

**OHIO DEPARTMENT OF TRANSPORTATION
OFFICE OF ESTIMATING**



GUIDELINES, PROCEDURES, & FREQUENTLY ASKED QUESTIONS


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Office of Estimating Mission Statement

The Office of Estimating serves as ODOT's expert in construction costs. Our expertise embraces estimating, bid analysis, management and monitoring of project funding, and economic analysis and forecasting. Our goal is to estimate and analyze project costs in a consistent, fair, and reasonable manner. In addition, we assist districts in managing their fiscal program from the inception of a project through completion of construction with training and support.

Preface

 The is for guidance, as well as to outline common procedures and answer frequently asked questions related to estimating. This document does not replace sound decision-making and engineering judgment. You should always consult with the Office of Estimating to ensure that you have a clear understanding before you proceed. If there is information in this document that conflicts with another publication, please contact us for clarification.

Background

In order for the Department and each District to manage its fiscal program, it is imperative that those involved with the planning and design of projects are cognizant of the construction costs of each project from the inception of a project through the completion of construction. ODOT District personnel and consultants, namely planners and designers, have two important roles in the estimating process. The first role is to develop preliminary estimates (i.e. budgetary, planning, or C1 Estimates). The second role is to prepare design estimates (i.e. detailed, or C2 Estimates). The District determines how much to budget for each project from the C1 Estimates. C2 Estimates are used to determine if the proposed design meets, exceeds, or falls short of the C1 Estimate and if any adjustments need to be made to the budget or the proposed design. Both C1 and C2 Estimates are tools available to Districts and consultants to manage designs and construction budgets during the planning and design stages of a project.



After project design and before construction, the Office of Estimating develops the most detailed estimate, the Engineer's Estimate that serves as the State's benchmark to analyze bids. The Engineer's Estimate and bid analysis ensures that the Department estimates and sells all construction projects in a consistent, fair, and reasonable manner. In fiscal year 2010 alone, the Office of Estimating processed \$2 Billion of construction work.



This document prints on letter size (8.5" x 11") paper unless noted otherwise and uses hyperlinks (underlined text in this document) and PDF bookmarks for your convenience. Please consider the environment before printing this document.



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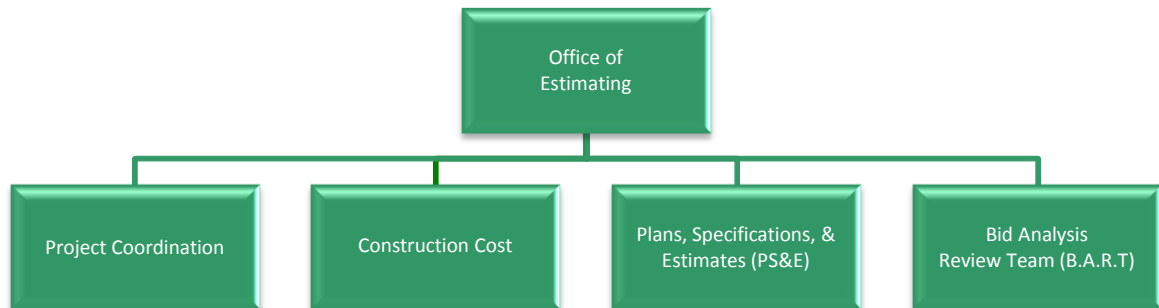
I. General Information





1. Who is the Office of Estimating and what do they do?

The Office of Estimating serves as ODOT's expert in construction costs. Our expertise embraces estimating, bid analysis, management and monitoring of project funding, and economic analysis and forecasting. After projects are designed and before they are advertised for sale, the Office of Estimating coordinates project sales, prepares the Engineer's Estimate, and funding splits. The Office of Estimating is comprised of the following four sections:



Please refer to questions 2 – 6 for more information about each section within the Office of Estimating.

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2. What are the responsibilities of the Project Coordination?

The Project Coordination Section has the following responsibilities:

- Receives the plan packages from the Districts to ensure they are complete and received on time
- Prepares the plan package for use by the Construction Cost Section so they can prepare the Engineer's Estimate
- Updates plans with revised plan sheets
- Coordinates project sales

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3. What are the responsibilities of the Construction Cost Section?

The Construction Cost Section has the following responsibilities:

- Serve as construction cost expert for The Department
- Prepares the Engineer's Estimate
- Performs Bid Analysis
- Provides information to the Award Committee
- Performs Life Cycle Cost Analyses (LCCA)
- Performs Value Engineering Analyses (VE)
- Provides support to District personnel and consultants with C1 Estimates, C2 Estimates, and Estimator
- Maintains the Item Master
- Works with districts to achieve their critical success factor goals and objectives
- Serves on Specification Committees

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4. What are the responsibilities of Plans, Specifications, & Estimates (PS&E) Section?

The PS&E Section has the following responsibilities:

- Prepares the project funding
- Splits the cost of items of work on projects with funding splits

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5. What are the responsibilities of the Bid Analysis Review Team (BART)?

The BART Section has the following responsibilities:

- Tracks market trends
- Performs in-depth data and cost analyses
- Develops inflation rates and forecasts for the Department

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6. What types of questions can the Office of Estimating answer?

We can answer many questions. However, if it is best for another office to answer your question, we are can direct you to the office that can assist you.

A few examples of questions and topics that we can answer are:

- Estimator Software
- Estimating Techniques
- Item Master
- Funding & Funding Splits
- Change Orders (Questions relating to costs)

A few examples of questions and topics for other departments to answer:

Office of Construction Administration

- Construction & Material Specifications (C&MS)
- Supplements
- Supplemental Specifications

Office of Contracts

- Contractor Pre-qualification
- Project Advertising
- Awards & Rejections

Planning, Engineering, & Other Departments

- Project Scopes
- Design
- L&D Manuals
- Standard Construction Drawings
- Plan Insert Sheets

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II. Plan Packages





1. What is a plan package?

When Districts file plans with the [Office of Estimating](#), they must submit a plan package. A plan package must contain the following items:

- *Plan Package Submittal Form (Prepared by the District)*
- *LD-4 Form (Prepared by the District, municipality, or consultant)*
- *C2 Estimate (Prepared by the District, municipality, or consultant)*
- *Proposal Note List (Prepared by the District)*
- *Construction Plans (Prepared by the District, municipality, or consultant)*

The plan package may also contain other information relevant to the project .

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2. How do I submit a plan package?

To submit a plan package, upload the required files to the Central Office server. The plans and other contract documents advertised to the public come from the Central Office server. When submitting revised plan sheets and files, please be sure to submit them to the Central Office server.

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3. What is a Plan Package Submittal Form?

District personnel submit a Plan Package Submittal Form to Central Office. This occurs during the plan package submittal step of the Project Development Process. The form contains the following information:

- *District contact person that can answer questions about the project*
- *Checklist of documents to be included with the plan package*
- *District's requested sale and completion date*
- *Special notes and considerations.*

The Office of Estimating maintains the Plan Package Submittal Form. You may download a copy of the form from our intranet site at:

<http://portal.dot.state.oh.us/Divisions/Construction/estimating/PlanPackage/PlansSubForm.doc>

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4. What is a Proposal Note List?

A Proposal Note List is a checklist of all the proposal notes applicable to a project. District personnel fill out the form and submit it to Central Office during the plan package submittal step of the Project Development Process.

The [Office of Estimating](#) maintains the Proposal Note List that is on their intranet site:

<http://portal.dot.state.oh.us/Divisions/Construction/estimating/PlanPackage/PlansSubForm.doc>

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5. What is a LD-4 Form?

District personnel, municipalities, or consultants prepare a LD-4 Form. This form is submitted to the Office of Estimating-Project Coordination Section during the plan package submittal step of the Project Development Process. The form contains information such as pavement planing depths, asphalt paving depths, conduit installation information, earthwork quantities, structural removal quantities, etc. The Office of Estimating- Construction Cost Section uses this form to develop the Engineer's Estimate.

Please completely fill out the form. Do not fill out the form with information such as "Variable" for a depth or "Lump" for a volumetric quantity. Regardless of the unit of measurement in the plans, you must be specific and quantify everything on this form for the Office of Estimating-Construction Cost Section. The Office of Estimating cannot estimate projects without this information. Though it may seem redundant or unnecessary to fill the form with information that is contained in the plans, it is best for those most familiar with the plans (typically designers) to be responsible for this information. In addition, the Office of Estimating processes a high volume of work; therefore, estimators do not have time to obtain this information for every project. Please refer to the L&D VIII Manual for more information about the LD-4 form.

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6. What are tracings?

