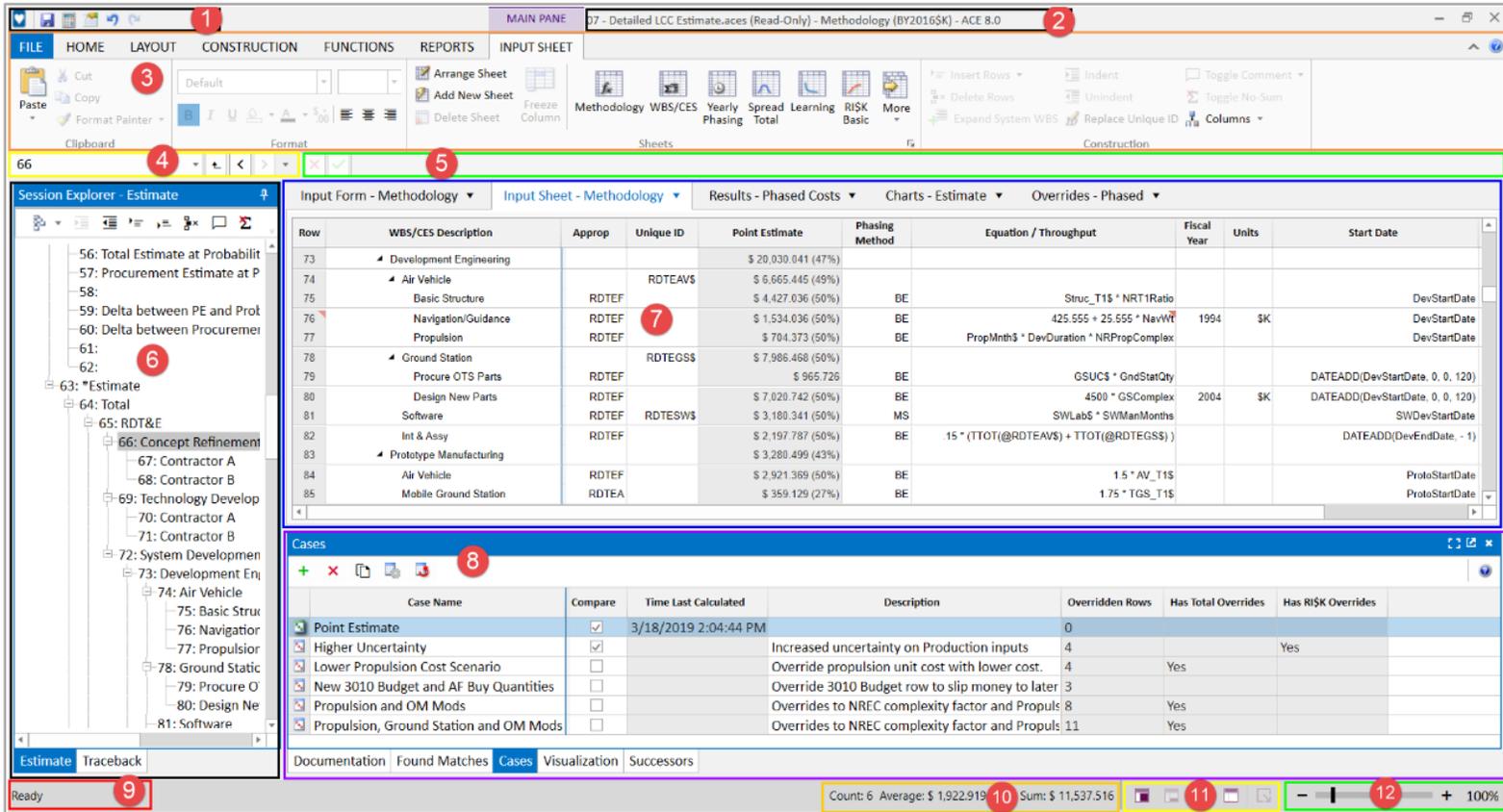


ACE 8.0 Layout



The screenshot displays the ACE 8.0 interface with the following components highlighted by numbered callouts:

- 1. Quick Access Toolbar:** Located at the top left, containing icons for Save, Calculate, and Options.
- 2. Title Bar:** Shows the session name 'D7 - Detailed LCC Estimate.aces (Read-Only) - Methodology (BY2016\$K) - ACE 8.0'.
- 3. Ribbons:** The top ribbon bar includes FILE, HOME, LAYOUT, CONSTRUCTION, FUNCTIONS, REPORTS, and INPUT SHEET.
- 4. Row Navigator:** A vertical pane on the left showing a hierarchical tree of the estimate structure.
- 5. Main Pane:** The central area displaying a table of WBS/CES items with columns for Row, Description, Approp, Unique ID, Point Estimate, Phasing Method, Equation / Throughput, Fiscal Year, Units, and Start Date.
- 6. Session Explorer:** A pane on the left showing the overall estimate structure and selected items.
- 7. Table Data:** The main pane table includes rows such as 'Development Engineering' (Point Estimate: \$20,030,041) and 'Air Vehicle' (Point Estimate: \$6,665,445).
- 8. Cases Pane:** A pane at the bottom showing a list of cases with columns for Case Name, Compare, Time Last Calculated, Description, Overridden Rows, Has Total Overrides, and Has RISK Overrides.
- 9. Status Bar:** Located at the bottom left, showing 'Ready'.
- 10. Summary Statistics:** A yellow box at the bottom center showing 'Count: 6 Average: \$ 1,922,919 Sum: \$ 11,537,516'.
- 11. View Controls:** A set of icons at the bottom right for zooming and window management.
- 12. Zoom Slider:** A slider at the bottom right showing the current zoom level at 100%.

1. **Quick Access Toolbar** - contains commonly used ACE commands like save, calculate, options, undo, and Redo.

2. **Title Bar** - shows the session name, current view in main pane, Base Year and units of the session and the application name (i.e., ACE 8.0).

3. **Ribbons** - there are five default ribbons always visible and five conditional ribbons only visible in certain instances.

4. **Row Navigator** - enter a row number to navigate to or click the drop-down and select from Favorite Rows. Jump to parent row icon  allows you to jump to the selected row's parent and the > and < icons allow you to jump between previous and next rows just visited.

