

AASHTOWare Estimation Quick Reference Guide

What's changing from CES?

The overall process, responsibilities, and workflows regarding cost estimating remain the same. Here are some of the software specific changes associated with AASHTOWare Estimation:

- Cost Estimates in AASHTOWare Estimation must be associated with an "AASHTOWare Concept".
- Standardized naming requirements for AASHTOWare Concepts, Cost Estimates, and Categories have been defined.
- "Control Groups" (CES) are now called "Estimate Phases" (AASHTOWare Estimation).

Resources:

- GDOT Policy 3A-9 (Cost Estimating Purpose): <http://mydocs.dot.ga.gov/info/gdotpubs/Publications/3A-9.pdf>
- GDOT R.O.A.D.S. → Design Related Resources → Engineering Services: <http://www.dot.ga.gov/PS/DesignManuals/DesignResources>
 - AASHTOWare Training Videos and Quick Reference Guide
 - AASHTOWare User Account Request
 - Many other cost estimate resources for designers

Creating a Concept:

Cost Estimates in AASHTOWare Estimation must be associated with an "AASHTOWare Concept".

- In this context "Concept" is referring to the overall functionality of the AASHTOWare software and should not be confused with the concept phase or concept report in GDOT's Plan Development Process (PDP).
 - Cost Estimates created or updated in the preliminary and/or final design phase of the PDP should still be associated with the AASHTOWare Concept.
- There should only be one AASHTOWare Concept per project/PI#, however, multiple cost estimates can be created under a Concept.
- The required information for the AASHTOWare Concept is similar to the "General" information tab in CES.

Creating a Concept (cont.):

Naming Convention for Concepts:

- The name of the AASHTOWare Concept should exactly match the 7-character PI# (Project Identification number) found on the Preconstruction Status Report (PSR). For a PI# of 1234567:
 - Correct name = 1234567
 - Examples of incorrect names = PI#1234567, PI1234567, 1234567_Updated, 1234567_Old, 1234567_Jim, 1234567_Version 2

Spec Book:

- The 2021 Spec Book is available. [Instructions](#) on updating existing concepts from the 2013 to the 2021 Spec Book are available.
- Certain pay items have become obsolete and are not available in the 2021 Spec Book. Make sure all intended pay items are shown in the estimate after the Spec Book is updated.

Creating a Cost Estimate: Pay Items & Quantities

Naming Convention for Cost Estimates:

- Prior to concept approval, there will typically be cost estimates developed for each alternative analyzed in the concept report. For example:
 - 1234567_Concept ALT 1
 - 1234567_Concept ALT 2
 - 1234567_Concept ALT 3
- Once the concept report is approved, the name of the current/active cost estimate should exactly match the 7-character PI# from the approved concept report through submission of corrected FFPR plans. For example:
 - **1234567 = Current/active cost estimate**
 - 1234567_Concept ALT 1
 - 1234567_Concept ALT 2
 - 1234567_Concept ALT 3
- During the preliminary and final design phases, multiple cost estimates may be added to the AASHTOWare Concept as needed; however, the current/active estimate should always exactly match the 7-character PI#. For example:
 - **1234567 = Current/active cost estimate**
 - 1234567_Concept ALT 1
 - 1234567_Concept ALT 2
 - 1234567_Concept ALT 3
 - 1234567_Concrete Pavement Estimate
 - 1234567_Full Depth Comparison Estimate
 - 1234567_DE = Designer's copy of "final" estimate matching the estimate submitted to Engineering Services at Corrected FFPR Plans

Creating a Cost Estimate: Pay Items & Quantities (cont.)

Estimate Phases:

- Designers (consultant and in-house) should create cost estimates and assign the "2-DE-Designers Estimate" phase to the cost estimates.
- Estimate phases in AASHTOWare Estimation:
 - 1-PE-Planners Estimate: This phase is used by GDOT's Office of Planning and/or their consultants to develop planning level cost estimates.
 - 2-DE-Designers Estimate: This phase is used by the Design Phase Leader (consultant or In-house) for developing and updating cost estimates from the concept phase through submission of corrected FFPR plans to the Office of Engineering Services.
 - 3-EE-Engineers Estimate: This phase is used by GDOT's Office of Engineering Services to develop the Department's Engineer's Estimate based on corrected FFPR Plans.
 - 4-CBA-CBA Estimate: This phase is used by GDOT's Office of Construction Bidding for developing bid proposals.

Bid history profile (BHP):

- A bid history profile must be assigned to a cost estimate to generate unit prices; the BHP in AASHTOWare Estimation is the same as the Item History in CES.
- When creating a cost estimate, assign the BHP named "BHP ALL" (24 months) as a starting point.

Creating a Cost Estimate: Pay Items & Quantities (cont.)

Adding Categories:

- Category names are standardized and cannot be created by users.
- For asset management purposes, some new categories have been created. For example:
 - Pavement related pay items have been separated from the “Roadway” category into a unique category named “Pavement”.
 - Signing and Pavement Marking have been separated into individual categories named “Signing” and “Pavement Marking” respectively.
- AASHTOWare Estimation category names:
 - 0100 – Roadway
 - 0110 – Pavement
 - 0200 – Drainage
 - 0210 – Temporary Drainage
 - 0300 – Temporary Erosion Control
 - 0400 – Permanent Erosion Control
 - 0500 – MS4
 - 0600 – Signing
 - 0610 – Pavement Marking
 - 0700 – Signals
 - 0801 to 0820 – Bridge 1 through Bridge 20
 - 0901 to 0925 – Wall 1 through Wall 25
 - 1000 – Lighting
 - 1100 – Utilities
 - 1200 – ITS
 - 1300 – Landscaping
 - 2000s – Bid Alternate Categories
- All walls (including “standard” walls like gravity and concrete side barriers) should be placed in the Wall category instead of the Roadway category.
- Users may request additional categories be created by contacting the Solutions Center (SolutionsCenter@dot.ga.gov). Names should be generic enough to apply to any project with similar scope/pay items.