Tracings are the final set of construction plans submitted to Central Office. These construction plans are the contract documents that ODOT, contractors, and other personnel use.

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7. Does an Engineer's stamp have to be on the title sheet of the construction plans?

The plans submitted to the Office of Estimating-Project Coordination Section are the official set of plans that will become contract documents. Therefore, they must have an Engineer's Seal affixed to the title sheet.

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8. What is an Addendum?

An addendum is a document submitted to the Office of Construction Administration-Pre-Bid Section to correct plans that are currently being advertised.

You can view addenda on the Office of Contracts website:

<https://extranet.dot.state.oh.us/groups/contracts/Lists/ConstructionAddendaList/Addenda.aspx>

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9. How do I submit an addendum / revised plan sheets?

If you submitted a project to the Office of Estimating and finance has not approved the project, you may submit revised plan sheets and a revised C2 Estimate without an addendum. If the project is in the advertising stage, you must submit an addendum to notify plan holders of the changes. When submitting plan sheets, you must submit two sets of sheets: one with revision clouds indicating the revisions and one with the changes without the revision clouds. In addition, you must submit a revised C2 Estimate with the revision / addendum. If you are unsure of the status of your project, you may contact Debra Neal-Harris at (614) 466-2731 or Debra.Neal-Harris@dot.state.oh.us.

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III. Estimates





1. What is a C1 Estimate?

C1 Estimates are preliminary budgetary estimates prepared by District personnel, consultants, or municipalities. These estimates are used to create construction budgets during the programming and planning stages of a project. Since defined items and quantities are typically unknown during the planning stages, a C1 Estimate will not contain these details. However, it can contain as much detail that is known. A C1 Estimate will have major cost categories such as earthwork, lighting, drainage, etc. and their respective costs. Relative to a C2 Estimate and the Engineer's Estimate, these are the least accurate and least precise estimates because they are preliminary with unknown details. Do not substitute these estimates and the techniques used to prepare these estimates in place of detailed design estimates (C2 Estimates).

Since these are preliminary estimates with undefined items and quantities, a contingency amount should be incorporated into the estimate to account for the unknowns. For more information regarding contingencies, please refer to the question 7 in this section, "What is a contingency and how do I determine how much to add to my estimate?"

These estimates are developed and used from the programming step through the preliminary design step, until Stage 1 design begins. (During the following steps of the three Project Development Processes (PDP)):

(NOTE THIS SECTION WILL BE UPDATED WITH THE NEW PDP PROCESS)

- Minimal PDP: Step 1
- Minor PDP Process: Steps 1-4
- Major PDP Process: Steps 1-8

For more information about C1 Estimates, please see:

http://www.dot.state.oh.us/Divisions/ConstructionMgt/Estimating/Miscellaneous/May2009-ODOT_ProcedureForBudgetEstimating.xls

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2. How do I prepare a C1 Estimate?

To create a C1 Estimate, consider the following:

- *Define all the categories of work associated with your project*
 - *Include all categories that will definitely be a part of your project*
 - *Include all categories that may be a part of your project*
 - *Even though you may know very little about a particular category, you should still define it as part of your project*
- *For the categories of work that will definitely be a part of your project and for those categories that you know more about; use the following tools to determine fair and reasonable prices:*
 - Estimator
 - CMS Cost Search
 - ODOT's Procedure for Budget Estimating
- *For the categories of work that may be a part of your project or for categories that you may not know as much about; do your best to determine to what level of involvement these categories may have with your project*
 - *You can use a contingency to cover the cost of these categories*



Keep the following in mind as you develop your C1 Estimate:

- This is a preliminary estimate. Therefore, the estimate is less accurate and precise than a C2 Estimate.
- Though these are the least accurate and precise estimates, they are still very important because they are used to develop the construction budget of a project. In addition, Central Office relies on these estimates to ensure that there is sufficient funding for the entire program.
- If you use a tool such as ODOT's Procedure for Budget Estimating, keep in mind the prices in this document are a starting point for your estimate, they are not an end-result nor are they the exact costs that you should use in your estimate. For example, the document will tell you soil excavation is \$8.00 / CY. In reality, excavation can vary in price. A typical range may be anywhere from \$5.00 - \$25.00 / CY. You must consider the specifics of your project that may increase or decrease the starting price of \$8.00 / CY.

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3. What is a C2 Estimate?

C2 Estimates are detailed design cost estimates prepared by District personnel, consultants, or municipalities. The C2 estimate should be a reasonably accurate representation of the project's construction cost. Planners and designers do not estimate with the level of detail, accuracy, precision, and certainty like full-time estimators. However, projects must be designed within a budget. Districts use these estimates to verify the proposed design meets the original budget and if the design or construction funding needs adjustment. A C2 Estimate will have categories of work as well as specific items of work defined (the categories, items, and quantities on a General Summary plan sheet).

Reduce the contingency amount in the estimate as the plans develop from Stage 1 design to tracings. Do not include contingency when submitting a C2 Estimate with the plan package since all categories and items of work are defined and quantified. For more information regarding contingencies, please refer to the question 7 in this section, "What is a contingency and how do I determine how much to add to my estimate?"

Develop C2 Estimates starting with Stage 1 design and finalize them during the final plan package submittal step. It is best not to wait and begin the C2 Estimate during the plan package submittal step. This ensures that if any revisions need to be made to the design or funding, there is an appropriate amount to time to do so without delaying the project or causing issues with the funding. C2 Estimates develop during the following steps of the Project Development Processes (PDP):

(NOTE THIS SECTION WILL BE UPDATED WITH THE NEW PDP PROCESS)

- Minimal PDP: Steps 2-3
- Minor PDP Process: Steps 4-8
- Major PDP Process: Steps 8-12

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4. How do I prepare a C2 Estimate?

To create a **C2 Estimate**, consider the following:

- Define all the categories and items of work associated with your project
- Use the following tools to determine fair and reasonable prices:
 - Estimator
 - CMS Cost Search
 - Authoritative references such as RS Means
- As your C2 Estimate develops, you should reduce the amount of contingency used in your estimate. Please see question 7 in this section for more about contingency.

Keep the following in mind as you develop your **C2 Estimate**:

- This is a detailed estimate with defined categories and items of work. Therefore, you should not use a C1 Estimate or preliminary estimating techniques in place of your C2 Estimate.
- There are three methods to develop a price for each item of work
 - Bid-Based Estimating (i.e. Historical Pricing, Bid Histories)
 - Cost-Based Estimating (i.e. Cost Sheets, Worksheets)
 - A combination of bid-based and cost-based estimating
- The following are a few factors to keep in mind when performing a bid-based estimate
 - Economies of Scale
 - Regional Pricing
 - Age of Historical Price
 - Project Type
- The following are a few factors to keep in mind when performing a cost-based estimate
 - Define material, labor, equipment, profit, and overhead costs
 - Define fair and reasonable production rates

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5. How do I use bid histories to estimate an item?

There are several factors you should consider when using bid histories:

- Economies of Scale
- Regional Pricing
- Age of Historical Price
- Project Type

If you use Estimator bid histories, be aware the software may not report an accurate price. In Estimator, you can view the historical regression models to determine if the software is using enough data to perform an accurate regression. In addition, Estimator can extrapolate prices. You can have Estimator extrapolate prices using the following procedure:

- With the Estimator software open, select the "Tools" menu.
- Select "Global Options"
- A box will open. Select the "General" tab.
- Check the box "Estimate Out of Range Bid History Prices"

Extrapolated prices with a low RMS value are not accurate and should not be used in your estimate.

You should always verify Estimator bid history prices and not solely rely on the software without doing an independent check. You may verify historical prices by using references such as the CMS Cost Search. Lump sum, miscellaneous, special, and as per plan items are job-specific and cannot be accurately estimated using bid histories. Therefore, you should estimate these items using a cost-based approach (cost sheets).

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6. How can I lookup historical prices?

There are several tools on our website to assist you:

CMS Cost Search

<http://www.odotonline.org/cmsportal/default.asp?tab=2000&si=2>

Bid Tabulations

<https://extranet.dot.state.oh.us/groups/contracts/BidTabs/Forms/Tabs.aspx>

Bid Histories

http://www.dot.state.oh.us/Divisions/Planning/Estimating/Pages/Bid_Histories.aspx

Summary of Contracts Awarded

http://www.dot.state.oh.us/Divisions/Planning/Estimating/Pages/Sum_Con_Awd.aspx

ODOT's Procedure for Budget Estimating

[http://www.dot.state.oh.us/Divisions/Planning/Estimating/Item%20Master%20Bid%20History%20List%20Links/Procedure%20for%20Budget%20Estimating%20\(July%202011\).xls](http://www.dot.state.oh.us/Divisions/Planning/Estimating/Item%20Master%20Bid%20History%20List%20Links/Procedure%20for%20Budget%20Estimating%20(July%202011).xls)

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7. How do I use a cost sheet to estimate an item?

