

Tax .NET: Report Designer

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BS&A Software Courseware

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Introduction

About This Course

This course is designed to offer a hands-on experience with the Report Designer that is included with all BS&A applications. It is not an exhaustive demonstration of the software. This course manual is intended to be a companion to the Tax software manual, the electronic version of which may be used during class time.

This book is yours to keep. Space has intentionally been made available throughout for you to record your own notes.

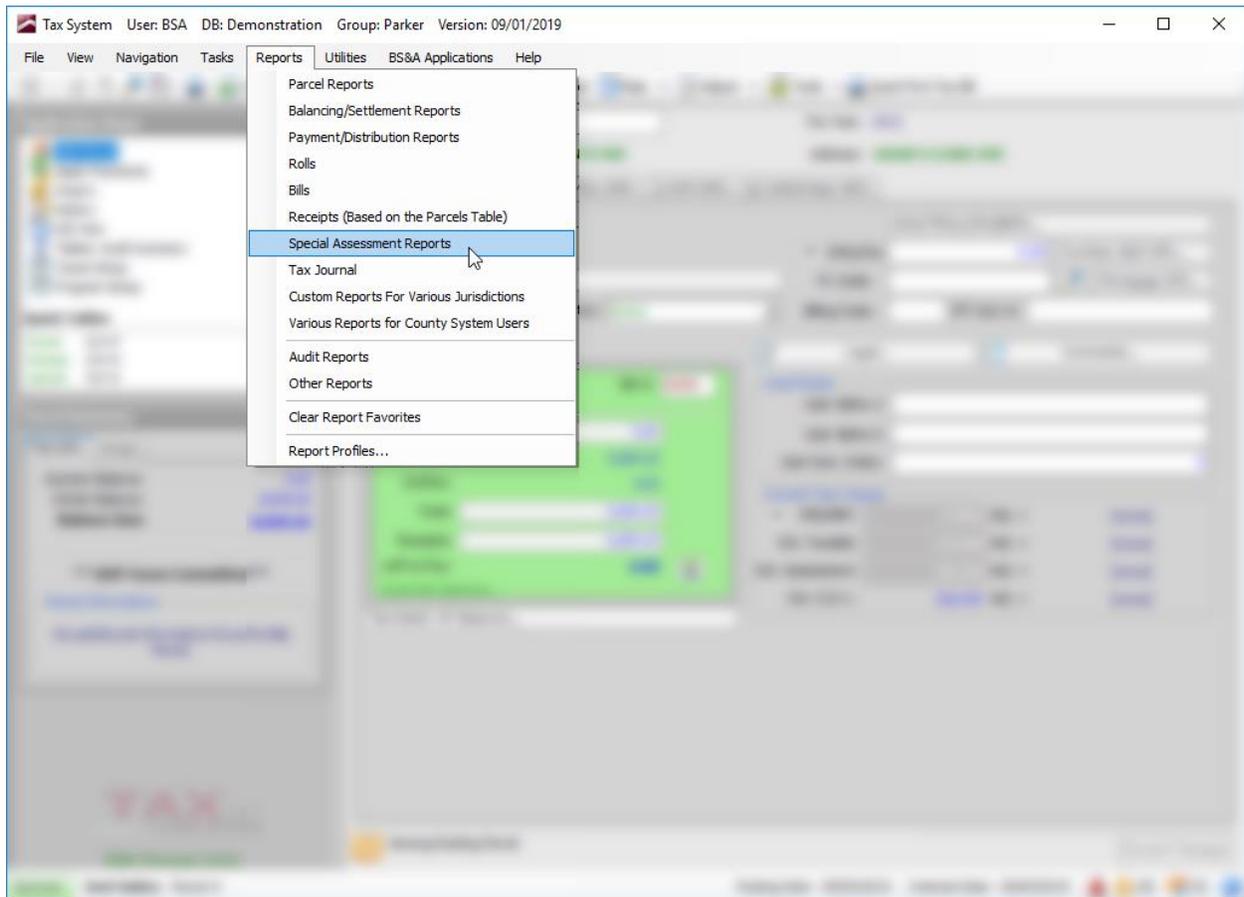
Contact Us

Help Menu Either option puts your request directly into our contact management database. Help requests submitted in either of these manners get the same first-come, first-served attention as a traditional phone call.	Option 1: Go to Help>Contact Customer Support>Request Support Phone Call Option 2: Go to Help>Contact Customer Support>Email Support