5. **Formula Bar** - alternative to in-cell editing, helpful when entering information in the Equation/Throughput column. If you begin typing your equations here, Autocomplete shows a list of available functions, row and column Unique IDs, column values, User Defined Functions (UDFs), and Data Tables.
6. **Session Explorer** - shows the session in a tree structure format. Click + or - buttons to expand or collapse the tree elements. There are two Session Explorer tabs: **Estimate** tab has options allowing you to manipulate the rows of the session and the **Traceback** tab allows you to trace calculations back to their origins.
7. **Main Pane** - contains five tabs that allow you to do the work in your session.
 - **Input Form** tab - guides you through the process of entering a methodology for a row. Select the row in the Session Explorer and enter appropriate methodology here or in the Input Sheet tab. Input Form views of Methodology, RI\$K and Custom Columns can be selected from drop-down on tab.
 - **Input Sheet** tab - shows session data in a spreadsheet-like format, much like traditional ACE versions. ACE User Settings allow you to select how clicking a row in the Session Explorer affects the view in the Input Sheet. Traditional ACE workscreen views can be selected on drop-down for Input Sheet tab.
 - **Results** tab - shows tabular results for the selected row(s). The drop-down on the tab lets you see Phased Costs, Implied Expenditures, Present Value costs, Reportable Base Year costs, RI\$K Statistics and calculated results of any Custom columns you have created.
 - **Charts** tab - shows graphical results for the selected row(s). The drop-down on the tab lets you choose the type of chart to view. The following charts types are available: Estimate, Comparison, RI\$K, and Analysis.
 - **Overrides** tab - lets you perform what-if drills on your estimate. You can override input values (both estimate and RI\$K) for selected rows in your estimate and ACE will calculate the cost for the case based on these override values. The case shown is controlled from the Content Pane for Cases. The drop-down tab provides access to Phased, Total/Year, RI\$K, or Custom Text Column Overrides.
8. **Content Panes** - used to view and enter key information about your session. There are thirteen Content Panes: Error Log, Cases, Visualization, References, Documentation, Favorite Rows, Successors, Drives, Watch, Calculation Log, Chart Data, Found Matches, RI\$K Correlation. A subset of the group is loaded initially, additional panes can be added via the Layout Ribbon.
9. **Status Message** - gives information about the status of the session. "Ready" means ready to calculate. During calculation, the Status Message tells you if ACE is running a full or incremental calculation (default calculation that only calculates rows impacted by changes since last calculation), what case is being calculated, and if RI\$K is being calculated or not.
10. **Summary Metrics** - Count, Average, and Sum of selected cells.
11. **Main Window Layout Options** - These icons allow you to adjust the layout of the ACE window by changing where and if the Content Panes are shown.
12. **Zoom Settings** - Allows you to adjust the main screen magnification settings. Click 100% to customize zoom magnification.

****Transition visuals shown with ACE 7.5 and equivalent ACE 8.0 example files. All ACE 8.0 example files were updated to Base Year 2019 and a newer phasing schedule. Further, the new examples were modified to illustrate new features like the Weibull Phasing Method. In short, the point estimates values in the following images while similar are not the same.**

ACE 7.5 to 8.0 Comparison

ACE 7.5

ACE 8.0

DATA ENTRY

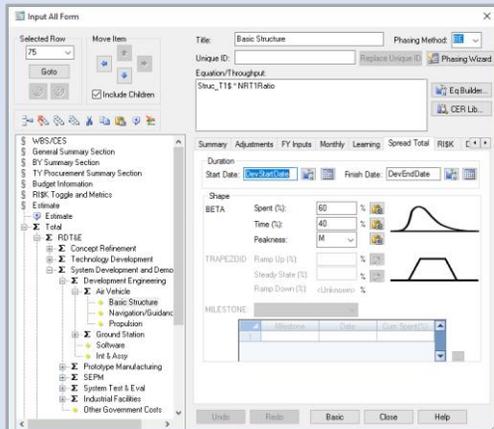
Workscreens

| | WBS/CES Description | Approp | Unique ID | Point Estimate | Phasing Method | Equation / Throughput | Fiscal Year | Un |
|----|--------------------------------------|---------|-----------|------------------|----------------|------------------------------------------|-------------|------|
| 63 | *Estimate | | *Estimate | | | | | |
| 64 | Total | | Total\$ | \$ 907,466,992 * | | | | |
| 65 | RDTE | | RDTE\$ | \$ 63,375,769 * | | | | |
| 66 | Concept Refinement | | | \$ 1,058,240 * | | | | |
| 67 | Contractor A | RDTEF | | \$ 531,150 * | TY | [Cost Throughput] | | |
| 68 | Contractor B | RDTEA | | \$ 527,090 * | TY | [Cost Throughput] | | |
| 69 | Technology Development | | | \$ 4,710,518 * | | | | |
| 70 | Contractor A | RDTEF | | \$ 2,355,259 * | TC | | 2.0 | 2006 |
| 71 | Contractor B | RDTEA | | \$ 2,355,259 * | TS | | 2.0 | 2006 |
| 72 | System Development and Demonstration | | | \$ 57,607,011 * | | | | |
| 73 | Development Engineering | | | \$ 20,030,041 * | | | | |
| 74 | Air Vehicle | | RDTEAVS | \$ 6,865,445 * | | | | |
| 75 | Basic Structure | RDTEF | | \$ 4,427,036 * | BE | Struc_T1\$*NRT1Ratio | | |
| 76 | Navigation/Guidance | RDTEF | | \$ 1,534,036 * | BE | 425.555 + 25.555 * NavVt | | 1994 |
| 77 | Propulsion | RDTEF | | \$ 704,373 * | BE | PropMnth\$ * DevDuration * NRPropComplex | | |
| 78 | Ground Station | RDTEGSS | | \$ 7,986,468 * | BE | | | |
| 79 | Procure OTS Parts | RDTEF | | \$ 965,726 * | BE | GSUCS * GndStatQty | | |

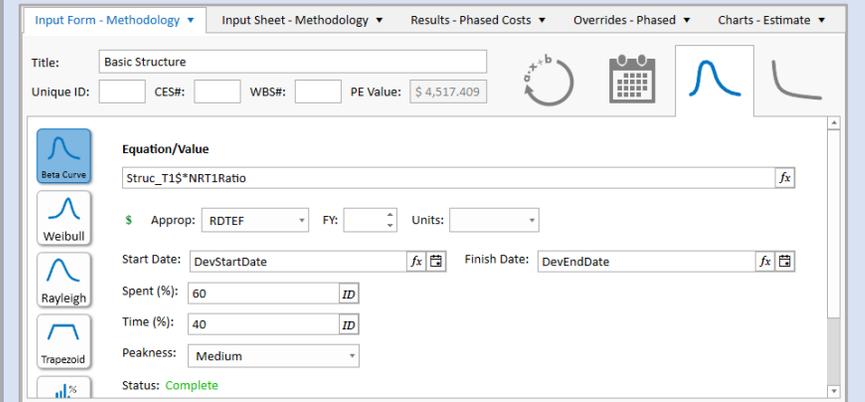
Input Sheets (Main Pane tab)

| Row | WBS/CES Description | Approp | Unique ID | Point Estimate | Phasing Method | Equation / Throughput | Fiscal Year | Un |
|-----|--------------------------------------|---------|-----------|----------------|----------------|--------------------------------------|-------------|------|
| 62 | *Estimate | | *Estimate | | | | | |
| 63 | Total | | Total\$ | \$ 910,495,259 | | | | |
| 64 | RDTE | | RDTE\$ | \$ 63,751,317 | | | | |
| 65 | Concept Refinement | | | \$ 530,487 | | | | |
| 66 | Contractor A | RDTEF | | \$ 532,172 | TY | [Cost Throughput] | | |
| 67 | Contractor B | RDTEA | | \$ 530,487 | TY | [Cost Throughput] | | |
| 68 | Technology Development | | | \$ 4,678,474 | | | | |
| 69 | Contractor A | RDTEF | | \$ 2,339,237 | TC | | 2 | 2009 |
| 70 | Contractor B | RDTEA | | \$ 2,339,237 | TS | | 2 | 2009 |
| 71 | System Development and Demonstration | | | \$ 58,542,356 | | | | |
| 72 | Development Engineering | | | \$ 20,241,260 | | | | |
| 73 | Air Vehicle | RDTEAVS | | \$ 7,242,551 | | | | |
| 74 | Basic Structure | RDTEF | | \$ 4,517,409 | BE | Struc_T1\$*NRT1Ratio | | |
| 75 | Navigation/Guidance | MPF | | \$ 2,008,188 | BE | 425.555+25.555*NavVt | | 1997 |
| 76 | Propulsion | RDTEF | | \$ 716,954 | BE | PropMnth\$*DevDuration*NRPropComplex | | |
| 77 | Ground Station | RDTEGSS | | \$ 7,503,106 | BE | | | |
| 78 | Procure OTS Parts | RDTEF | | \$ 976,217 | BE | GSUCS*GndStatQty | | |

