
PBRP	Parameters for Budget Roll Process	No
SBA	Summarized Budget Activity	No
LNKHIST	Link History	No

When a record is changed or added to any of these tables in memory, a warning is issued that a bounce of the application is required before it will take effect.

When an application is brought up, the flex server will initialize upon the first validation of a transaction. The best transaction for this is a budget transaction. If the 'budget flex server is not initialized' error is ever issued, bounce the application and validate a budget transaction. An instance of the flex server exists for every instance (VLS) of the application, thus all must be bounced for any change or addition to one of the tables in memory.

## Special Cost Accounting Budget Interaction

When continuing budgets are being used so that older budget dollars should be exhausted first before more current dollars, there is a special Cost Accounting interactions with a central control budget. The interaction is referred to as Budget Fiscal Year Front-End Split logic (or BFY FES). Rolling unspent budget dollars forward comingles funds across budget years, so that budget feature is not desired in sites

that wish to keep budget dollars separate. Setting up the BFY FES feature requires updates in several Application Parameter records.

Parameter Records	Description
Perform BFY Logic in FES (BFY_FES)	<p>When set to True, the Budget Fiscal Year (BFY) Front-End-Split (FES) logic is enabled. This logic uses older budget year monies in a First-in-First-Out (FIFO) basis. This means that the oldest BFY that still has money is used first until it is depleted, then the system moves to the next oldest, and goes forward from there.</p> <p>The delivered value for this parameter is False so that the FIFO behavior is not invoked, resulting in standard BFY logic. When set to <i>True</i> the three other BFY FES parameters need to be completed.</p>
BFY FES Budget Structure (BFY_FES_STRU_ID)	<p>This parameter is read when the Perform BFY Logic in FES (BFY_FES) parameter is set to <i>True</i>. This parameter indicates the Budget Structure ID that should be used to look for 'active' years of funding. The Budget Structure ID provided must be an active budget structure as well as one flagged as Budget Fiscal Year Driven on the Budget Structure (BUDST) page.</p>
BFY FES Budget Level (BFY_FES_LVL_ID)	<p>This parameter is read when the Perform BFY Logic in FES (BFY_FES) parameter is set to <i>True</i>. This parameter indicates the Budget Level that should be used to look for 'active' years of funding. The Budget Level ID must be valid for the BFY FES Budget Structure ID (BFY_FES_LVL_ID) and not one defined as the audit/activity level.</p>
BFY FES Budget Control ID (BFY_FES_CNST_ID)	<p>This parameter is read when the Perform BFY Logic in FES (BFY_FES) parameter is set to <i>True</i>. This parameter indicates the Budget Control ID that should be used to calculate availability. The Budget Control ID must be a valid budget control that has been turned on. (Default Violation for the control is set to any other value than <i>Not Selected</i>.) Controls 1 and 5 are very likely choices for this parameter.</p>

Refer to the *Cost Accounting User Guide* for more information as this feature contains several limitations.

## Application Parameters

The Application Parameter configuration page is one that is part of general system configuration. Options on this page are set once and do not usually change. Several have been discussed in earlier sections in line with the budget control feature to which they apply. The remaining ones related to budget configuration is listed here.

The Parameter Short Description is listed first followed by the Parameter Name in parentheses.

Parameter	Description
<p>Extended or Standard Budget (EXT_STD_BUD)</p>	<p>Budget structures that contain the chart of account (COA) element Appropriation often work in one of two ways. The first, <i>Extended</i>, often matches very large sites such as states where budgeting dollars are legislated at a very high level that can span multiple Funds and Departments. In such a case, an Appropriation is shared by multiple entities and more than one appropriation may be used for funding a certain type of spending (and sometimes revenue). Here Appropriations are entered by users just like any other COA code to complete a funding string.</p> <p>In contrast to <i>Extended</i>, sites that operate as <i>Standard</i> have much more targeted budget dollars where an Appropriation is for a single Fund and Department combination. Very often the definition goes further to a single Unit within a Department for a single Object or Revenue Source. For this reason, the Appropriation code can be inferred. Users typically do not even know what Appropriation may be associated with a combination of COA.</p>
<p>Budget Structure 80 Option (STD_EXTENSION)</p>	<p>This parameter is used to determine if structure 80 is to define an appropriation at the combination of Fund, Department, Unit, Object and Activity instead of stopping at Object. When set to <i>STD2</i> the Appropriation Inference with Activity (APPRINF2) and BFY and Appropriation with Activity (APBYINF2) are used. Leave the parameter blank in all other cases.</p>
<p>Suppress Infer BFY Update (SPRS_INF_BFY)</p>	<p>This optional parameter is used to turn off automatic updates to the BFY Inference (BFYINF) page by budget transactions creating a BFY 9999 budget line for a Fund, Department and Appropriation combination because there will be an automatic update to another page that is used to infer BFY 9999. One or more Structure ID values can be entered, if separated by commas. This control is not to be used with those structures that read the EXT_STD_BUD option.</p>