Adding Pay Items and Quantities

- Pay items can be added in either the “Item Pricing Worksheet” or the “Cost Estimate Items” pages. The “Item Pricing Worksheet” organizes the pay items in a tabular format which may look more familiar to users of CES.
- The “Adhoc Pricing” page replaces the “Cost Groups” feature which CES users may be familiar with. It may be useful for concept level and planning estimates when little information is known about specific pay items. A description is required for each

“Adhoc Pricing” entry so that anyone reviewing the estimate understands what the lump sum price represents. “Adhoc Pricing” should not be used for Corrected FFPR and Final Plans submissions. Instead, each pay item should be listed individually.

- Ensure supplemental descriptions are entered for pay items containing a “-” after the pay item description. For further information, please refer to GDOT’s standard specifications.
- It is recommended that additional pay item information beyond what is required for supplemental descriptions (such as a user derived price) also be stored in AASHTOWare. To access the “Remarks” feature:
 - Navigate to the “Cost Estimate Items” page and select the drop-down arrow located next to the line number of the pay item of interest.
 - Scroll down to the “Remarks” section
 - Select a remark “Type” from the drop-down menu and type the necessary information into the remark field.
- Cost estimates should reflect construction cost only. Contingences and E&I should not be added within AASHTOWare. To account for these additional costs, users should reference the “Cost Estimate Worksheet” tab of the [“Revision to Program Costs Template”](#) spreadsheet provided by the Office of Engineering Services.

Cost Estimates: Pricing Pay Items:

To price pay items in the cost estimate:

1. Ensure that BHP-ALL (24 months) is associated with the cost estimate.
2. From the Item Pricing Worksheet, click the action arrow in the upper right corner and select “Calculate Bid Based Prices”
 - A status message will appear at the top of the screen when the process has begun.
 - Prices will appear for all items with bid history data.
 - If an error message is displayed after initiating bid based pricing, follow these steps:
 - Click the “Actions” drop down menu.
 - Click on “Open Process History”.
 - Under the **Output Files** heading, click on the Error.log and open the file once it downloads.
 - Each pay item causing an error will be listed along with a description of issue.
3. Fill in blank unit prices and/or override bid based prices for lump sum items and other items where the supplemental description (such as diameter) directly affects the price of the item. Below are options for determining a unit price.

1. Increase the BHP’s number of months in increments of 6 months until a bid-based price is generated. To update bid-based pricing for a single, specific pay item:
 - Navigate to the “Cost Estimate Items” page and select the drop-down arrow located next to the line number of the pay item of interest.
 - Click “Details” and “Calculate Price” to generate the updated unit price.
 - Once all necessary pay items have an associated unit price, return the BHP to the original 24-month time period.
2. Enter a user derived price based on engineering judgment or resources posted on the ROADS webpage. Design Phase Leaders may also request assistance from DesignerEstimateQuestions@dot.ga.gov.
4. In rare circumstances, AASHTOWare may return a unit price that is noticeably high or low. If a user questions the validity of a certain unit price, assistance may again be requested from DesignerEstimateQuestions@dot.ga.gov. Please provide the pay item and a brief description of the project and its location.

Copying & Changing the Phase of a Cost Estimate:

Copying a Cost Estimate:

- Designers typically copy a cost estimate for two reasons:
 - To keep a record copy of the “final” cost estimate submitted to Engineering Services at the time of Corrected FFPR Plans, and
 - For convenience when developing multiple similar cost estimates without having to re-enter pay items and quantities each time. This is commonly done with Concept Report Alternatives Analysis.
- Copying a Cost Estimate will copy all the items, item categories, and bid based prices associated with the cost estimate.
- To make a copy of an existing cost estimate:
 - Navigate to the AASHTOWare Concept where the user desires to create a copy, then click the Cost Estimates tab on the left.
 - Click the down arrow next to the “Add” button and click on “Select Cost Estimates...”. A new window will open.
 - In the upper field, enter the name of the new cost estimate (for example: 1234567_DE); in the lower field, search/navigate to the existing cost estimate that is being duplicated.
 - Click on (select) the desired estimate from the search results and click “Add to Concept...”. The cost estimate is now copied and should appear in the list of cost estimates associated with this AASHTOWare Concept.

Changing the Phase of a Cost Estimate:

- Typically, designers would only change the phase of a cost estimate once during the life of the project:
 - This occurs at the submission of Corrected FFPR Plans to the Office of Engineering Services. Designers are encouraged to create a copy of the Corrected FFPR cost estimate for their future use (e.g. cost estimate updates for any projects that might be “shelved” after submittal of 18-week plans). Once the cost estimate phase is switched to “3-EE-Engineers Estimate,” the phase cannot be switched back to “2-DE-Designers Estimate”.
 - At this point, the designer should change the phase of the estimate from “2-DE-Designers Estimate” to “3-EE-Engineers Estimate”.
- To change the phase of a cost estimate:
 - Navigate to and select the active cost estimate (not the copied version); the Cost Estimate Summary information will appear.
 - Scroll down to the Estimate Information section.
 - Click the drop-down arrow next to the Estimate Phase field and select “3-EE-Engineers Estimate” to transfer access to the Office of Engineering Services.
 - Scroll back up to the top of the page and click “Save”.

Reporting:

411 Cost Estimates

- For internal users, the following [instructions](#) may be used to print copies of the construction cost estimate(s) from GDOT 411.

Budget Class Reports

- Alternatively, external users may generate construction cost estimate(s) through AASHTOWare by following these [instructions](#).