Input All Form



Input Form (Main Pane tab)



ACE 7.5

ACE 8.0

DATA ENTRY

Enter/Edit values for row in Input All Form

| Category | Value |
|------------------------|-------|
| Category 3 | |
| Category 4 | |
| Category 5 | |
| Category 6 | |
| Category 7 | |
| CES Number | |
| Funding Source | |
| Key Unit Cost Category | |
| MDEP | |
| Model | |
| PME Matrix | Joint |
| Service | |
| Theater | |
| WBS Indent Level | 4 |
| WBS Summary | |
| WBS/Item Number | 1.2.2 |

Enter/Edit values for row in Input Form

| Column Title | Column ID | Tag | Type | Value | Group by: |
|----------------------|------------|-----|-----------------|-------------|-----------|
| Approp Reportable BY | AppnRBY | | Text | | |
| Comments | Comments | | Comment | | |
| Counter | Count | | Non-cost | 2 | fx |
| Funding Source | Funding | | Text | | |
| Service | Service | | Text | Joint | |
| TechWeight | Wgt | | Non-cost | 2300 | fx |
| WBS Summary | WBS | | Text | | |

Enter/Edit values for row in Workscreen

| | 1 | 2 | 3 | 4 | 5 | 6 | WBS/CES Description | Count (+) Counter | Wgt (+) TechWeight | Service |
|----|---|---|---|---|---|---|------------------------|----------------------|-----------------------|---------|
| 63 | | | | | | | *Estimate | | | |
| 64 | | | | | | | Total | | | |
| 65 | | | | | | | RDT&E | | | |
| 66 | | | | | | | Concept Refinement | | | |
| 67 | | | | | | | Contractor A | | | Joint |
| 68 | | | | | | | Contractor B | 2 | 2300 | Joint |
| 69 | | | | | | | Technology Development | | | |
| 70 | | | | | | | Contractor A | | | Joint |
| 71 | | | | | | | Contractor B | | | Joint |

Enter/Edit values for row in Input Sheet

| Row | WBS/CES Description | Counter | TechWeight | Service | Funding |
|-----|------------------------|---------|------------|---------|---------|
| 64 | RDT&E | | | | |
| 65 | Concept Refinement | | | | |
| 66 | Contractor A | | | | |
| 67 | Contractor B | 2 | 2300 | Joint | |
| 68 | Technology Development | | | | |
| 69 | Contractor A | | | Joint | |
| 70 | Contractor B | | | Joint | |

ACE 7.5

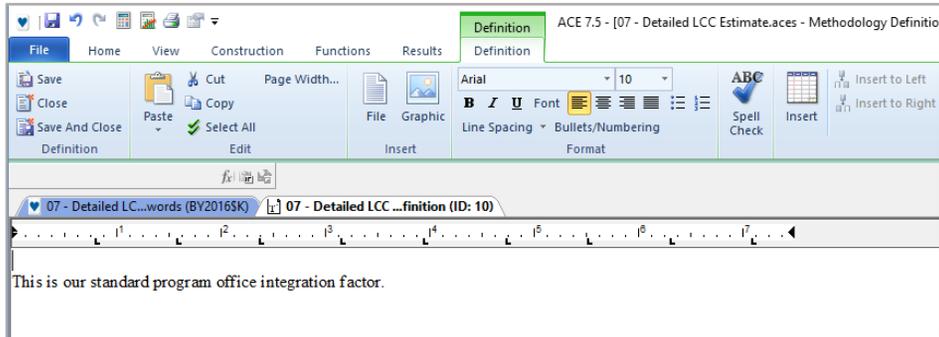
ACE 8.0

NAVIGATION

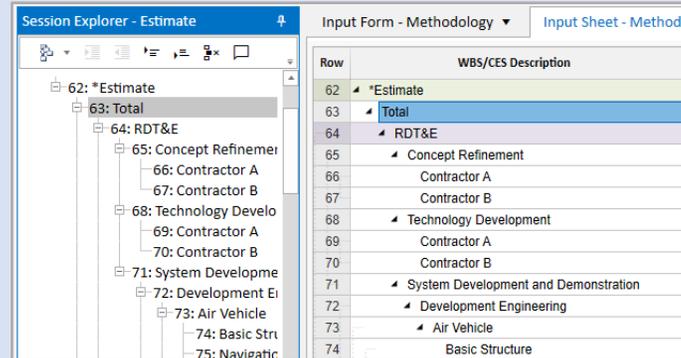
WBS Tree In workscreen view

| WBS/CES Description |
|-----------------------------------------|
| 63 *Estimate |
| 64 Total |
| 65 RDT&E |
| 66 Concept Refinement |
| 67 Contractor A |
| 68 Contractor B |
| 69 Technology Development |
| 70 Contractor A |
| 71 Contractor B |
| 72 System Development and Demonstration |
| 73 Development Engineering |
| 74 Air Vehicle |
| 75 Basic Structure |

Definition Editor



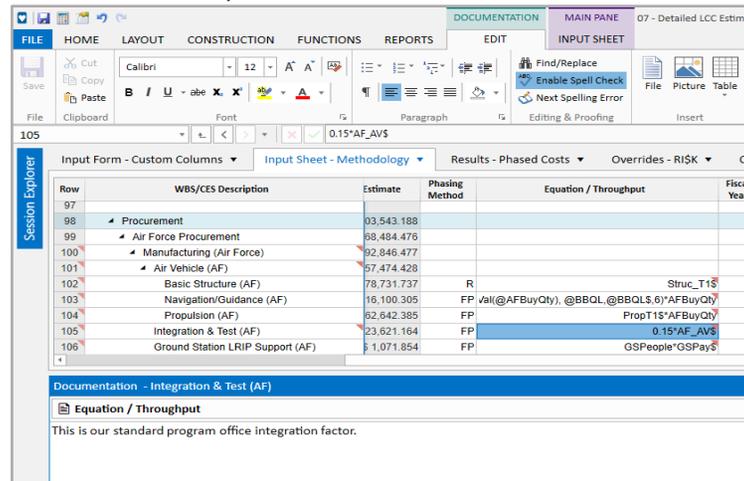
Session Explorer Session Tree and Input Sheet



| Row | WBS/CES Description | Estimate | Phasing Method | Equation / Throughput | Fiscal Year |
|-----|--------------------------------------|----------|----------------|-----------------------|-------------|
| 62 | *Estimate | | | | |
| 63 | Total | | | | |
| 64 | RDT&E | | | | |
| 65 | Concept Refinement | | | | |
| 66 | Contractor A | | | | |
| 67 | Contractor B | | | | |
| 68 | Technology Development | | | | |
| 69 | Contractor A | | | | |
| 70 | Contractor B | | | | |
| 71 | System Development and Demonstration | | | | |
| 72 | Development Engineering | | | | |
| 73 | Air Vehicle | | | | |
| 74 | Basic Structure | | | | |

