

Oregon
Department of Transportation

Transport Estimator ®
Data Entry Guideline

Prepared by:
Estimating Section

February, 2006

TABLE OF CONTENTS

Turning System On and General Overview	2
Consultant Input	2
Importing and Global File Options	3
Changing the View on the Tree	3
Methods for Developing Estimates	4
Catalogs	4
Building from Scratch	5
Adding Unit Bid Items	6
Copying From a Template	7
Entering Incidental and Breakdown Data	7
Entering Hybrid Lump Sum Data	8
Specification Writer Duties and Pricing Responsibilities	9

[See Appendix 1](#)

ESTIMATOR TRAINING OUTLINE

Turning System On and General Overview

- Open the estimator program.
- Open the basic catalog
- Import the project skeleton form the PES/LAS export folder
- Review categories identified in project folder – add/change/delete folders using standardized category numbers and naming conventions
- Add bid items, anticipated items, construction engineering
- Add quantities and print without prices for quantity/item QC
- Add Hybrid Lump Sum Quantities and prices
- Add Incidental items and cost breakdowns in cost item
- Change catalogs for pricing unit bid items
- Entering reference pricing from designers
- Entering reference pricing from reference catalogs
- Entering pricing from bid based catalogs
- File naming for work in process “key#adv#” – in secure region folder
- File name for PS&E estimate using export function – “key#” and is placed in the estimate folder

Consultant Input

- Work in stand alone environment
- Transfer PS&E files to regions

Importing and Global File Options

- Set cap lock on computer.
- File – Import must be used to initially open file download from P/L
- Edit – Estimate Options – do not uncheck radio box “only Trns*prt”
- Quantities must be entered in hundred’s or larger. No entries to 3 decimal places.
- Prices must be entered in whole cents – no portions of cents. Note: estimator often shows numbers in portions of cents – ignore this and do not attempt to change or round entries internal to the system.
- Select Catalog with most recent time data
- Select OK
- Tools – Switch Catalog – select the same catalog as in “estimate options”
- Select OK
- Fill in basic fields, work type, highway type, urban/rural, season, county, letting date, unit system (be sure this matches your spec year and your catalogs).
- Enter 3.5% in the contingencies box.
- Verify or type in the project name in the description field – be exact on this description – this field is used for advertising the project.
- Click on page two, enter name and check box for date on estimate.
- Save file using “Key#adv”
- Save final estimate as “Key#PS&E” using save function
- Export final estimate as “KeyPS&E” using export as a “PES project file (5.4 or earlier)
- Expand all files in the tree on the left side of the screen – verify the tree is showing you the data you want to see.

Changing the View on the Tree

- Save and close the current job – do not close the program.
- Tools – global options
- Tree Labels (select)
- Left click and hold over the “?” button at the tree level that you want changed.
- Visually identify the item you want to change, release the mouse key, make that change in the box area to the left of the “?” button. Note that text and blanks are accepted and shown in the tree view. Select OK, if an error message comes up, select OK again (your change is accepted, this is a program flaw).
- Re-open your project and verify that the changes in the tree mode are what you would like to see. Make further changes by closing the job and re-entering the Tools – Global Options – Tree Labels menu.

Methods for Developing Estimates

- Build an estimate from scratch in the “skeleton file from P/L
- Copy information from templates into the “skeleton file” from P/L
- Entry order of data
 - General project data
 - Set Catalog to NoBidHist
 - Categories for the bid summary
 - Quantities for unit price items – then print for review
 - Enter Reference prices from each designer
 - Change catalog to year/quarter
 - Check reference price to designer price – add bid items or data as required
 - Print for project leader review

Price distribution to project team – see notes at bottom of bulletin.