*Cost-Based Estimating is a method to estimate the cost for items of work based on estimating the cost of each component to complete the work and then adding a reasonable amount for a contractor's overhead and profit. The unique character of projects, geographical influences, market factors and the volatility of material prices can make historical pricing an unreliable method of estimating project costs. Therefore, the use of a cost-sheet may be more appropriate to determine a price. For more information about how to use a cost-sheet in *Estimator*, please see the *Estimator User's Guide* on the *Office of Estimating* website.*

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8. What is a contingency and how do I determine how much to add to my estimate?

A contingency (also known as a design contingency) is an added lump sum amount or percentage added to an individual item price, category, or overall estimate. The purpose of the design contingency is to account for the cost of the categories and items of work not designed or quantified (unknowns). C1 and C2 Estimates use design contingencies. The Engineer's Estimate does not use design contingencies. It is up to the individual(s) preparing the estimate to determine an appropriate contingency amount to use. Design contingency is not the same as inflation.

As the project and design develops, more categories and items of work are defined and quantified. As you define, quantify, and add items to the estimate, reduce the contingency amount since you have reduced the number of unknowns. When submitting the plan package, do not use design contingency for the final C2 Estimate since all items of work have been defined, quantified, and priced. In addition, do not add design contingency to the final C2 Estimate to cover what you do not know or understand about an estimate. If there are any categories or items of work that you do not know how to estimate, please contact the Office of Estimating for assistance.

To determine how much design contingency to add to an estimate consider the following:

- Which categories and items of work are defined and quantified?
-Once you have determined these items, enter them into your estimate.
- Which categories and items of work are not defined and quantified?
-Do your best to estimate which categories and items of work are not defined and quantified. Use Estimator, CMS Cost Search, and ODOT's Procedure for Budget Estimating to give you an idea of how much money these items may cost in a similar manner that you would for the defined, quantified items. You can use this information to estimate a dollar amount or percent design contingency to use.

The Office of Estimating cannot answer questions such as "How much design contingency should I add to my estimate?" unless we have an understanding of the design, what step the design is in the project development process, how many categories and items of work have been defined, how many are undefined, etc. We can only offer our advice if you provide this information to us.

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9. What is inflation?

Inflation accounts for the time-value of money. If there is a gap in time when the estimate is prepared and when the project is constructed, add inflation to the estimate. Inflation is not the same as contingency. There are tools available on our website with more information about inflation:

- [Business Plan Inflation Calculator](#)
- [Construction Cost Outlooks](#)

When you are estimating a project that is the planning and design steps, add inflation to your estimate. Do not include inflation with the final submittal.

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10. What is an Engineer's Estimate?

The Office of Estimating prepares the Engineer's Estimate. It is more detailed than a C1 and C2 Estimate, uses the most up-to-date data, estimating methods, and accounts for current market trends. The Engineer's Estimate is prepared by full-time construction cost estimators who understand construction methodologies, economics, bidding trends, markets, and so forth. The Engineer's Estimate is the State's benchmark for analyzing contractor's bids and is used in the consideration of the award or rejection of a project by the Awards Committee. Of the three types of estimates: the C1 Estimate, C2 Estimate, and Engineer's Estimate; the Engineer's Estimate has the highest level of detail, accuracy, precision, and certainty.

After we receive a plan package, we process it and prepare the Engineer's Estimate. (During the following steps of the three Project Development Processes (PDP)):

(NOTE THIS SECTION WILL BE UPDATED WITH THE NEW PDP PROCESS)

- Minimal PDP: Step 3
- Minor PDP Process: Step 8
- Major PDP Process: Step 12

The Engineer's Estimate is not a public record and cannot be discussed with anyone outside the Office of Estimating, even within ODOT. For legal information regarding the Engineer's Estimate, please see [Ohio Revised Code Section 5525.15](#)

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11. Why do the Districts and the Office of Estimating prepare separate estimates?

Please see questions 1, 3, and 9 in this section for an explanation of C1 Estimates, C2 Estimates, and Engineer's Estimate. The District, consultant, or municipality prepares a C1 Estimate to budget funds for the proposed work starting at the programming step. As the project progresses through the project development process, from programming to final design, the District prepares a C2 Estimate. This estimate verifies that the proposed design is within the original budgeted amount and if there need to be any changes to the design or budget. C1 and C2 Estimates are tools that the Districts use to manage individual project construction budgets as well as their overall District construction budgets for each fiscal year. In addition, the Department as a whole uses these estimates to allocate funds to individual projects, each District, and to create economic forecasts to plan the Department's program.

Generally, C1 and C2 Estimates are concerned with the overall cost of the project. We do not use these estimates in the consideration of the award or rejection of projects because they are prepared during the planning and design steps and they do not contain sufficient detail about every item of work to serve as a benchmark to analyze contractor's bids. Typically, these estimates rely heavily on bid histories. If used properly, bid histories are a reasonable approach to prepare C1 and C2 estimates. However, more details and an understanding of costs and construction methodologies is necessary for bid analysis. Therefore, you should not assume that these estimates can replace the Engineer's Estimate.

The Engineer's Estimate is a detailed construction estimate similar to the contractor's bids. The Office of Estimating- Construction Cost Section and Awards Committee rely on estimates prepared with the highest level of accuracy, precision, detail, and certainty to assess contractor's bids. Therefore, the Engineer's Estimate serves as a benchmark for bid analysis.

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12. Which projects does the Office of Estimating estimate?

The Office of Estimating processes and estimates all projects sold by The Department. After the a project is estimated, it is sent to the Office of Estimating- Plans, Specifications, & Estimates Section (PS&E) which will prepare the funding. After the funding is prepared, the Office of Contracts advertises the project.

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13. Does the Office of Estimating review plans?

The Office of Estimating does not review plans, we use plans to develop the [Engineer's Estimate](#). As we develop the [Engineer's Estimate](#), we may notice problems and errors with the plans. We will contact Districts and consultants to make plan corrections for the following reasons:

- *Incorrect Item Numbers, Item Number Extensions, and Items Descriptions*
- *Misquantified items*
- *Missing plan information*

We point out errors so that we can clearly understand the plans to prepare the [Engineer's Estimate](#). In addition, if we feel that an error may cause potential bidding, contractual, or construction issues, we may bring this to the attention of the Districts and consultants. Like any form of written or verbal communication, it is necessary that the details, notes, design, and plans are understandable to anyone that uses them.

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IV. Project Lettings & Bidding





1. Does the Office of Estimating award and reject projects?

The Office of Estimating does not award and reject projects. The Awards Committee, which is comprised of voting and non-voting Central Office administrators and Federal Highway Administrator(s), awards and rejects projects.

When it comes to a project letting (sale), the Office of Estimating serves in the following capacities:

Construction Cost Section

The Construction Cost Section prepares the Engineer's Estimate, which is the state's benchmark for analyzing bids. They analyze the bids after a sale to determine if any corrections need to be made to the Engineer's Estimate, determine whether a contractor mathematically unbalanced their bid, materially unbalanced their bid, front-end loaded their bid, or if there is any other information that needs to be provided to the Awards committee. The Construction Cost Section does not recommend to award or reject projects. The Awards Committee relies on the Engineer's Estimate and the Construction Cost Section to provide them with unbiased facts to make an educated decision to award or reject a project. The Office of Estimating will contact a District with questions if the low bidder is more than 7% over the Engineer's Estimate. We provide this information to the Awards Committee.

Plans, Specifications, and Estimates Section (PS&E)

The PS&E Section prepares the funding splits before the project sale. Once a project has gone to sale, the PS&E Section notifies the Districts and municipalities that are involved with a project if they owe more money than their originally estimated share of the project.

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2. Why did the Engineer's Estimate amount change after a letting?

The Office of Estimating- Construction Cost Section corrects the Engineer's Estimate for reasons such as but not limited to- mistakes, mis-estimation, and computer errors. We never correct the Engineer's Estimate to make it closer to the contractor's bid(s) so that it is within awardable range. Remember that it is within the interest of The Department, contractors and taxpayers that we sell projects in a consistent, fair, and reasonable manner.

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3. The C2 Estimate is closer than Engineer's Estimate to the low-bidder; does this mean it is more accurate?