Documentation Pane

Cells with documentation indicated by small red triangle
Documents attached to an ACE 7.5 session row reflected with a paper clip in the Comments column (new custom column added when opening 7.5 session in 8.0)



| Row | WBS/CES Description | Estimate | Phasing Method | Equation / Throughput | Fiscal Year |
|-----|----------------------------------|------------|----------------|------------------------------------------|-------------|
| 97 | | | | | |
| 98 | Procurement | 03,543.188 | | | |
| 99 | Air Force Procurement | 68,484.476 | | | |
| 100 | Manufacturing (Air Force) | 92,846.477 | | | |
| 101 | Air Vehicle (AF) | 57,474.428 | | | |
| 102 | Basic Structure (AF) | 78,731.737 | R | | Struc_T1\$ |
| 103 | Navigation/Guidance (AF) | 16,100.305 | FP | Val(@AFBuyQty), @BBOL,@BBQLS,6)*AFBuyQty | |
| 104 | Propulsion (AF) | 62,642.385 | FP | PropT1\$*AFBuyQty | |
| 105 | Integration & Test (AF) | 23,621.164 | FP | 0.15*AF_AV\$ | |
| 106 | Ground Station LRIP Support (AF) | 1,071.854 | FP | GSPeople*GSPay\$ | |

Documentation - Integration & Test (AF)

 **Equation / Throughput**
This is our standard program office integration factor.

ACE 7.5

ACE 8.0

RESULTS

Inputs Results/Viewer

BY, TY, SY Results, Present Value Real/Nominal, DEC Results, BY RI\$K Statistics

| WBS/CES Description | Total | FY 2011 | FY 2012 |
|------------------------|----------------|--------------|--------------|
| *Estimate | | | |
| Total | \$ 907,466,992 | \$ 8,994,765 | \$ 8,403,530 |
| RDT&E | \$ 63,375,769 | \$ 8,994,765 | \$ 8,403,530 |
| Concept Refinement | \$ 1,058,240 | \$ 1,058,240 | |
| Contractor A | \$ 531,150 | \$ 531,150 | |
| Contractor B | \$ 527,090 | \$ 527,090 | |
| Technology Development | \$ 4,710,518 | \$ 448,126 | \$ 2,386,075 |
| Contractor A | \$ 2,355,259 | \$ 181,954 | \$ 1,193,140 |

Results (Main Pane tab)

BY, TY, SY Phased Costs, Case Totals, RI\$K Statistics, Custom Columns, Present Value, Reportable Base Year

Use Configure to customize which options appear on the drop-down
Use the Cases Pane to create/select case

| WBS/CES Description | Total | FY 2014 | FY 2015 |
|------------------------|----------------|--------------|--------------|
| *Estimate | | | |
| Total | \$ 904,459,331 | \$ 1,874,381 | \$ 3,244 |
| RDT&E | \$ 62,952,687 | \$ 1,874,381 | \$ 3,244 |
| Concept Refinement | \$ 1,058,427 | \$ 1,058,427 | |
| Contractor A | \$ 532,172 | \$ 532,172 | |
| Contractor B | \$ 526,255 | \$ 526,255 | |
| Technology Development | \$ 4,637,328 | \$ 441,164 | \$ 2,342,260 |
| Contractor A | \$ 2,318,664 | \$ 179,127 | \$ 1,171,080 |
| Contractor B | \$ 2,318,664 | \$ 262,037 | \$ 1,171,180 |

| Case Name | Compare | Time Last Calculated | Description |
|--------------------------------------|-------------------------------------|----------------------|------------------------------------------|
| Point Estimate | <input checked="" type="checkbox"/> | 4/1/2019 4:32:20 PM | |
| Lower Cost Propulsion | <input type="checkbox"/> | | Lower Propulsion T1 Cost |
| New APF Budget and AF Buy Quantities | <input type="checkbox"/> | | Override APF Budget row to slip money to |
| Propulsion and O&S Mods | <input type="checkbox"/> | | Overrides to NREC complexity factor and |

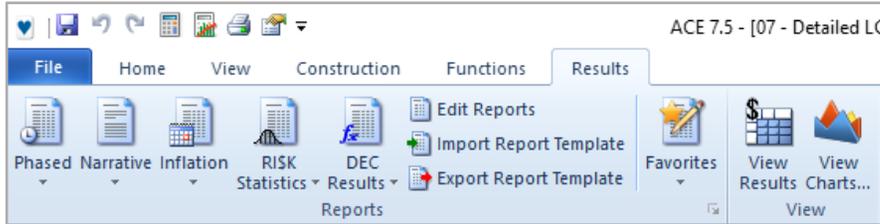
ACE 7.5

ACE 8.0

REPORTS

Reports

Accessed from the Results ribbon

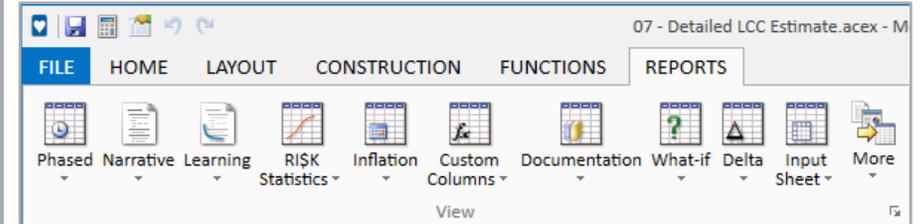


Edit report templates and view report

| Row | Cost Element | Approp | Total | FY 2011 | FY 2012 | FY 2013 |
|-----|-----------------------------------------|--------|----------------|--------------|--------------|-------------|
| 76 | 63 *Estimate | | | | | |
| 77 | 64 Total | | \$ 907,392,552 | \$ 8,969,952 | \$ 8,378,717 | \$ 14,362,5 |
| 78 | 65 RDT&E | | \$ 63,301,330 | \$ 8,969,952 | \$ 8,378,717 | \$ 14,362,5 |
| 79 | 66 Concept Refinement | | | | | |
| 80 | 67 Contractor A | RDTEF | | | | |
| 81 | 68 Contractor B | RDTEA | | | | |
| 82 | 69 Technology Development | | | | | |
| 83 | 70 Contractor A | RDTEF | | | | |
| 84 | 71 Contractor B | RDTEA | | | | |
| 85 | 72 System Development and Demonstration | | | | | |
| 86 | 73 Development Engineering | | | | | |
| 87 | 74 Air Vehicle | | | | | |
| 88 | 75 Basic Structure | RDTEF | | | | |
| 89 | 76 Navigation/Guidance | RDTEF | | | | |
| 90 | 77 Propulsion | RDTEF | | | | |
| 91 | 78 Ground Station | | | | | |
| 92 | 79 Procure OTS Parts | RDTEF | | | | |