Catalogs

- NoBidHist – used for data entry of quantities without prices
 - Default catalog for quantity entry for all projects
 - Allows printing of quantities for verification by project team
 - Maintains security around estimate pricing – easiest method to print bid items without prices
- Weighted Average Reference Catalogs – used to check estimates
 - Based on yearly weighted average costs
 - Roughly the same data the designers are using
 - Used to QC the bid item selection of designer – if large differences in costs the bid item should be reviewed and further work needed for bid item selection.
- Catalog naming conventions
 - Year and quarter
 - Metric vs. English
 - Switching catalogs during development of project (2 places)

Building from Scratch

Default category items and descriptions

- File – Import skeleton with correct key number from region folder
- Open all categories for viewing
- Make additions and changes to category descriptions as required – right click the mouse and either add or insert categories as needed. Adjust the category numbers to sequentially increase either in increments of 10, 5, or 1 as needed for the project.
- Note: categories 1200 and above are reserved categories. Do not select numbers above 1200 for category items except for 9400 and 9800.
- Primary category numbers match the APWA specifications. Added categories use the third and fourth digits within the primary category. Always use 1200 for added bid items, 9400 for anticipated items, 9800 for construction engineering.
- Make additions or changes to unit items by right clicking and inserting items. While adding/inserting items, maintain the general order that is customary to ODOTS particular category. Do not mix and match bid items in a random manner – generally follow project item order of previous bids and do not re-order the numbers until the item entry process is generally completed.
- Enter the supplemental bid item description in the supplemental item description box. This description will print out as the primary description when the project is set up for advertisement.
- The notes tab is used to communicate with SEOPL and cost estimators – provide information if an unusual bid item is selected, if incidental items are selected or if further assistance will be needed at the point of document review.
- Verifying data entry: Edit – verify estimate. This provides a log of data anomalies. It is used as an error editor to In a few cases,
- Save the file on a region approved and secure folder. Do not resave work in the skeleton file.

Adding Unit Bid Items

- Item number selected from either the drop down box or from the "find item" box next to the drop down box. NOTE: all lump sum reference quantities must be entered on this line – no exceptions.
- Automated project cost percentages – with the cursor on the item, right click and add reference price – percentage of estimate click on – make sure active price basis is on – enter the percentages required – multiplies the total project cost by a percentage to make line item price current to total project values. Mandatory requirement on all projects for the following items.
 - Mobilization 10%
 - TPDT 2%
 - Erosion control 1%
 - Survey 2%
 - Construction Engineering 8%
- Estimate bid history – automatically enters price information when the bid item is selected. Price data is automatically entered in many instances. Spec writers are required to enter the designers prices and then compare to bid history – reconcile the price to be used with the designer – turn off the selected price not to be used by clicking off the active column check box.
- Cost sheets – used to price incidental work into a bid item or for combinations of work that are normal bid with components such as retaining and MSE walls. Note that more than one active item may be left in the on position. For incidental items, the bid history price may represent the largest portion of work. Open the cost sheet and click on the materials tab. Enter the description of the incidental item, the quantity and the price provided by the designer. Open the notes tab and identify the designer and source of the data and date the entry.
- Warning: Under no circumstances should prices be entered in fields where the cursor is over the category level of work. Prices will also not "take" if the cursor is on the item and an entry is made on the entry sheet on the upper half of the page. In either case, the data will not pass into the client server and data will need to be re-entered into the program before continuing.
- Once entries are nearly completed – the item numeric order is reset. This renumbers items in increments of 10. Press Edit – Renumber Estimate Items.

Copying From a Template

- Standard templates for large projects are being developed for your use. These will be provided in your region folder. Copy either the entire category or the individual items from the template into the skeleton estimate. Reset the category or item number as needed to fit in the proper location on your skeleton sheet.
- Templates are best used with no prices (cost, reference or bid based) attached to the bid item. This allows printing of the summary sheet without prices attached. The alternative is to turn off the check box for each price item to allow printing without prices.
- Pricing after copying templates and bid items is managed as follows: updating prices by Edit – Update price information – refresh time dependant data and cost information. This item replaces old cost data with prices from the price catalog that the estimator is currently pointing to – the option you chose when starting up the program.
- Remove all prices to start fresh on pricing – Edit – update price information – restart. This selection is NOT RECOMMENDED. It is used to clear all information including cost groups and is generally used as a programming tool to establish new groups of items. Similar to a “Delete all” command.