## Advanced - Batch Processing

The Budgeting area has many batch and chain jobs. Please refer to the appropriate topic below for a list of all batch and chain jobs. For detailed information on the jobs (such as when to run, input, output, and process parameters) refer to the associated run sheet in the CGI Advantage - Budget Control Run Sheets guide or other guide as indicated by the Batch Catalog Section column in the following topics.

- [Batch Jobs](#)
- [Chain Jobs](#)
- [Report Jobs](#)

### Batch Jobs

The jobs are listed alphabetically in the below table and the last column indicates the location in the Batch Catalog. For detailed information on the jobs (such as when to run, input, output, and process parameters) refer to the associated run sheet in the following user guides: *CGI Advantage - Budget Control Run Sheets* and *CGI Advantage - System Assurance Run Sheets*.

Job Name	Description	Batch Catalog Section
Budget Structure 90 Activity Load	Loads FY and APD drilldown data for the special Budget Structure 90 level 2 Detail Inquiry.	Budget
Budget Rollup Update Job	Updates selected budget inquiry records with the latest rollup values when those rollups are descriptive fields and not key fields to a budget line.	Budget
Calculate Budget Controls	As part of the performance feature called Incremental Updates for budgeting, a table exists that maintains records for each budget control that may apply to a budget or allotment line. This job performs two actions on that table. The first is an initial loading of the table with records for all active controls for all established budget lines. The second action recalculates each record that is suspect for being incorrect and re-computes the amounts on that record.	Budget
System Assurance 10	Assures linked expense budget lines, links, and linked revenue budget lines.	System Assurance

System Assurance 11	Assures non-pending stand-alone budget amounts updated by budget transactions.	System Assurance
System Assurance 12	Assures budget lines and the Budget Constraint Amount table.	System Assurance

## Chain Jobs

The jobs are listed alphabetically in the below table and the last column indicates the location in the Batch Catalog. Click the appropriate name in the Chain Job Name column to learn more about each job. For detailed information on the jobs (such as when to run, input, output, and process parameters) refer to the associated run sheet in the following user guides: *CGI Advantage - Budget Control Run Sheets*, *CGI Advantage Financial - Utilities Run Sheets*, and *CGI Advantage - General Accounting Run Sheets*.

Job Name	Description	Batch Catalog Section
Budget Archiving	The Budget Archiving chain facilitates the archival of budget lines and related data from many budget tables to maintain a production environment of a manageable size.	Utilities
Budget Roll Chain	The Budget Roll chain provides three features. The first is the ability to create budget lines in a new year based on existing lines in a prior year. The second is the ability to roll unspent monies from one budget year to another. The third is to lapse any outstanding amount in a budget year that has concluded for new activity.	Budget
Open Activity and Budget Roll	When a year comes to a close, there are many transactions open with accounting activity that has not yet reached its final state (open purchase orders for example). The Open Activity & Budget Roll (OABR) chain is the third of three chain jobs used in the maintenance of that open activity. The OABR takes the activity in the old budget fiscal year forward into the next year with a transaction modification, while also reverting and carrying forward budget authority to cover the rolled accounting activity.	General Accounting

## Report Jobs

The Budgeting area includes batch jobs that are listed under several different areas in the Batch Catalog. The report jobs are listed alphabetically in the below table and the last column indicates the location in the Batch Catalog. For detailed information on the jobs (such as when to run, input, output, and process parameters) refer to the associated run sheet in the following user guides: *CGI Advantage - Budget Control Run Sheets*, *CGI Advantage - General Accounting Run Sheets*, *CGI Advantage Financial - Utilities Run Sheets*, and *CGI Advantage Financial - System Assurance Run Sheets*.