Reports

Accessed from the Reports ribbon



Easily update and refresh with integrated report settings

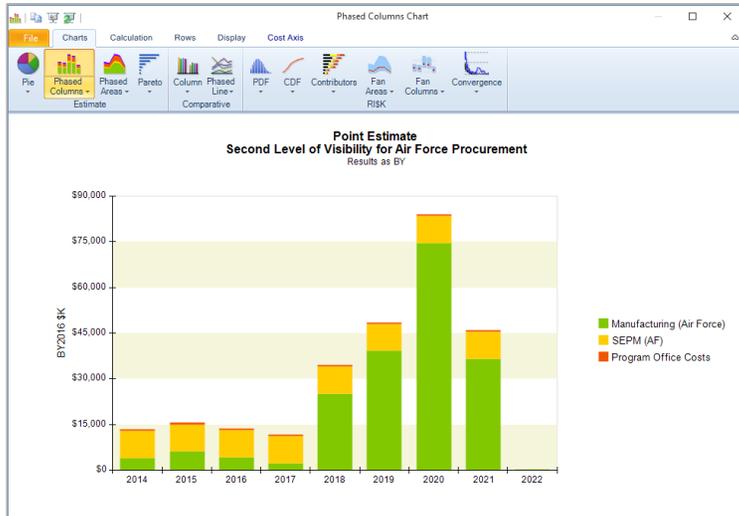
| WBS/CES Description | Approp | Total | FY 2014 | FY 2015 | FY 2016 |
|-----------------------------------------|--------|----------------|--------------|--------------|---------------|
| 62 *Estimate | | | | | |
| 63 Total | | \$ 904,414,292 | \$ 1,874,381 | \$ 3,244,026 | \$ 18,515,644 |
| 64 RDT&E | | \$ 62,907,648 | \$ 1,874,381 | \$ 3,244,026 | \$ 18,515,644 |
| 65 Concept Refinement | | \$ 1,058,427 | \$ 1,058,427 | | |
| 66 Contractor A | RDTEF | \$ 532,172 | \$ 532,172 | | |
| 67 Contractor B | RDTEA | \$ 526,255 | \$ 526,255 | | |
| 68 Technology Development | | \$ 4,637,328 | \$ 441,164 | \$ 2,342,260 | \$ 1,853,905 |
| 69 Contractor A | RDTEF | \$ 2,318,664 | \$ 179,127 | \$ 1,171,080 | \$ 968,458 |
| 70 Contractor B | RDTEA | \$ 2,318,664 | \$ 262,037 | \$ 1,171,180 | \$ 885,447 |
| 71 System Development and Demonstration | | \$ 57,211,893 | \$ 374,790 | \$ 901,766 | \$ 16,661,739 |
| 72 Development Engineering | | \$ 19,508,162 | | \$ 280,496 | \$ 6,161,978 |
| 73 Air Vehicle | | \$ 6,696,175 | | \$ 280,415 | \$ 3,454,628 |
| 74 Basic Structure | RDTEF | \$ 4,466,480 | | \$ 187,042 | \$ 2,304,305 |
| 75 Navigation/Guidance | RDTEF | \$ 1,519,046 | | \$ 63,613 | \$ 783,692 |
| 76 Propulsion | RDTEF | \$ 710,649 | | \$ 29,760 | \$ 366,631 |
| 77 Ground Station | | \$ 7,437,118 | | | \$ 1,260,078 |
| 78 Procure OTS Parts | RDTEF | \$ 967,631 | | | \$ 530,178 |
| 79 Design New Parts | RDTEF | \$ 6,469,487 | | | \$ 729,900 |
| 80 Software | RDTEF | \$ 3,254,875 | | \$ 0,082 | \$ 1,447,272 |
| 81 Int & Assy | RDTEF | \$ 2,119,994 | | | |
| 82 Prototype Manufacturing | | \$ 3,305,561 | | | |

ACE 7.5

Charts

Accessed from the Results ribbon

Charts dialog on pop-up dialog

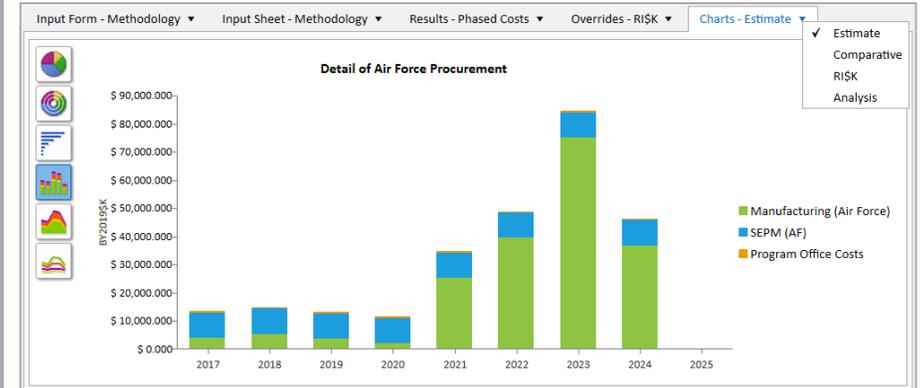


ACE 8.0

CHARTS

Charts (Main Pane tab)

