

## Tutorials

### Lesson 13 - Calculation/Indicator and % Complete Columns

In this lesson you will learn how to:

- Create a percent complete SmartColumn with a percent complete pie.
- Create two Values SmartColumns (columns which contain values.)
- Enter values in to the Values Smart Columns.
- Create a Calculation/Indicator SmartColumn and set conditions for symbols to appear.

Open the schedule for this lesson

1. On the toolbar choose the **File** tab.
2. In the **Files and Templates: Open and Save Options** section, click ▼ (the down arrow) next to **Open**.
3. Choose **Lesson Chart**.
4. Select **Lesson 13 Starter Schedule.mif**.
5. Save the schedule to an accessible folder on your hard drive, such as your **Documents** folder. Choose **File**. In the **Files and Templates: Open and Save Options** section, click ▼ (the down arrow) next to **Save As ...** And choose **Chart**. You will now be able to work with and save this les-





This schedule has basic schedule information already included: task names, symbols and connectors, column headings, a legend, and a pre-configured toolbox.

Construction Indicator Schedule								
% Comp.	Project/ Task	2017				Cost	Budget	Budget - Cost
		Jan	Feb	Mar	Apr			
	BHSubdiv, Lot 50	[Progress bar]						
	Foundation	13	24					
	Framing/Siding	25	7					
	Roofing	9	16					
	Insulation	17						
	Brick	25						
	Drywall	26	6					
	Texture/Paint	7	21					
	Carpet/flooring	15	6					
	Interior/Misc.	28	2					
	Punch list	3	14					
	Complete	15						

Lesson 13 starter schedule

### Create a percent complete SmartColumn with a percent complete pie

Percent complete is used for showing and maintaining a project's progress. By default, this column will show progress based on the current date (here, the vertical dotted line). To establish progress differently, a status symbol can be used to manipulate the progress of project tasks.

1. Using  in the toolbox, click the **% Comp.** column heading. The toolbar will change to the **Selection** tab with **Current Object: Column Heading**. Choose **Switch to Column**.
2. In the **Column Type and Format** section click ▼ (the down arrow) next to  (the **Properties** button.) Scroll and choose **Percent Complete**. The **Percent Complete Settings** dialog box appears.
3. For **Display Settings**  **Include Percent Complete Symbol in column**.
4. Choose **Symbol on Left**.
5. Click **OK** to return to the schedule. The schedule will now have information in the % Comp. column.
6. Click  in the Toolbox.
7. Go to the **Carpet/Flooring** task. Click (and hold the mouse button) on the status symbol (yellow arrow), moving the symbol to the left or right. Then release the mouse button. Notice the change in the bar shading and the Percent Complete column for this task.
8. Click  in the Toolbox.
9. Move the cursor to **Carpet/flooring** task. Select the % complete text in the **Percent Complete** cell.
10. Enter **75** (for 75%). Then press **Enter** on the keyboard. Notice that the status symbol moved to match the new percent.

Construction Indicator Schedule				
% Comp.	Project/ Task	2017		
		Jan	Feb	M
65%	BHSubdiv, Lot 50	[Progress bar]		
100%	Foundation	13	24	
100%	Framing/Siding	25	7	
100%	Roofing	9	16	
0%	Insulation	17		
0%	Brick	25		
100%	Drywall	26	6	
84%	Texture/Paint	7	21	
45%	Carpet/flooring	15	6	
0%	Interior/Misc.			




Percent complete column

84%	Texture/Paint	7	21
75%	Carpet/flooring	15	6


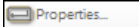
Percent complete change

## Create Two Values SmartColumns


The Cost and Budget columns will be changed to Values SmartColumns.

1. Click  in the toolbox.
2. Click the **Cost** column heading. The toolbar will change to the **Selection** tab with **Current Object: Column Heading**. Choose **Switch to Column**.
3. In the **Column Type and Format** section click  (the down arrow) next to  (the **Properties** button.) Scroll and choose **Values**. The **Indicators for Values Column** dialog box appears.
4. Click **OK**.
5. On the toolbar, in the **Column Type and Format** section under **Decimal Places:**  **Currency**.

**Now, do the same for the Budget column.**

1. Click the **Budget** column heading. The toolbar will change to the **Selection** tab **Current Object: Column Heading**. Choose **Switch to Column**.
2. In the **Column Type and Format** section click  (the down arrow) next to  (the **Properties** button) scroll and choose **Values**. The **Indicators for Values Column** dialog box appears.
3. Click **OK** because you only want to display the values that will be entered.
4. On the toolbar in the **Column Type and Format** section under **Decimal Places:**  **Currency**.

## Enter values into the Values SmartColumns

1. Click  in the toolbox.
2. Click once in the **Cost** column for the **Foundation** task row and enter **500**.
3. Hit **Enter** or **Return** or the down arrow key on the keyboard, to get to the next task row's **Cost** cell.
4. Continue entering values as shown in the picture to the right for both **Cost** and **Budget**.