Being closer to the low-bidder does not make an estimate more accurate. In addition, never assume that if the percent difference between the C2 Estimate and the low-bidder is within awardable range that it is awardable.

A C2 Estimate is a tool to confirm that the design is within the original budgeted amount, the C1 Estimate. The Engineer's Estimate is a construction cost estimate that contains more detail and is prepared after a project is designed. Since the Engineer's Estimate contains more detail, it is more accurate, precise, and certain than a C2 Estimate. This is why the Engineer's Estimate serves as the benchmark to analyze the contractor's bids.

If the apparent low-bidder submits an unreasonably high bid, having an estimate with sufficient details, accuracy, precision, and certainty to assess if a contractor submitted a fair and reasonable bid is more important than being close to the apparent low-bidder.



A rejection may be necessary to sell the project at a better value or to make any corrections to the plans that may cause contractual or construction issues. Remember that it is within the interest of The Department, contractors and taxpayers that we sell projects in a consistent, fair, and reasonable manner.

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4. What is Front-End Loading?

The Department pays for some items of work either partially or in their entirety up-front (e.g. mobilization). If a contractor submits a bid with unreasonably high prices for these items of work, the bid has been Front-End Loaded. (e.g. 95% project cost in mobilization, 5% project cost in actual work items) The Office of Estimating shall determine if a price is unreasonably high by comparing it to the Engineer's Estimate. The Office of Estimating may also use other bidder's prices, bid averages, historical prices, and authoritative references to determine if a bid is Front-End Loaded.

Please see C&MS Section 102.08 for more information regarding Front-End Loading.

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5. What is a Mathematically Unbalanced Bid?

A contract has defined, quantified items of work. If the contractor's bid for a particular item(s) does not include reasonable material, labor, equipment, profit, and overhead costs, the bid is mathematically unbalanced. The Office of Estimating defines an unreasonable price as a price that is low or high relative to the Engineer's Estimate. In addition to the Engineer's Estimate, the Office of Estimating may also use other bidder's prices, bid averages, historical prices, and authoritative references to determine if a bid is Mathematically Unbalanced.

If a contractor submits a bid with \$0.00 for an item(s) price, the bid will be considered non-responsive and the bid will automatically be rejected.

Please see C&MS Section 102.08 for more information regarding mathematically unbalanced bids.

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6. What is a Materially Unbalanced Bid?

A Materially Unbalanced Bid is a Mathematically Unbalanced Bid that will not result in the lowest overall project cost to The Department. If the Mathematically Unbalanced item(s) are non-performed and the order of bidders changes; the bid is Materially Unbalanced.

A Materially Unbalanced Bid is always Mathematically Unbalanced.

A Mathematically Unbalanced Bid may be Materially Unbalanced.

Please see C&MS Section 102.08 for more information regarding materially unbalanced bids.

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7. What is Plan Error Exploitation?

If a contractor is aware of a mistake in the plans, they are supposed to notify The Department via the Pre-Bid process.

The Office of Estimating analyzes bids after a project letting. If it is believed that the contractor unbalanced their bid to profit from a plan error, the District will be notified and questioned about the potential problem. This information will be provided to the Awards Committee.

A rejection may be necessary to avoid exploiting The Department. Remember that it is within the interest of The Department, contractors and taxpayers that we sell projects in a consistent, fair, and reasonable manner.

Please see [C&MS Section 102.07](#) for more information regarding plan errors.

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8. Can a contractor call with questions about a project?

If a contractor has questions about a project that is currently being advertised, they must submit a pre-bid question. The Office of Estimating cannot answer any questions about projects that are being advertised.

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9. Who can a contractor call about a bid submission?

Contractors may call the Office of Estimating to discuss their bid after bids have been opened. In addition, the Office of Estimating may contact a contractor between a project letting and award to inquire about a project. In either case, the [Engineer's Estimate](#) is not discussed. Please contact Chrissy Hackney, Administrative Assistant, at (614) 644-6782 to direct your call to the appropriate personnel to discuss your project.

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V. Item Master





1. What is the Item Master?

The *Item Master* is a list of all the items of work that are used by ODOT. Each item of work has an associated item number, item extension, description, and unit of measurement. When developing construction plans, the items of work listed on the *General Summary* should exactly match the item numbers, item extensions, item descriptions, and units of measurement in the *Item Master*. The item numbers in the *Item Master* correspond to the item numbers in the *Construction and Material Specifications (C&MS)*. The *C&MS* contains information about each item such as a description of the work, materials and equipment, method of measurement, basis of payment, etc.

The *Office of Estimating* maintains the *Item Master*, which can be found on our website at:
<http://www.dot.state.oh.us/Divisions/ContractAdmin/Contracts/Construction/itemmst.pdf>

The *Office of Construction Administration* maintains the *C&MS*, which can be found at:
<http://www.dot.state.oh.us/Divisions/ConstructionMgt/OnlineDocs/Pages/default.aspx>

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2. Can I modify an item number, item extension, unit of measurement, or description?

You cannot modify a standard item number, item extension, or description. Please reference the “*Special Instructions*” column in the *Item Master* for more guidance on when supplemental descriptions are required for *Miscellaneous* and *Special* items. When adding a supplemental description, only add the description as a suffix; do not add a prefix to any description, including *miscellaneous* and *special* items.

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3. Why can't I find my item in the Item Master?

The *Item Master* is updated frequently, sometimes several times a week. The *Office of Estimating* recommends saving the *Item Master* as a favorites link rather than downloading the file to ensure you are always viewing the most current version.

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4. Can I have an item added to the Item Master?

You may make a request to the *Debbie Wood* in the *Office of Estimating* at Debbie.Wood@dot.state.oh.us or (614) 644-6786. She will evaluate whether the item should be added to the *Item Master* or if the item can be classified as a *miscellaneous*, *special*, or *as per plan* item.

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5. If an item is designated as Miscellaneous, Special, or As Per Plan, what does this mean?

Standard plan items have specifications, drawings, and details in the Construction & Material Specifications (C&MS), Standard Construction Drawings, Plan Insert Sheets, and design manuals.

“Miscellaneous” means that the item is not part of our standards. “Special” means that an item requires more information than is contained in our standards. “As Per Plan” means that an item deviates from the standards.

“Miscellaneous” and “Special” items do not have information documented in the Construction & Material Specifications (C&MS), Standard Construction Drawings, Plan Insert Sheets, and design manuals. Therefore, the designer has to include a plan note, detail, or both so that the plan user can clearly understand the designer’s intent. Please refer to question 2 in this section, “Can I modify an item number, item extension, unit of measurement, or description?” for more information about adding supplemental descriptions for “Miscellaneous” and “Special” items.

“As Per Plan” items deviate from ODOT standards. As with “Miscellaneous” and “Special” items, the designer has to include a plan note, detail, or both so that the plan user can clearly understand the designer’s intent. When listing the item on a General Summary plan sheet, include a page number that references the plan note / detail under the “See Sheet No.” column.

For more information regarding Standard, Miscellaneous, Special, and As Per Plan items, please refer to the Location & Design Volume III manual, which is published by the Office of Engineering:
<http://www.dot.state.oh.us/Divisions/ProdMgt/Production/volume3/Pages/ld3.aspx>

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6. How do I use a special item number?

If you have an item of work that is not contained in the Item Master, you can use one of the special item codes in your plans. There are different special item codes for you to use. Some of the special item codes are within specific sections of the item master. In addition, there are generic special items numbers that begin with 690E98XXX, SPECIAL - MISC.:. There are special item codes for the different units of measurement. Choose the item code that matches the unit of measurement you need. Add a supplemental description after the “SPECIAL - MISC.:”

ITEM	UNITS	DESCRIPTION	Special Instructio	
690E98200	Y	SQ FT	SPECIAL - MISC.: ADD DESCRIPTION HERE	ADD SUPPLEMENTAL DESCRIPT
690E98300	Y	SQ YD	SPECIAL - MISC.:	ADD SUPPLEMENTAL DESCRIPT
690E98400	Y	LUMP	SPECIAL - MISC.:	ADD SUPPLEMENTAL DESCRIPT
690E98500	Y	MILE	SPECIAL - MISC.:	ADD SUPPLEMENTAL DESCRIPT
690E98600	Y	HOUR	SPECIAL - MISC.:	ADD SUPPLEMENTAL DESCRIPT
690E98700	Y	CU YD	SPECIAL - MISC.:	ADD SUPPLEMENTAL DESCRIPT
690E98800	Y	TON	SPECIAL - MISC.:	ADD SUPPLEMENTAL DESCRIPT
690E98900	Y	GALLON	SPECIAL - MISC.:	ADD SUPPLEMENTAL DESCRIPT

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VI. Using Estimator Software





1. How do I obtain a copy of Estimator?

Estimator is part of the American Association of State Highway and Transportation Officials (AASHTO) Trns•port family of software produced by InfoTech. At the time of publication of this document, we are currently using Version 2.8a. The software is available to ODOT personnel, municipalities, and consultants registered with ODOT. Contractors may not use the software. ODOT has a site license for the software. District personnel may contact Debbie Wood at (614) 644-6786 or DEBBIE.WOOD@DOT.STATE.OH.US for information about installing the software. Municipalities and consultants may contact the following third party Value Added Reseller to for more information about purchasing a copy of the software:



Ariel Gibson
Info Tech
5700 SW 34th St., Suite 1235
Gainesville, FL 32608
(352) 381-4400
Sales@infotechfl.com
<https://www.infotechfl.com/products/estimator.php>

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2. Where can I find a user's guide for Estimator software?