Built into Main Pane for more interaction with the rest of the session



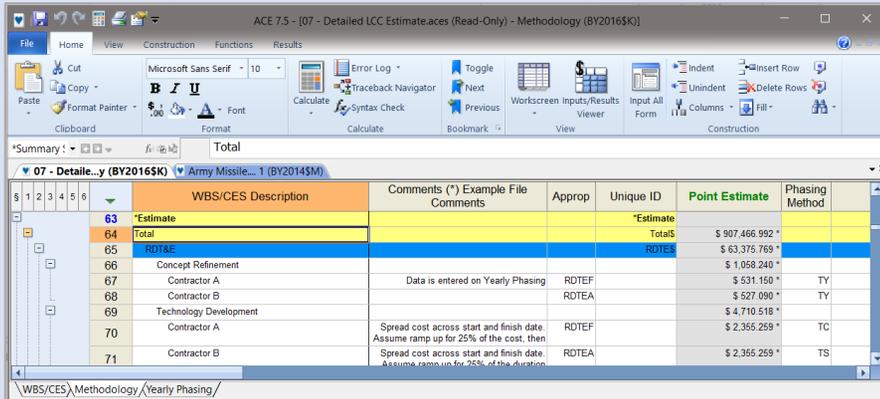
ACE 7.5

ACE 8.0

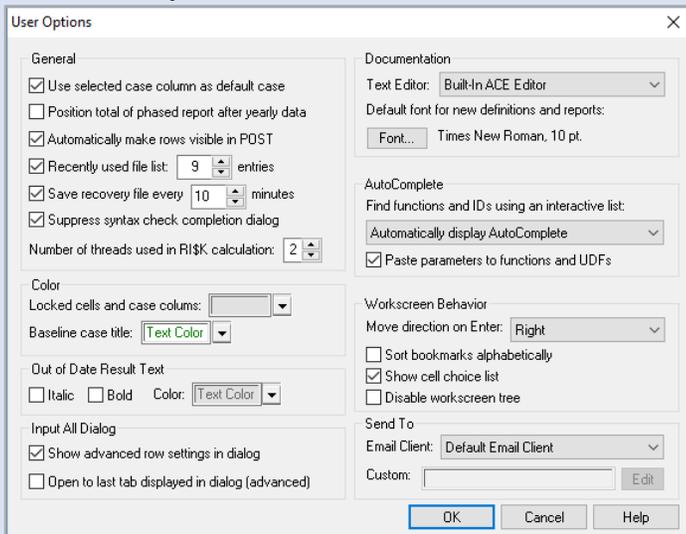
MORE IN-DEPTH FEATURES

One Instance of ACE

Tabs to change to a different session



File > User Options

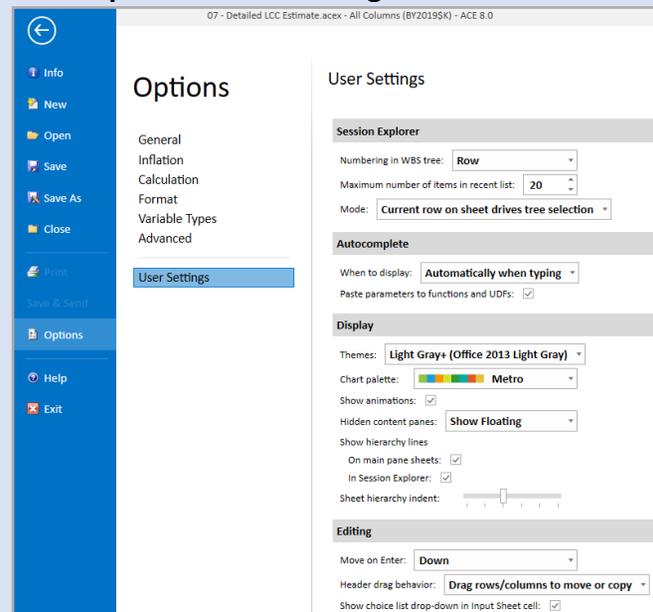


Multiple Instances and Multiple Monitors

Content Panes can be unpinned and moved to a second monitor



File > Options > User Settings



ACE 7.5

ACE 8.0

MORE IN-DEPTH FEATURES

Bookmarks

| Row | WBS/CES Description | Unique ID | Point Estimate |
|-----|----------------------|-----------|----------------|
| 38 | Operations & Support | | |
| 39 | Air Force | | |
| 40 | Army | | |

Favorite Rows

Viewed in Row Navigator and Favorite Rows Pane

| Row | WBS/CES Description | Unique ID | Point Estimate |
|-----|--------------------------|----------------|----------------|
| 2 | *General Summary Section | *Summary | |
| 44 | *Budget Information | *Budget | |
| 49 | *RISK Toggle and Metrics | GlobalSwitches | |
| 62 | *Estimate | *Estimate | |
| 64 | RDT&E | RDTE\$ | \$ 62,710.780 |
| 98 | Procurement | Proc\$ | \$ 403,473.795 |
| 138 | Operations & Support | OS\$ | \$ 149,239.881 |
| 169 | *INPUT VARIABLES | *IN_VAR | |

ACE 7.5

ACE 8.0

MORE IN-DEPTH FEATURES

Category Columns

| Service | Funding Source | WBS Summary | Theater | MDEP | Expansion Available |
|---------|----------------|-------------|---------|------|---------------------|
| Joint | | | | | |

Edit Category Column [X]

Enter unique Category column title:

Enter column short title:

OK Cancel Help

DECs

Create using Columns > Add DEC

Add New DEC [X]

Column Title:

Column Description:

Column Identifier

Unique ID:

Change all instances of old ID to new ID?

Cell Content

Normal - Column holds non-cost data and/or equations

Cost - Column holds cost data and/or equations

Comment - Column holds comments and text that is not evaluated

Date - Column holds dates of the form DDMMYYYY

Parent 'Roll-Up' Behavior

Sum up results of children into their parents

Do not sum up results of children (leave parents empty/zero)

Store the minimum of all children into their parents

Store the maximum of all children into their parents

Show in IRV "BY DEC Results" View

OK Cancel Help

Category Columns and DEC columns merged into Custom Columns

Input Form - Custom Columns | Input Sheet - Methodology | Results - Phased Costs | Overrides - RISK

Title:

Unique ID: CES#: WBS#: PE Value: \$ 526,255

| Column Title ^ | Column ID | Tag | Type | Value | Group by: None |
|----------------------|-----------|-----|----------|-------|-----------------------------------|
| Approp Reportable BY | AppnRBY | | Text | | |
| Comments | Comments | | Comment | | |
| Counter | Count | | Non-cost | 2 | <input type="button" value="fx"/> |
| Funding Source | Funding | | Text | | |
| Service | Service | | Text | Joint | |
| TechWeight | Wgt | | Non-cost | 2300 | <input type="button" value="fx"/> |
| WBS Summary | WBS | | Text | | |

Custom Columns – Non-cost, Cost, Text, Date, Comment types

Create using Columns > Add Custom Column

Add Custom Column [?] [X]

Column Title:

Unique ID:

Column Description:

Tag:

Custom Column Type:

Non-cost - Column holds non-cost data and/or equations

Cost - Column holds cost data and/or equations

Text - Column holds text that can be used for filtering

Date - Column holds dates of the form DDMMYYYY

Comment - Column holds comments and text that is not evaluated

Calculation Behavior:

Show in custom column results

OK Cancel

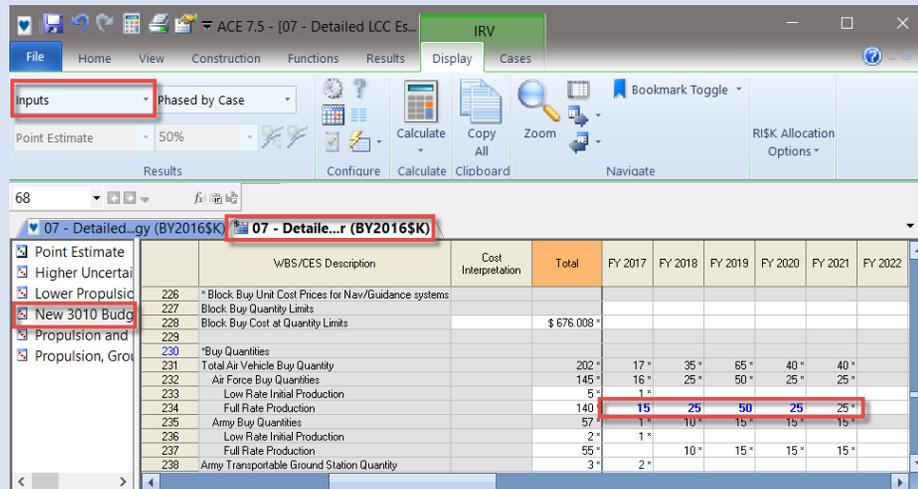
ACE 7.5

ACE 8.0

OVERRIDES

Inputs Results/Viewer

Inputs (Phased and Total) and RI\$K Inputs view



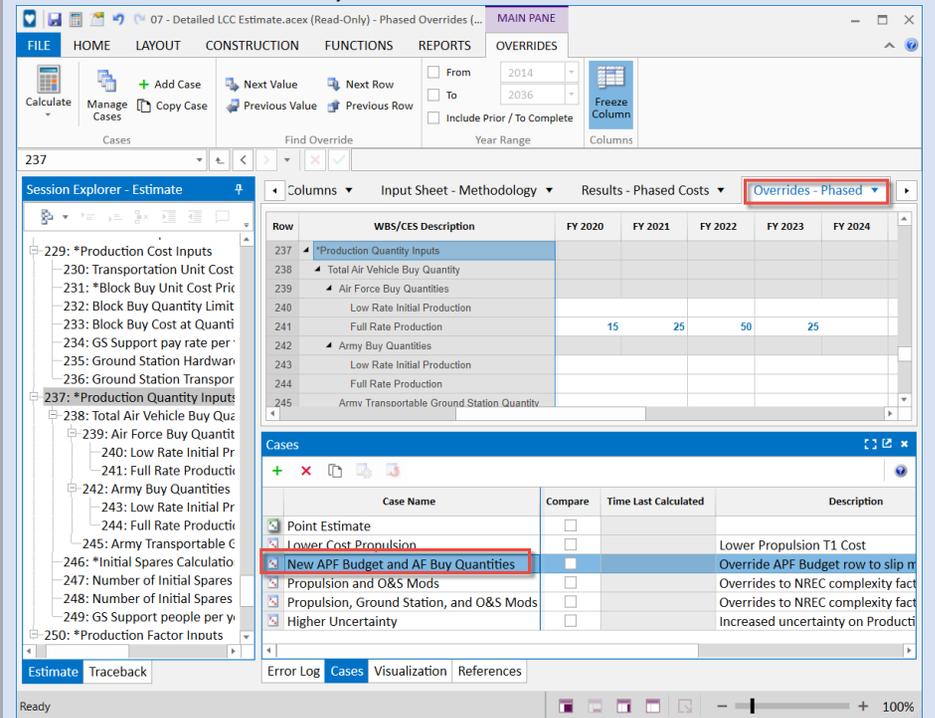
The screenshot shows the ACE 7.5 interface with the 'Inputs' menu highlighted. Below the menu is a table with the following data:

| WBS/CES Description | Cost Interpretation | Total | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 |
|-----------------------------------------------------------|---------------------|--------------|---------|---------|---------|---------|---------|---------|
| 226 * Block Buy Unit Cost Prices for Nav/Guidance systems | | | | | | | | |
| 227 Block Buy Quantity Limits | | | | | | | | |
| 228 Block Buy Cost at Quantity Limits | | \$ 676,008 * | | | | | | |
| 229 | | | | | | | | |
| 230 *Buy Quantities | | | | | | | | |
| 231 Total Air Vehicle Buy Quantity | | 202 * | 17 * | 35 * | 65 * | 40 * | 40 * | |
| 232 Air Force Buy Quantities | | 145 * | 16 * | 25 * | 50 * | 25 * | 25 * | |
| 233 Low Rate Initial Production | | 5 * | 1 * | | | | | |
| 234 Full Rate Production | | 140 | 15 | 25 | 50 | 25 | 25 * | |
| 235 Army Buy Quantities | | 57 * | 1 * | 10 * | 15 * | 15 * | 15 * | |
| 236 Low Rate Initial Production | | 2 * | | | | | | |
| 237 Full Rate Production | | 55 * | | 10 * | 15 * | 15 * | 15 * | |
| 238 Army Transportable Ground Station Quantity | | 3 * | 2 * | | | | | |

Overrides (Main Pane tab)

Phased, Total/Year, RI\$K

Use Cases Pane to create/select case



The screenshot shows the ACE 8.0 interface with the 'Overrides - Phased' view selected. The 'Cases' pane is open, showing a list of cases with the following data:

| Case Name | Compare | Time Last Calculated | Description |
|------------------------------------------|--------------------------|----------------------|-----------------------------------|
| Point Estimate | <input type="checkbox"/> | | |
| Lower Cost Propulsion | <input type="checkbox"/> | | Lower Propulsion T1 Cost |
| New APF Budget and AF Buy Quantities | <input type="checkbox"/> | | Override APF Budget row to slip n |
| Propulsion and O&S Mods | <input type="checkbox"/> | | Overrides to NREC complexity fact |
| Propulsion, Ground Station, and O&S Mods | <input type="checkbox"/> | | Overrides to NREC complexity fact |
| Higher Uncertainty | <input type="checkbox"/> | | Increased uncertainty on Producti |

* Some case names revised in the ACE 8.0 example files

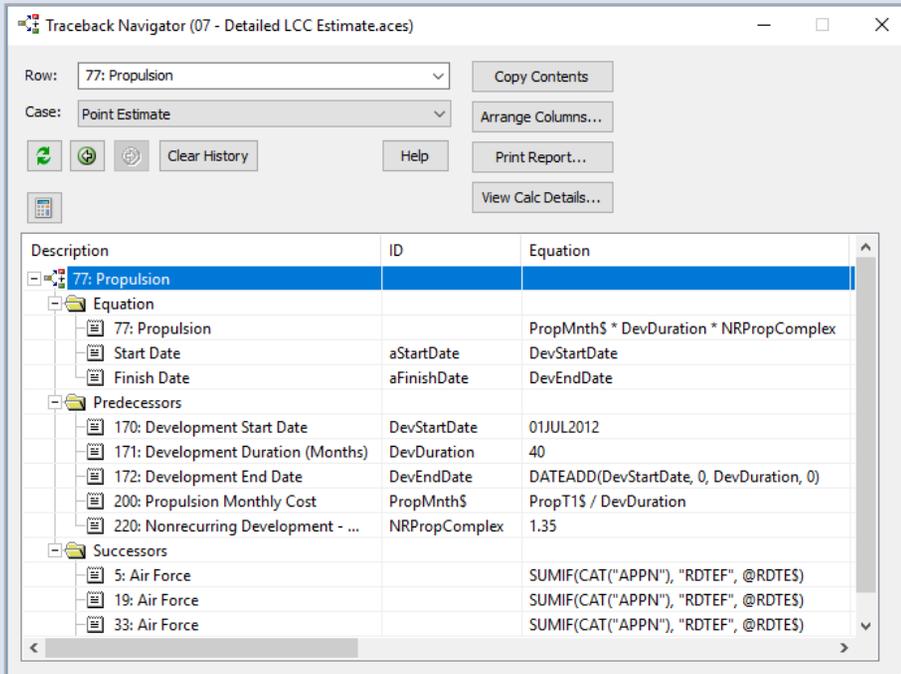
ACE 7.5

ACE 8.0

DEBUGGING

Traceback Navigator

Shows immediate Predecessors and Successors



Traceback Navigator (07 - Detailed LCC Estimate.aces)

Row: 77: Propulsion

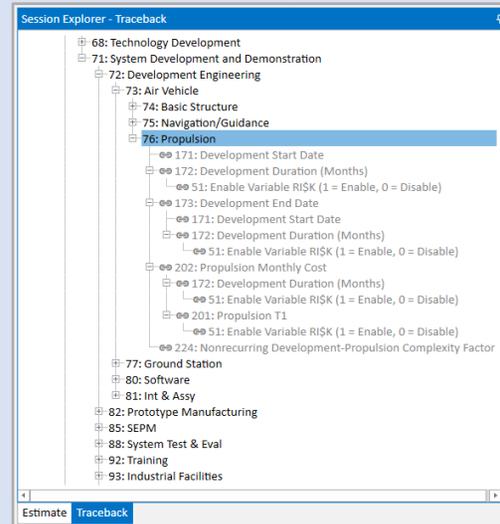
Case: Point Estimate

| Description | ID | Equation |
|-------------------------------------|---------------|------------------------------------------|
| 77: Propulsion | | |
| Equation | | |
| 77: Propulsion | | PropMnth\$ * DevDuration * NRPropComplex |
| Start Date | aStartDate | DevStartDate |
| Finish Date | aFinishDate | DevEndDate |
| Predecessors | | |
| 170: Development Start Date | DevStartDate | 01JUL2012 |
| 171: Development Duration (Months) | DevDuration | 40 |
| 172: Development End Date | DevEndDate | DATEADD(DevStartDate, 0, DevDuration, 0) |
| 200: Propulsion Monthly Cost | PropMnth\$ | PropT1\$ / DevDuration |
| 220: Nonrecurring Development - ... | NRPropComplex | 1.35 |
| Successors | | |
| 5: Air Force | | SUMIF(CAT("APPN"), "RDTEF", @RDTE\$) |
| 19: Air Force | | SUMIF(CAT("APPN"), "RDTEF", @RDTE\$) |
| 33: Air Force | | SUMIF(CAT("APPN"), "RDTEF", @RDTE\$) |