Cost	Budget
\$6,395	\$7,000
\$500	\$200
\$400	\$800
\$600	\$500
\$800	\$800
\$700	\$700
\$500	\$400
\$450	\$600
\$385	\$400
\$485	\$600
\$950	\$1,200
\$625	\$800

## Construction Indicator Schedule

% Comp.	Project/Task	2017				Cost	Budget	Budget - Cost
		Jan	Feb	Mar	Apr			
72%	BHSubdiv, Lot 50					\$6,395	\$7,000	
100%	Foundation	13	24			\$500	\$200	
100%	Framing/Siding	25	7			\$400	\$800	
100%	Roofing	9	16			\$600	\$500	
0%	Insulation		17			\$800	\$800	
0%	Brick		25			\$700	\$700	
100%	Drywall		26	6		\$500	\$400	
84%	Texture/Paint		7	21		\$450	\$600	
75%	Carpet/flooring		15	6		\$385	\$400	
0%	Interior/Misc.			26	2	\$485	\$600	
0%	Punch list			3	14	\$950	\$1,200	
0%	Complete				15	\$625	\$800	

Under Budget   
 On Budget   
 Over Budget   
 Status


Cost and Budget values SmartColumns schedule

Cost and Budget values SmartColumns



Cost and Budget values for the BHSubdiv, Lot 50 task row are automatically totaled because the schedule is outlined. This setting is under **Layout** menu. In the **Other** section (choose **Summary Bar Settings...**).

## Create a Calculation/Indicator SmartColumn and set conditions for symbols to appear

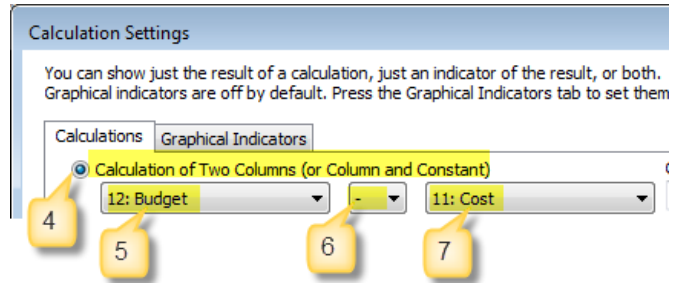
Now, define the **Budget-(minus) Cost** column as a **Calculation/Indicator SmartColumn** which subtracts the **Cost** column values from the **Budget** column values. Then it will display symbols based on those values.

1. Using  in the toolbox, click the **Budget - Cost** column heading. The toolbar will change to **Current Object :Column Heading**. Choose **Switch to Column**.


2. In the **Column Type and Format** section under **Decimal Places**:  **Currency**.

3. In the **Column Type and Format** section click  (the down arrow) next to  (the **Properties** button). Scroll and choose **Calculation/Indicator**. The **Calculation Settings** dialog box displays.


4. In the **Calculation** tab choose **Calculation of Two Columns**.



Calculation Setting

5. Under **Calculation of Two Columns** in the first box click  (the down arrow) scroll and choose: **12: Budget**.

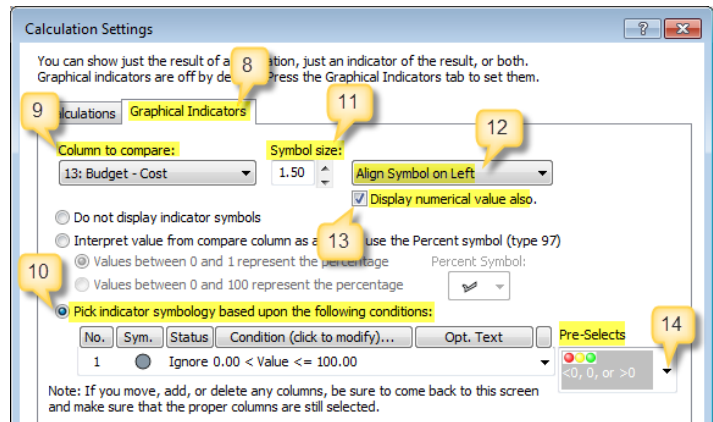
6. In the second box click the down arrow scroll and choose the **minus sign (-)**.

7. In the third box click  (the down arrow scroll) and choose: **11: Cost**.

8. The schedule should: a red "stoplight" symbol when **Cost > Budget** for a task; a green symbol when the **Budget > Cost** values; and a yellow symbol when the **Budget = Cost**. Click the **Graphical Indicators** tab.

9. For **Column to Compare**, choose **13: Budget - Cost**.

10. Choose **Pick indicator symbols based upon the following conditions**.



Indicator symbology

11. Change **Symbol size** to **1.50**.

12. Choose **Align Symbol on Left**.

13.  **Display numerical value also**.

14. Choose the **Pre-Selects** as shown.

15. Press **OK** to see the completed schedule below.

### Construction Indicator Schedule

% Comp.	Project/ Task	2017				Cost	Budget	Budget - Cost
		Jan	Feb	Mar	Apr			
72%	BHSubdiv, Lot 50					\$6,395	\$7,000	\$605
100%	Foundation	13		24		\$500	\$200	(\$300)
100%	Framing/Siding	25		7		\$400	\$800	\$400
100%	Roofing		9		16	\$600	\$500	(\$100)
0%	Insulation		17			\$800	\$800	\$0
0%	Brick		25			\$700	\$700	\$0
100%	Drywall		26		6	\$500	\$400	(\$100)
84%	Texture/Paint		7		21	\$450	\$600	\$150
75%	Carpet/flooring		15		6	\$385	\$400	\$15
0%	Interior/Misc.			26		\$485	\$600	\$115
0%	Punch list			3		\$950	\$1,200	\$250
0%	Complete				15	\$625	\$800	\$175

Under Budget    On Budget    Over Budget    Status

Schedule With Calculation Indicator Column