Job Name	Description	Batch Catalog Section
Budget Roll	<p>When preparing to run the Budget Roll Chain in Modes 1, 2, or 3, this report is available to list what lines will be selected in the source year. By choosing the <i>Report</i> as the Roll Mode on the Parameters for Budget Roll Process (PBRP) page, selection logic will occur, but transaction creation does not happen. From that selection logic a report is produced that will show all lines in the source year that will be selected.</p>	Budget
Budget vs. Actual Exp	<p>The Budget vs. Actual Report for Expense is a sample report configured to work with budget structure 29 only. The report lists each Object for a Fund, Department, Appropriation, and Unit combination. Columns exist showing the Current Budget amount as Exp Budget, along with totals for Encumbered, Accrued Expenses, and Cash Expenses for both the current period as well as inception-to-date. The report ends with a Difference column showing what would be unobligated.</p> <p>Records are displayed with summary totals as rollups are presented at:</p> <ul style="list-style-type: none"> <li>• Fund, Department, and Appropriation</li> <li>• Fund and Department</li> <li>• Fund</li> <li>• All budget lines</li> </ul>	General Accounting
Budget vs. Actual Rev	<p>The Budget vs. Actual Report for Revenue is a sample report configured to work with budget structure 30 only. The report lists each Revenue Source for a Fund, Department, and Unit combination. Columns exist showing the</p>	General Accounting

Job Name	Description	Batch Catalog Section
	<p>Current Budget amount as Rev Budget, along with totals for Billed Earned Rev and Collected Earned Rev for both the current period as well as inception-to-date. The report ends with a Difference column showing what would be the difference of the total billed and collected from what was budgeted.</p> <p>Records are displayed with summary totals as rollups are presented at:</p> <ul style="list-style-type: none"> <li>• Fund and Department</li> <li>• Fund</li> <li>• All budget lines</li> </ul>	
Pre-Archive Budget Report	<p>This report helps to identify unfinished budget activity. The most common use for the report is before running the Budget Archiving chain job, which archives data from budget tables. An alternative use for the report is at year end to find pending activity for which a decision should be made to complete the activity or it will fail when the final approval is applied. Lastly, the report can be run on an ad hoc basis to review one or more budget lines.</p>	Utilities
System Assurance 01 (chain) or SA01 Report	<p>The SA01 Report, produced separately or as part of the chain, lists all budget lines or only those with an accounting amount that is not in sync with historical transaction records.</p>	System Assurance
System Assurance 11	<p>System Assurance 11 produces a report listing all budget lines or only those with a budgeting amount that is not in sync with the Budget Journal.</p>	System Assurance
System Assurance 12	<p>System Assurance 12 produces a report listing each budget line with one or more Constraint Amount records that do not reflect amounts found on the budget line.</p>	System Assurance
System Assurance 15	<p>System Assurance 15 produces a listing of budget lines where an accounting amount on the budget line does not reflect the total open amounts of accounting lines against the budget</p>	System Assurance



Job Name	Description	Batch Catalog Section
	line and amount. The report will also list all journal postings against those open accounting lines to determine what the open amount should be.	
Budget Structure 90 Activity System Assurance	The Budget Structure 90 Activity System Assurance batch job produces a report listing budget lines where the stand alone (not calculated) amounts do not match between Budget Structure 90 Level 2 (BQ90LV2) and the Detail Activity Inquiry.	Budget

## Advanced - Reports

Reports can be created from CGI Advantage Financial or they can be created from CGI infoAdvantage or CGI Advantage Insight, if installed at your site. Refer to one of the following topics for more information.

- [CGI Advantage Financial Reports](#)
- [CGI infoAdvantage](#)
- [CGI Advantage Insight](#)

## CGI Advantage Financial Reports

The major reports generated from CGI Advantage are listed alphabetically in the below table. To learn more about the job that generates a specific report, click on the job name in the Description column.