Session Explorer Traceback Mode

Open with References and Successors Panes

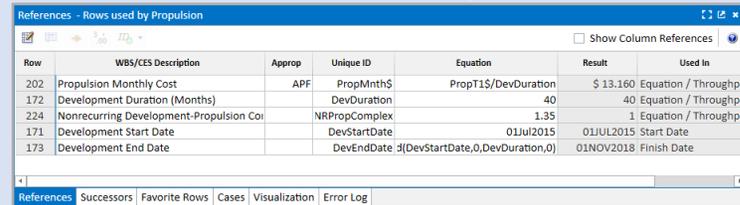
Traceback shows complete drill down for current row



Session Explorer - Traceback

- 68: Technology Development
- 71: System Development and Demonstration
- 72: Development Engineering
 - 73: Air Vehicle
 - 74: Basic Structure
 - 75: Navigation/Guidance
 - 76: Propulsion
 - 171: Development Start Date
 - 172: Development Duration (Months)
 - 51: Enable Variable RISK (1 = Enable, 0 = Disable)
 - 173: Development End Date
 - 171: Development Start Date
 - 172: Development Duration (Months)
 - 51: Enable Variable RISK (1 = Enable, 0 = Disable)
 - 202: Propulsion Monthly Cost
 - 172: Development Duration (Months)
 - 51: Enable Variable RISK (1 = Enable, 0 = Disable)
 - 201: Propulsion T1
 - 51: Enable Variable RISK (1 = Enable, 0 = Disable)
 - 224: Nonrecurring Development-Propulsion Complexity Factor
 - 77: Ground Station
 - 80: Software
 - 81: Int & Assy
 - 82: Prototype Manufacturing
 - 85: SEPM
 - 88: System Test & Eval
 - 92: Training
 - 93: Industrial Facilities

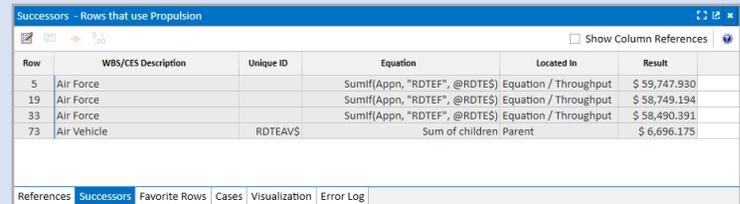
References Pane Shows immediate predecessors



References - Rows used by Propulsion

| Row | WBS/CES Description | Approp | Unique ID | Equation | Result | Used In |
|-----|----------------------------------------|--------|---------------|---------------------------------|-----------|-----------------------|
| 202 | Propulsion Monthly Cost | APF | PropMnth\$ | PropT1\$/DevDuration | \$ 13.160 | Equation / Throughput |
| 172 | Development Duration (Months) | | DevDuration | | 40 | Equation / Throughput |
| 224 | Nonrecurring Development-Propulsion Co | | NRPropComplex | | 1.35 | Equation / Throughput |
| 171 | Development Start Date | | DevStartDate | | 01JUL2015 | Start Date |
| 173 | Development End Date | | DevEndDate | d(DevStartDate,0,DevDuration,0) | | Finish Date |

Successors pane Shows immediate successors



Successors - Rows that use Propulsion

| Row | WBS/CES Description | Unique ID | Equation | Located In | Result |
|-----|---------------------|-----------|-------------------------------|-----------------------|---------------|
| 5 | Air Force | | Sumff(Appn, "RDTEF", @RDTE\$) | Equation / Throughput | \$ 59,747.930 |
| 19 | Air Force | | Sumff(Appn, "RDTEF", @RDTE\$) | Equation / Throughput | \$ 58,749.194 |
| 33 | Air Force | | Sumff(Appn, "RDTEF", @RDTE\$) | Equation / Throughput | \$ 58,490.391 |
| 73 | Air Vehicle | RDTEAV\$ | Sum of children Parent | | \$ 6,696.175 |

ACE 7.5

ACE 8.0

ERROR LOG

Error Log

Error Log - 07 - Detailed LCC Estimate.aces (BY2016\$K)

0 Unused Var | 7 Information | 1 Warning | 0 Fatal

| Error Code | Row # | Severity | Description | Column |
|------------|-------|-------------|--------------------------------------------------------------|------------|
| PHZ891 | 92 | Warning | BY method used without fiscal year or units specified. | Equation / |
| INF122 | | Information | Not using most recent system inflation table. | Equation / |
| RSK726 | 53 | Information | Referenced row contains no RISK statistics (using baseline). | Equation / |
| RSK726 | 54 | Information | Referenced row contains no RISK statistics (using baseline). | Equation / |
| RSK726 | 56 | Information | Referenced row contains no RISK statistics (using baseline). | Equation / |
| RSK726 | 57 | Information | Referenced row contains no RISK statistics (using baseline). | Equation / |
| RSK726 | 59 | Information | Referenced row contains no RISK statistics (using baseline). | Equation / |
| RSK726 | 60 | Information | Referenced row contains no RISK statistics (using baseline). | Equation / |

Buttons: Set as Default, Goto Error, Copy, Close, Help

Error Log Pane

Error Log - 8 total

0 Fatal | 1 Warning | 7 Information | 0 Hidden Types

| Error Code | Row # | Severity | Description | Column Name | Case |
|------------|-------|-------------|--------------------------------------------------------------|-----------------------|----------------|
| PHZ891 | 91 | Warning | BY method used without fiscal year or units specified. | Equation / Throughput | |
| INF122 | | Information | Not using most recent system inflation table. | Equation / Throughput | Point Estimate |
| RSK726 | 53 | Information | Referenced row contains no RISK statistics (using baseline). | Equation / Throughput | Point Estimate |
| RSK726 | 54 | Information | Referenced row contains no RISK statistics (using baseline). | Equation / Throughput | Point Estimate |
| RSK726 | 56 | Information | Referenced row contains no RISK statistics (using baseline). | Equation / Throughput | Point Estimate |
| RSK726 | 57 | Information | Referenced row contains no RISK statistics (using baseline). | Equation / Throughput | Point Estimate |
| RSK726 | 59 | Information | Referenced row contains no RISK statistics (using baseline). | Equation / Throughput | Point Estimate |

References | Successors | Favorite Rows | Cases | Visualization | Error Log

Additional option to hide selected warnings and info messages

Error Log - 8 total

0 Fatal | 1 Warning | 6 Information | 1 Hidden Types

| Error Code | Row # | Severity | Description | Column Name | Case |
|------------|-------|-------------|--------------------------------------------------------------|-----------------------|----------------|
| PHZ891 | 91 | Warning | BY method used without fiscal year or units specified. | Equation / Throughput | |
| RSK726 | 53 | Information | Referenced row contains no RISK statistics (using baseline). | Equation / Throughput | Point Estimate |
| RSK726 | 54 | Information | Referenced row contains no RISK statistics (using baseline). | Equation / Throughput | Point Estimate |
| RSK726 | 56 | Information | Referenced row contains no RISK statistics (using baseline). | Equation / Throughput | Point Estimate |
| RSK726 | 57 | Information | Referenced row contains no RISK statistics (using baseline). | Equation / Throughput | Point Estimate |
| RSK726 | 59 | Information | Referenced row contains no RISK statistics (using baseline). | Equation / Throughput | Point Estimate |
| RSK726 | 60 | Information | Referenced row contains no RISK statistics (using baseline). | Equation / Throughput | Point Estimate |

References | Successors | Favorite Rows | Cases | Visualization | Error Log

Hide the selected error(s).