Other program tools:

- View – show/hide columns
- View – show/hide tree

Entering Incidental and Breakdown Data

- Highlight the selected bid item – right click – select cost sheet
- Highlight the cost sheet description in the tree view
- Select the materials tab at the bottom of the sheet
- Highlight the box under the “Description” box in the lower right side of the page – enter a description of the incidental or breakdown component bid item
- Select the box under the unit’s box – use the drop down menu to select the unit of measure.
- Select the box under the quantities box – enter the quantity that is identified in the special conditions for that work item.
- Select the box under the unit price box – enter the estimated unit price for that work component.
- Select enter and repeat the process for every incidental item or breakdown item not already listed in the unit price or cost breakdown schedule.
- Highlight the selected bid item again – verify that all bid components are selected and checked on. Note: this will prompt a “Honda” error that is ignored in these cases.
- Select the notes tab in the upper right half of the screen, enter the date of the information provided in the cost breakdown, the source of the data and the contact person for that data.

Entering Hybrid Lump Sum Data

What is a “Hybrid Lump Sum”?

There are Lump Sum items that will show a unit of one on the Bid Summary Sheet. Examples include Rebar, Concrete and other items. These are identified in the Item code where the letter “A” is shown as the last item in the code string. When it is selected the code will show the “A” and the unit description in the unit item mode will show something other than “LS”.

Data entry for this work is required as noted below.

- Enter the reference quantity in the quantity box at the unit item level – do not enter these quantities under the cost sheets.
- Right Click and select either reference or cost sheet to price. **WARNING:** Do not enter prices at the unit price level in the upper right area within the unit price box. Prices entered here will not pass into the main system and data will be required to be re-entered into the program.
- Enter prices the using the following methods:
 - Enter and highlight the cost sheets and enter data as noted earlier
 - Enter a reference price item, then enter the price in the price box on the lower right portion of the sheet. Do not enter prices in the upper right box of the cost sheet. These prices do not pass into the client/server system. The enter the source of the data in the description box (Ad Hoc, Means, other) – then select the notes box and date the entry and add a reference name for the person selecting the data.
 - Enter a reference price item, highlight the reference price item, enter a price or select the percentage box and enter a percentage of total estimate
 - Enter a reference price item, highlight the reference price item, select the drop down menu or search button just right of the reference price ID box, select the bid item number and the price will automatically be entered.

Specification Writer Duties and Pricing Responsibilities

Estimator is used as an entry platform to replace the mainframe platform entry process. It is more users friendly and has significantly greater capabilities. The specification writer duties are generally the same for this level of data entry. Work should reflect accuracy in selection of bid items, completeness of the selection of information to be bid and entry of quantities for further analysis by cost estimators.

Security around price information is generally the same – quantity information provided by the designers is to be sent back to the designers for verification of quality. Pricing information is considered confidential and the following ODOT policy applies to the estimator information. Management and distribution of the estimate and component prices is the responsibility of project leaders and restricted to a “need to know” basis.

THE ENGINEER'S ESTIMATE IS CONSIDERED EXEMPT FROM DISCLOSURE UNDER THE PUBLIC RECORDS LAW. IT SHOULD BE CONSIDERED CONFIDENTIAL AND SHOULD BE USED ONLY FOR ODOT INTERNAL PURPOSES. IT SHALL NOT TO BE DISCLOSED TO ANYONE OTHER THAN ODOT EMPLOYEES, EXCEPT FOR THE LIMITED SITUATION OF ODOT CONTRACTED, PROJECT SPECIFIC CONSULTANTS OR LOCAL AGENCY EMPLOYEES WORKING DIRECTLY ON THE PROJECT AND EVEN IN THOSE INSTANCES SHOULD BE CLEARLY IDENTIFIED AS CONFIDENTIAL.

To view the policy concerning Management of the Engineer's Estimate (EE), use [this link](#).

[See Appendix 1](#)