Report Name	Description
Budget Lines Selected for Roll	This report is generated by the Budget Roll Process (Modes 1, 2, and 3) - Report Mode job.
Budget Lines Not Rolled	The Budget Lines Not Rolled report is generated by the Budget Roll Chain and Budget Roll Report in run modes 1, 2, and 3. In mode 1, the report lists all budget lines already established in the new year. In modes 2 and 3 the report lists those lines that were not (will not be) rolled because the source amount selected as a parameter contained a zero or negative amount.
Budget Links Not Rolled	The Budget Links Not Rolled report is generated by the Budget Roll Chain and Budget Roll Report in modes 1 or 2, as those modes are the only ones that can roll budget links, to show all links to revenue budget lines that were not (will not be) rolled because the revenue budget line does not exist in the target year.
Budget Pre-Archive Report	This report is generated by the Pre-Archive Budget Report job. This report helps to identify unfinished budget activity.
Budget Roll Crosswalk of Successful Transactions	The Budget Roll Crosswalk of Successful Transactions report is generated by all 4 modes to list the successfully processed transactions for a budget roll.
Budget Roll Listing of Unsuccessful Transactions	The Budget Roll Listing of Unsuccessful Transactions report is generated by all 4 modes to list the successfully processed transactions for a budget roll.

Report Name	Description
Budget vs. Actual Report (Expense)	This report is generated by the Budget vs. Actual Report for Expense report job.
Budget vs. Actual Report (Revenue)	This report is generated by the Budget vs. Actual Report for Revenue report job.
Budget Actuals vs Ledgers, Journals, and Posting Line Catalog	The System Assurance 1 chain and the SA01 Report batch jobs produce this listing of all budget lines or only those with an accounting amount that is not in sync with historical transaction records.
Budget Amount Actuals vs Journals	The System Assurance 11 batch job produces this listing of all budget lines with budget amounts that are not in sync with the Budget Journal.
Incremental Updates System Assurance: Budget Amount Actuals vs Budget Amount Constraint Table	System Assurance 12 produces a report listing each budget line with one or more Constraint Amount records that do not reflect amounts found on the budget line.
System Assurance for Open Amounts	The System Assurance 15 produces this listing of budget lines where an accounting amount on the budget line does not reflect the total open amounts of accounting lines against the budget line and amount. The report will also list all journal postings against those open accounting lines to determine what the open amount should be.

## CGI infoAdvantage

For sites that have implemented infoAdvantage, please refer to the below for the universe and report information specific to this functional area.

- Universes - Please refer to the *CGI\_infoAdvantage\_4\_Financial\_Universes\_Guide* for more information on the universe that exists for this functional area.
- Reports - The sample reports and templates can be found under the CGI Resource Library link: <https://sdc.cgi.com/aal/>

## CGI Advantage Insight

For sites that have implemented Insight, please refer to the below for the semantic model information specific to this functional area.

- Semantic Model - Please refer to the *CGI\_Advantage\_Insight\_4\_Semantic\_Model\_Guide* for more information on the model that exists for this functional area.

## Advanced - Unique Features

The following functionality is only applicable for your site if the associated functionality fits a very specific set of circumstances. Please refer to each topic for more information.

- [Special Control of Transfers Out](#)
- [Inference of Start and End Dates on Budget Line](#)
- [Validation of Budget PY and Actual PY on Budget Structure 68 transaction](#)

## Special Control of Transfers Out

There are several methods of controlling the transferring of budget authority with very different types of control:

- **Net Zero Budget Impact Across Budget Lines:** Basic budget transaction editing ensures that each transaction balances in terms of net transfers out and net transfers in, with or without additional transfer balancing settings defined at the budget level.
- **Not Decreasing a Budget Line Below Original Amount:** Budget Guideline (#40) can be used to ensure the amount of transfers in is equal to or greater than the amount of transfers out for a given budget line.
- **Not Reducing a Group of Budget Lines Below a Base or Percentage that Base:** An extended method of controlling transfers out based on a percentage of a configurable 'base budget' amount optionally exists on a subset of budget structures. Please see the descriptions of each budget structure for which this feature has been enabled.

This third method requires several setup steps for this feature before establishing controls.

- Use the Configure Page (DESIGNER)
  - To display the Transfer Base Limit Posting Codes and Transfer Out Posting Codes fields on the Budget Level Update (XX023) page.
  - To display the Transfer Limit Editing field on the budget transaction for the structure at the level where the control applies.
  - To display the Transfer Limit Editing field on the budget inquiry page (BQ##LV#) where the control applies.
  - To display the Transfer Limit Editing field on Budget Journal (JBUD).
- Update the structure and level record on the Budget Level Update page to 'turn on' the feature. The Transfer Base Limit Posting Codes field defines the Base Amount on the Appropriation Transfer Limit (APTL) inquiry with the entry of one or more budget posting codes. A common choice for this field would be Adopted (B001) and Amendments (B003). The Transfer Out Posting Codes field defines what transfer out posting code(s) are part of the edit.
- Add records to the Configurable Formula (BOFRMLA) page to default STRU\_ID and LVL\_ID to the R\_APBUD\_TRAN\_CTRL business object, where the control applies to match the BQ##LV# page also updated.