*A general user's guide can be found on our website at:
http://www.dot.state.oh.us/Divisions/ConstructionMgt/Estimating/Miscellaneous/Estimator_UG.pdf*

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3. Do the item numbers, extensions, and descriptions in the plans have to match the estimate?

No, the item numbers and item extensions in the plans and those used to prepare the estimate do not have to match. The plans are a contract document that will be viewed by contractors; the estimate is not a contract document. Since the plans are a contract document, the item numbers, item extensions, units, and descriptions have to match the Item Master. This ensures that all items of work are clearly understood, consistently itemized, and properly bid. If you use item(s) that differ in the plans and estimate, we recommend making a note in Estimator so that anyone viewing the estimate understands why item(s) differ in the plans and estimate. Also, if you use different items, do not to use a bid history as it may be an inaccurate representation of price. Please see the next question for more explanation.

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4. What should I do if an item is not in Estimator?

It is acceptable that the plans and estimate do not match exactly as long as the General Summary follows the Item Master exactly. If an item is not in Estimator, you may use one of the miscellaneous item codes or a similar item in your estimate. The Estimator catalogs are restricted and you cannot modify or add items.

Your item may not appear in Estimator because the catalogs are built upon a history of items that have been used. Therefore, if the item has not been used, it will not appear in the Estimator catalog. (This is common with new and infrequently used items.) Keep in mind that the estimate is not a contract document, it is used to budget the cost of a project. Therefore, using a similar item will suffice. The General Summary needs to have the correct item number, item extension, unit, and description because it is a contract document that will be viewed and bid by contractors.

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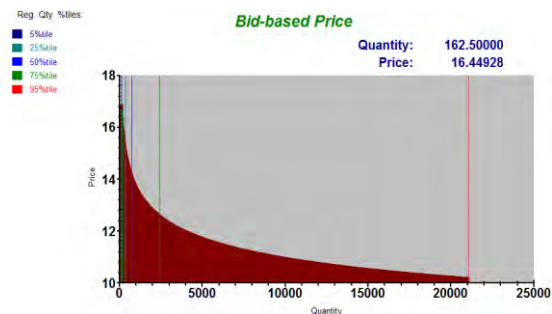
5. What should I do if Estimator will not give me a price?

If you use Estimator bid histories to estimate an item, be aware that the software does not always give an accurate price. In Estimator, you can view the historical regression models to determine if the software is using enough data to perform an accurate regression. You may also verify historical prices by using authoritative references such as the CMS Cost Search. Lump sum, miscellaneous, special, and as per plan items are job-specific and cannot be accurately estimated using bid histories. Therefore, you should estimate these items using a cost-based approach (cost sheets).

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7. Why is the Estimator historical price unrealistic or incorrect?

Be careful if you use a bid history as a price basis. You should not use a bid history for miscellaneous, special, as per plan, and lump sum items. These items are unique and vary from plan-to-plan. Therefore, using an average price for these items is inaccurate. In addition, the software uses regression models to interpolate and extrapolate prices. If few data points are available, the regression may be inaccurate. We recommend doing your own independent check to verify the accuracy of your prices.

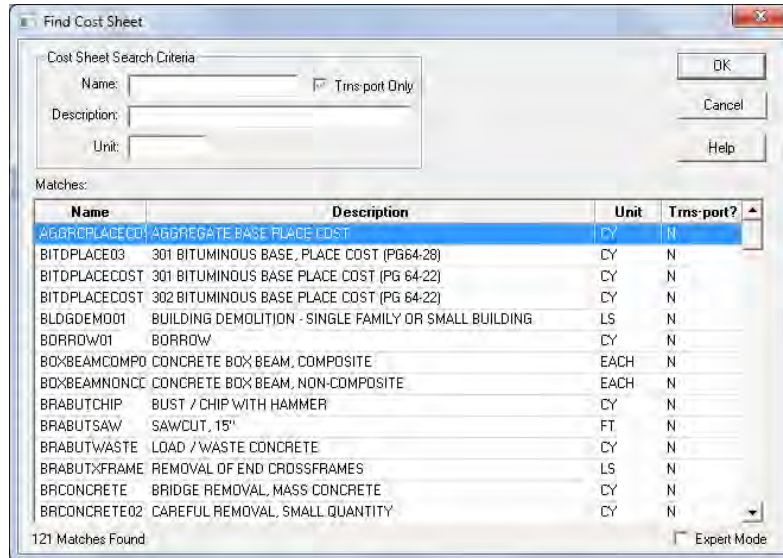


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8. What is an Estimator cost sheet?

A cost sheet is used for cost-based estimating. You must estimate the cost, quantity, and production rate of the material, labor, equipment, profit, and overhead of an item. Cost sheets are more detailed than bid-based (historical based) prices.



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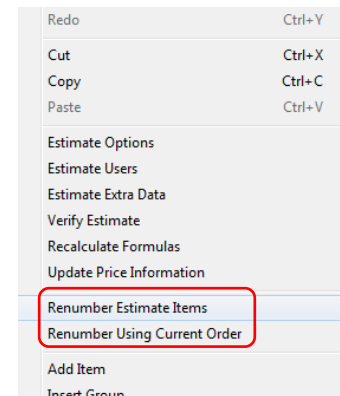
9. How do I renumber my estimate?

As you add and modify items in your estimate, you may need to renumber it to put the items in the correct order.

To renumber your estimate, follow this procedure.

With the Estimator software and the estimate open, select the "Edit" menu. There are three options to select from to renumber an estimate including: "Renumber Estimate Items", "Renumber Using Current Order (Items Grid Not Visible)", and "Renumber Selected Items, (Items Grid Not Visible)". In order to use the second and third renumbering options, you must have a Cost Group selected, not an individual item nor be at the top level (the first page with the general estimate information) of the estimate.

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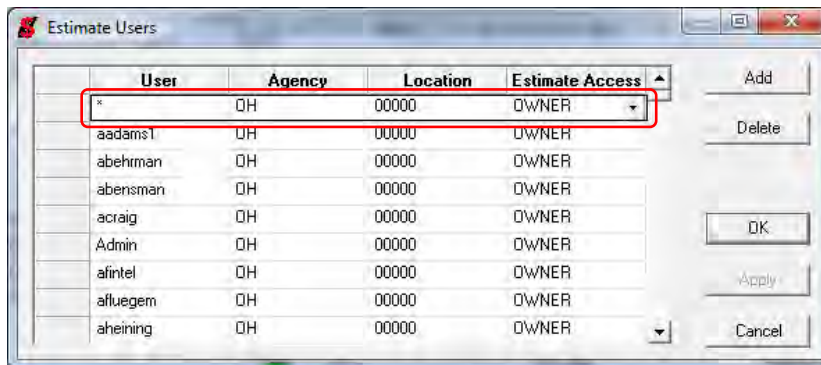


10. Why can't someone else open my Estimator file?

There are several common causes of this problem. First, verify that you are using the Ohio version of Estimator since there are different versions of the software for different states. Second, verify that you have the software setup correctly.

To make consultant Estimator files compatible with the District Estimator software, please do the following:

- With your estimate file open, click on "Edit", then "Estimate Users".
- Add a user to the estimate with a user ID "*" and a location of "00000" (Without the quotes.) This will allow the District to open the file as a generic user.



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11. How do I copy groups / items from one Estimator file to another?

To copy groups / items from one estimate to another, you must be using the same catalog for both estimates. Otherwise, one of the Estimator files will become read-only.

To copy an individual group

- Select the group from the tree area in Estimator. If you are at the top level of the estimate (the first page with the general estimate information), you may select the group from the grid area.
- To copy the group, either right-mouse click and select "Copy" or from the "Edit" menu select "Copy".
- Switch to the other Estimator file.
- Right-mouse click over a blank area of the tree area and select "Paste" or from the "Edit" menu select "Paste".