## Appropriation Transfer Control

The Appropriation Transfer Control (APTC) reference page establishes and maintain the percentage used to calculate the Net Transfers Out Allowable on the Appropriation Transfer Limit (APTL) inquiry. Records are defined for specific BFY or the multi-year 9999. Any subsequent change in the percentage can result in more or less monies available for transfer. A reduction can even make an APTL record in violation, but the error seen on budget transactions is not issued on the APTC page. Appropriate actions are necessary to bring the total transfers out within the limit in such a case.

Each department that should be controlled must be listed on this page. After the initial load, the New Year Table Initialization process rolls the data forward each year, so that updates are only necessary when the control percentage changes.

The Budget Structure ID and Level ID fields are required and delivered as hidden. An earlier setup point is used on the Configurable Formula (BOFRMLA) page to default STRU\_ID and LVL\_ID to the R\_APBUD\_TRAN\_CTRL business object. Alternatively, the fields can be made visible using Configure Page (DESIGNER) and manually specify values.

## Appropriation Transfer Limit

The Appropriation Transfer Limit (APTL) inquiry page is a system-maintained page that is primarily updated through budget transaction processing. The page summarizes Budget Lines by BFY, Fund, and Department and used to edit budget transactions.

- **Transfer Limit Base** - The initial amount available for transfers before applying the percentage defined on Appropriation Transfer Control (APTC) for the BFY and department. Setup in the Transfer Base Limit Posting Codes field on Budget Level Update controls the calculation of this amount.
- **Net Transfer Allowable** - The amount available for transfers after applying the percentage defined on APTC for the BFY and department against the Transfer Limit Base.
- **Net Transferred Out** - The total amount of transfers out processed against the BFY, Fund and Department combination, where the budget line was not excluded.
- **Available for Transfer** - The difference between the Net Transfers Allowed and Net Transfers Out, which defines the maximum amount of transfers out still available.

The **Recalculate** action (a securable action) exists to update all amounts when there are setup changes. For example: When there is a change to control percentage in Appropriation Transfer Control (APTC), records corresponding to the Department and BFY should be identified on the Appropriation Transfer Limit (APTL) inquiry page and the Recalculate action should be applied individually to keep them in sync. While applying the Recalculate action, the system does not perform any edits. So, if changes to control percentage results in Available for Transfer amounts going negative on the Appropriation Transfer Limit (APTL) inquiry, manual action is needed to address the condition through updates to one or more budget lines.

## Budget Transaction

The Transfer Limit Editing field is used to define a budget line as one that edits against the Appropriation Transfer Limit (APTL) page or not. An edit ensures that this field is set to *Enable* or *Disable* when a budget is adopted at the start of the year with the Line Action of *New*. After budget lines are created, the field defaults to *Unchanged*. Should it be found that the initial value needs to be updated, the budget line must have an Event Type that updates the Adopted budget amount. Please note that changing the field may result in updates to APTL for not only the current budget transaction but also amounts already recorded on the budget line. Such an update may result in the APTL error.

## Inference of Start and End Dates on Budget Line

The Start and End dates on the budget line can alternatively be inferred using Reporting Dates for structures with Appropriation. The dates are informational only and do not control accounting or budget transaction processing.

To enable this feature:

- Appropriation (APPR) - Reporting Start Date and Reporting End Date can be made visible using Configure Page (DESIGNER) and manually specify values.
- Budget Level Update (BUDST) - Enable Start and End Date Tracking is set to *True*.

## Validation of Budget PY and Actual PY on Budget Structure 68 transaction

A validation is added to the Budget Structure 68 (BGE68) transaction to ensure that the budget transaction that update Budget PY and Actual PY amounts can only be processed when Personal Services is enabled on the specified Object Class.

To enable this feature:

- Object Class (OCLS) - Personal Services can be made visible using Configure Page (DESIGNER).
- Inquiry Pages (BQ68\*) - Budget PY and Actual PY amounts can be made visible using Configure Page (DESIGNER).
- Posting codes and Event Types need to be configured to post against Budget PY (Bucket ID: 50) and Actual PY (Bucket ID: 49) buckets since these are stored amounts.