To copy multiple groups

- To copy multiple groups, you must be at the top level of the estimate (the first page with the general estimate information). You may then select the groups from the right-hand side of the screen, the grid area. To select individual groups, hold down the Control key while clicking on the groups. To select a range of groups, hold down the Shift key and click on the first and last groups in the range you want to select.
- To copy the groups, either right-mouse click and select "Copy" or from the "Edit" menu select "Copy".
- Switch to the other Estimator file.
- Right-mouse click over a blank area of the tree area and select "Paste" or from the "Edit" menu select "Paste".

To copy items

- Select a group from the left-hand side of the screen (the tree area). You may then select the item(s) from the right-hand side of the screen, the grid area. To select individual items, hold down the Control key while clicking on the items. To select a range of items, hold down the Shift key and click on the first and last items in the range you want to select.
- To copy the items, either right-mouse click and select "Copy" or from the "Edit" menu select "Copy".
- Switch to the other Estimator file.
- Right-mouse click over a blank area of the tree area and select "Paste" or from the "Edit" menu select "Paste".

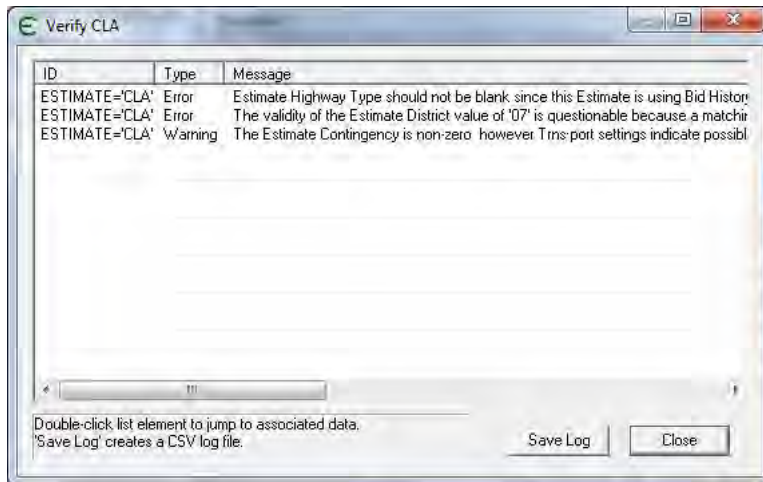
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12. What does a yellow exclamation mark mean?

An exclamation mark indicates an error in the estimate. To view the errors, select "Verify Estimate" from the "Edit" menu. You may also select the yellow check mark from the toolbar. It is important to verify your estimate and correct all errors to ensure Estimator is correctly accounting for all items and prices. In addition, it is important to fill out the main page in Estimator as incomplete information can lead to problems with the estimate.

Group 0100 Roadway - NHS \$27,989.93
Item 201E1000 CLEARING AND GRUBBING



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VII. Estimator Templates & Catalogs





1. What is an Estimator template?

An Estimator template is a file that is structured in the same format as an ODOT General Summary sheet (i.e. item categories outlined in the [ODOT L&D VIII Manual](#)). When selecting a template, we recommend that you choose one that best suits your needs and most closely matches the category breakdown of your General Summary plan sheet. If the template has categories that your project does not use, you can delete them. When you begin an estimate using an ODOT template, it will automatically default to a particular [ODOT catalog](#). If you want to change the catalog your estimate uses, follow the procedure outlined in [question 6](#) in this section. Please note that “Catg” is an abbreviation for “Category” not “Catalog”. Estimator templates are different from Estimator [catalogs](#). The [Office of Estimating](#) has created four templates.

C1 Template

C-1 Estimate 2010.etm

(Contains major cost categories. Used for preliminary (budgetary) estimating.)

- 0001 Pavement Removal
- 0002 Excavation – Rock
- 0003 Excavation – Soil
- 0004 Excavation – Hazardous
- 0005 Fill – Embankment
- 0006 Fill – Lime Modified Soil
- 0007 Fill – Borrow
- 0008 Concrete Barrier
- 0009 Subgrade Treatment – Lime
- 0010 Subgrade Treatment – Cement Stabilization
- 0011 Subgrade Treatment – Undercutting
- 0012 Other Roadway Costs
- 0013 Seeding & Mulching / Sodding
- 0014 Rock Channel Protection
- 0015 Erosion Control – Item 832
- 0016 Other Erosion Control Costs
- 0017 Underdrains
- 0018 Culverts – Type A: < 5’
- 0019 Culverts – Type A: 5’ – 10’
- 0020 Culverts – Type A: 10’ – 20’
- 0021 Median Drainage
- 0022 BMP’s
- 0023 Closed Storm System
- 0024 Other Drainage Costs
- 0025 Mainline – Travel Lanes
- 0026 Mainline – Outside Shoulders
- 0027 Mainline – Inside Shoulders
- 0028 Ramps
- 0029 Non – Mainline Lanes
- 0030 Concrete Overlay
- 0031 Rubblize & Roll
- 0032 Joint Repair
- 0033 Slab Replacement
- 0034 Overlay
- 0035 Dowel Bar Retrofit
- 0036 Diamond Grinding
- 0037 Undersealing
- 0038 Other Pavement Costs
- 0039 Water Works
- 0040 Sanitary Line
- 0041 Lighting – Full Interchange
- 0042 Lighting – Partial Interchange
- 0043 Lighting – Continuous Roadway
- 0044 Other Lighting Costs
- 0045 Traffic Surveillance
- 0046 Signs
- 0047 Pavement Marking
- 0048 Other Traffic Control Costs
- 0049 Signals – Intersections
- 0050 Other Traffic Signal Costs
- 0051 Landscaping
- 0052 Retaining Walls
- 0053 Other Retaining Wall Costs
- 0054 Building Demolition
- 0055 Noise Barrier
- 0056 Other Noise Barrier Costs
- 0057 New Structures
- 0058 Rehabilitated Structures
- 0059 Other Structure Costs
- 0060 Temporary Road and Pavement Costs
- 0061 Portable Concrete Barrier (PCB)
- 0062 Impact Attenuators
- 0063 Sheeting
- 0064 Temporary Signals
- 0065 Work Zone Lighting
- 0066 Innovative Contracting Incentives
- 0067 Other MOT Costs
- 0068 Wetland Construction
- 0069 Misc. Costs
- 0070 Design Contingency Costs
- 0071 Inflation Contingency



C2 Templates

2010 GenSum NoCatg.etm

(General Summary with no categories. This template is typically used with minimal PDP projects.)

- 8000 Items of Work
- 9000 Incidentals

2010 GenSum BasicCatg.etm

(General Summary with basic item categories. This template is typically used with minor PDP projects such as resurfacings.)

- 0100 Roadway
- 0200 Erosion Control
- 0300 Drainage
- 0400 Pavement
- 0800 Traffic Control
- 1200 Maintenance of Traffic
- 9000 Incidentals

2010 GenSum MultiCatg.etm

(General Summary with multiple item categories. This template is typically used with minor and major PDP projects.)

- 0100 Roadway
- 0200 Erosion Control
- 0300 Drainage
- 0400 Pavement
- 0500 Water Work
- 0600 Sanitary Sewer
- 0700 Lighting
- 0800 Traffic Control
- 0810 Traffic Surveillance
- 0900 Traffic Signals
- 1000 Landscaping
- 1100 Building Demolition
- 1200 Maintenance of Traffic
- 1300 Retaining Walls
- 1400 Structure Repair
- 1401 Structure Repair
- 1402 Structure Repair
- 1500 Structures Over 20 Foot Span
- 1501 Structures Over 20 Foot Span
- 1502 Structures Over 20 Foot Span
- 2000 Structures 20 Foot Span and Under
- 9000 Incidentals

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2. What is an Estimator catalog?

An Estimator catalog is a file that contains historical price information for each item of work. The Office of Estimating maintains eight catalogs: four for the 2008 specifications (08Asphalt.cat, 08Bridge.cat, 08DistWide.cat, and 08Other.cat) and four for the 2010 specifications (2010Asphalt.cat, 2010Bridge.cat, 2010DistWide.cat, and 2010Other.cat).

The 2010 Estimator catalogs are updated on a semiannual basis. Please note that the 2010 Estimator catalogs do not contain prices from 2010 alone; the “2010” refers to the specification year, not the year of the historical prices. Since the 2010 specifications have been implemented, the 2008 catalogs are no longer updated with the latest prices. Therefore, if you want to use the most current prices, you should use the 2010 catalogs for your estimate. Please note that the specifications for some items changed from the 2008 to the 2010 specifications. Therefore, you may not want to use bid histories to estimate items that changed. (You may want to use the 2008 catalogs to obtain a historical price for these items.) Hydrodemolition is an example of an item that changed from the 2008 to the 2010 specifications.)



2010Asphalt.cat & 08Asphalt.cat

Use the “Asphalt” catalog when the **majority** of the project is paving related work, such as a resurfacing. (These projects are typically prepared in-house by Districts.)

2010Bridge.cat & 08Bridge.cat

Use the “Bridge” catalog when the **majority** of the project is bridge or culvert related work, such as a bridge or culvert replacements and rehabilitations. (These projects are prepared in-house by Districts and by consultants.)

2010DistWide.cat & 08DistWide.cat

Use the “District-Wide” catalog for District-wide projects, such as District-wide pavement marking, raised pavement marking, and crack seal projects. (These projects are typically prepared in-house by Districts)

2010Other.cat & 08Other.cat

Use the “Other” catalog for projects with multiple major work types, such as new construction, major reconstruction, and projects that do not classify as asphalt, bridge, or District wide projects. (These projects are prepared in-house by Districts and by consultants. Most projects that consultants design are larger in scale and will most likely use this catalog.)

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3. How often are catalogs updated and where can I download them?

The 2010 Estimator catalogs are updated on a semiannual basis. Please note that the 2010 Estimator catalogs do not contain prices from 2010 alone; the “2010” refers to the specification year, not the year of the historical prices. Since the 2010 specifications have been implemented, the 2008 catalogs are no longer updated with the latest prices. Therefore, if you want to use the most current prices, you should use the 2010 catalogs for your estimate. For most estimates, you should use the 2010 catalogs. Please note that the specifications for some items changed from the 2008 to the 2010 specifications. Therefore, you may not want to use bid histories to estimate items that changed. (You may want to use the 2008 catalogs to obtain a historical price for these items.) Hydrodemolition is an example of an item that changed from the 2008 to the 2010 specifications.)

You may visit our website to download the latest catalogs:

<http://www.dot.state.oh.us/Divisions/ContractAdmin/Contracts/Estimator/Forms/Category.aspx>

Group : Bid History Catalog (9)

08Asphalt	8/10/2009 1:22 PM	Contracts - FTP Update	Bid History Catalog
08Bridge	2/18/2010 7:44 PM	Contracts - FTP Update	Bid History Catalog
08DistWide	8/10/2009 1:22 PM	Contracts - FTP Update	Bid History Catalog
08Other	8/10/2009 1:22 PM	Contracts - FTP Update	Bid History Catalog
list	8/12/2009 8:31 AM	Tina Collins	Bid History Catalog
2010Asphalt	9/29/2010 7:44 PM	Contracts - FTP Update	Bid History Catalog
2010Bridge	9/29/2010 7:44 PM	Contracts - FTP Update	Bid History Catalog
2010DistWide	9/29/2010 7:44 PM	Contracts - FTP Update	Bid History Catalog
2010Other	9/29/2010 7:44 PM	Contracts - FTP Update	Bid History Catalog

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4. Why won't Estimator automatically update the catalogs?

At one time, the Office of Estimating maintained a website for Estimator software to automatically connect to and download the latest catalogs. Currently, we do not use this service. You may visit our website (please refer to the question 3) to manually download the latest catalogs. Save the catalogs to the correct directory.

To find where Estimator reads the catalogs from, follow this procedure:

- Open Estimator software, but do not open an estimate.
- Select the "Tools" menu and select "Global Options". A box with the global options will appear on the screen.
- Select the "URLs" tab. The first line "Catalog Path (HTTP or file):" is where Estimator points to the catalogs.

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5. I want to use current prices; however, you only have "08" and "2010" catalogs to use.

The 2010 Estimator catalogs are updated on a semiannual basis. Please note that the 2010 Estimator catalogs do not contain prices from 2010 alone; the "2010" refers to the specification year, not the year of the historical prices. Since the 2010 specifications have been implemented, the 2008 catalogs are no longer updated with the latest prices. Therefore, if you want to use the most current prices, you should use the 2010 catalogs for your estimate. For most estimates, you should use the 2010 catalogs. Please note that the specifications for some items changed from the 2008 to the 2010 specifications. Therefore, you may not want to use bid histories to estimate items that changed. (You may want to use the 2008 catalogs to obtain a historical price for these items.) Hydrodemolition is an example of an item that changed from the 2008 to the 2010 specifications.)

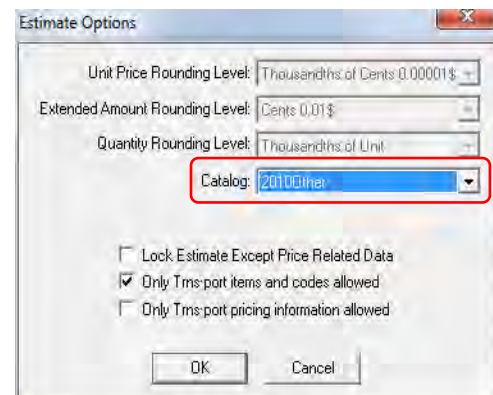
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6. How do I switch catalogs? / My estimate becomes "read only" when I switch catalogs.

To change the catalog of a current estimate

- Open your estimate.
- From the "Edit" menu, select "Estimate Options".
- In the "Catalog" drop down box, select the catalog you want to use. Once you select the catalog, click "OK".
- You must refresh your estimate to use the new catalog prices as outlined in question 8.

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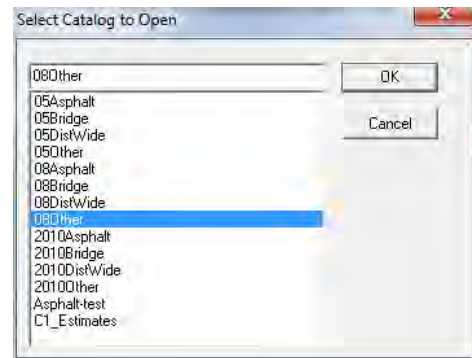




To change the catalog Estimator defaults to when you begin a new estimate

(This procedure will change the default catalog when you begin a new estimate with generic Estimator templates. ODOT templates are setup to default to a particular ODOT catalog.)

- With the Estimator software open, select the “Tools” menu.
- Select “Switch Catalog”.
- From the box that appears, select the catalog you want to use and click “OK”. Please note that if you use this option while you are in an Estimator file, it will make the file read only and it will not correctly switch the catalog. You should only use this option when you have Estimator open but are not in an estimate.



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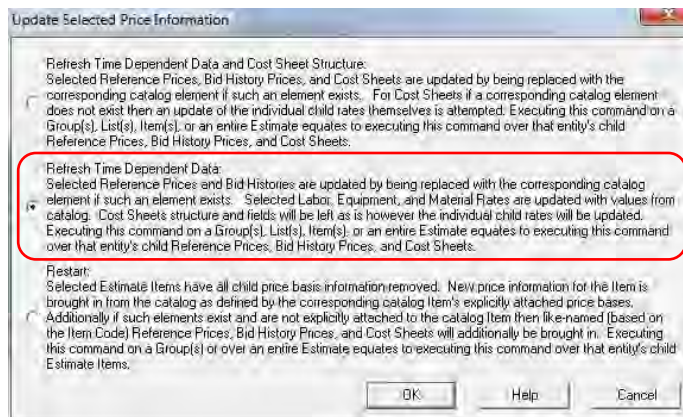
7. Why is my estimate read only?

Your estimate may become “read only” when you open another estimate. We recommend closing Estimator software completely and restarting it before you open another estimate. Please see [question 6](#) in this section about “read only” issues when switching catalogs.

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8. How do I update historical prices in my estimate?

- Follow the procedure outlined in [question 6](#) to change the Estimator catalog to the one you want to use.
- Select the “Edit” menu.
- Select “Update Price Information.” A box with three choices will appear.
- Select the second option, “Refresh Time Dependent Data”. Only bid histories and cost sheet data will update. Reference prices will not update because these are manually input.



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VIII. Additional Resources





Additional Resources

ODOT

- [Asphalt Plant List](#)
- [Concrete Plant List](#)
- [Construction Management System Bid Item Search](#)
- [Item Master](#)
- [ODOT Office of Estimating](#)

Organizations

- [AASHTO Subcommittee on Cost Estimating](#)
- [Design-Build Institute of America](#)
- [NCHRP Guidance for Cost Estimation and Management for Highway Projects During Planning, Programming, and Preconstruction](#)
- [Transportation Estimators Association-Cost Based Estimating](#)
- [USDA Cost Estimating Guide for Road Construction](#)

Research

- [Internet-based preliminary highway construction cost estimating database](#)
- [Montana Department of Transportation Highway Project Cost Estimating and Management](#)

Software

- [HCSS](#)
- [Info Tech](#)
- [Oman Systems](#)

Websites

- [Get-A-Quote](#)
- [RS Means Reed Construction Data](#)
- [RS Means Types of Estimates, Tools, Data Sources, Methods](#)

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IX. Appendix





(NOTE THIS SECTION WILL BE UPDATED WITH THE NEW PDP PROCESS)

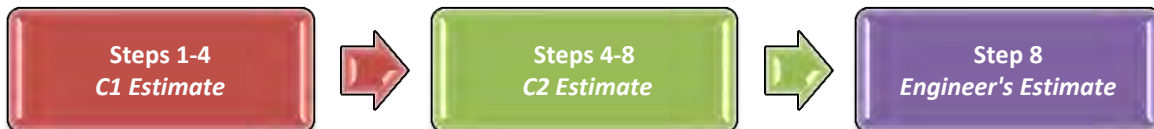
Estimates & PDP Steps



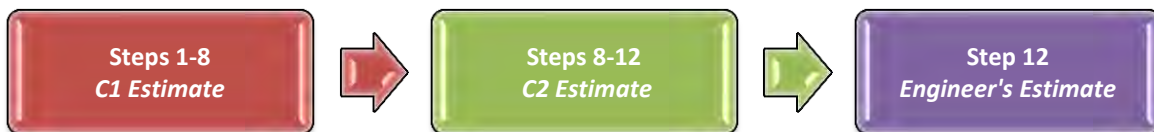
Minimal PDP Process



Minor PDP Process



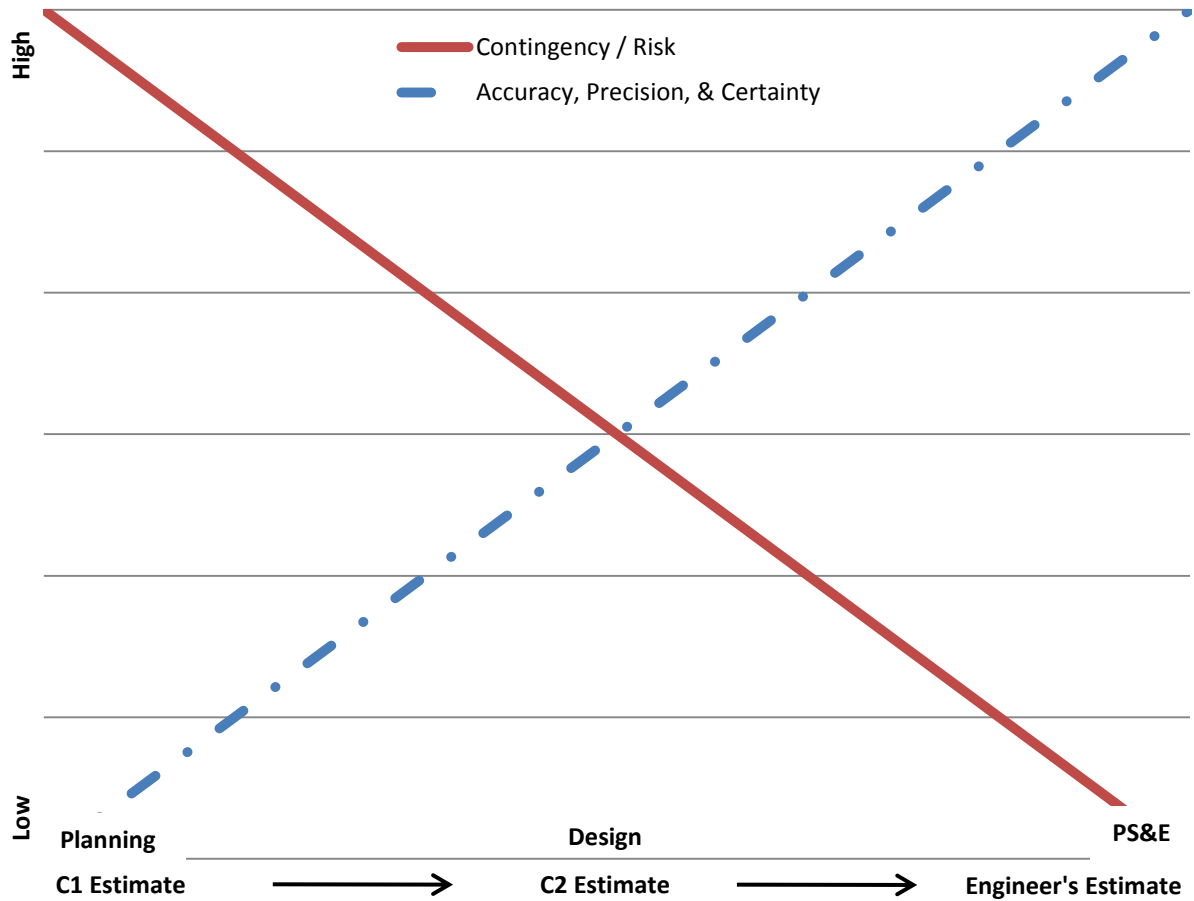
Major PDP Process



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Estimate Accuracy, Precision, Certainty, & Contingency / Risk Levels vs. PDP Steps



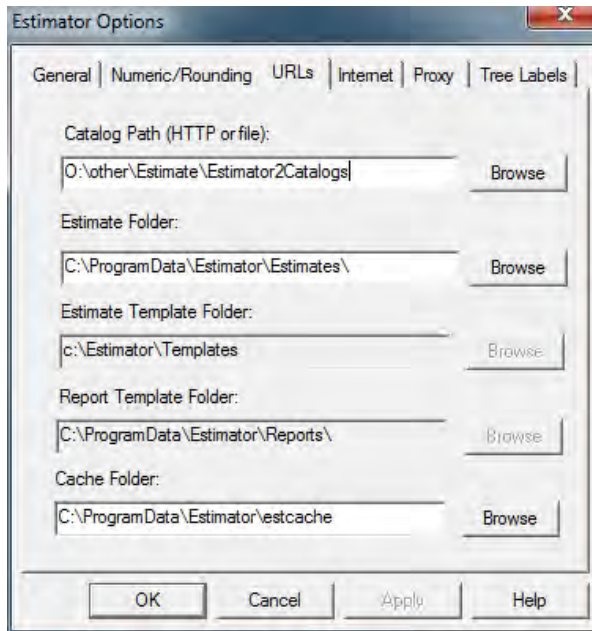
The purpose of the graph is to illustrate a concept and is not intended to show exact levels of accuracy, precision, certainty, and risk. In addition, the relationships are not necessarily linear.

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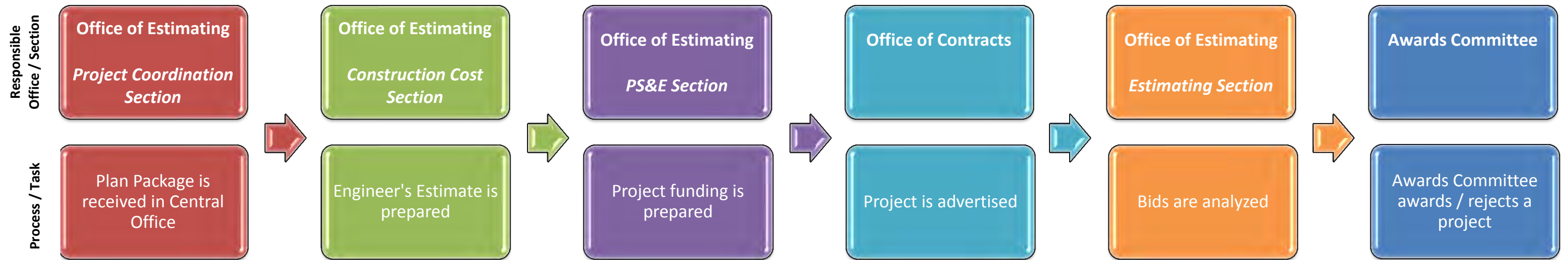
Estimator Options

With Estimator open (not in an estimate), you can set the program options by going to the "Tools" menu and selecting "Global Options". Estimator Options is where you set the default directories where Estimator software saves estimates, templates, and catalogs. When downloading catalogs and templates, save these files in the correct location. Note that the directories shown below may differ from your default directories.





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