Phone	Toll free at (855) 272-7638
Email	taxsupport@bsasoftware.com
I.T. SUPPORT EMAIL	itsupport@bsasoftware.com
Web	http://www.bsasoftware.com/Contact
Fax	(517) 641-8960

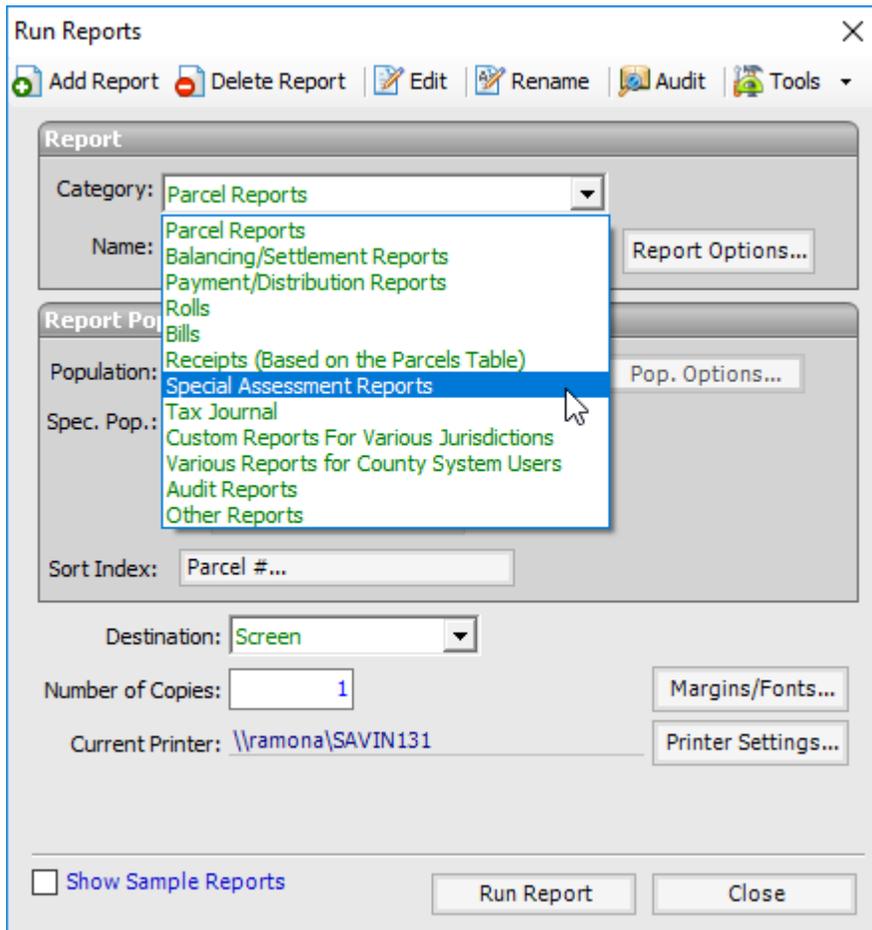
The Basics

Getting Started

It is important to select the proper report Category on which to base your user report. For example, if your report will be comprised primarily of special assessment data, be sure to select Special Assessment Reports from the Reports menu.



If you happen to have selected a different Category from the Reports menu, you may switch categories in the Run Reports screen.



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Most report Categories give you the option of either basing your report on a system report, or adding a blank report. The System Report option includes fields that may be added to, removed, or otherwise manipulated; the Blank option does not - you have a clean slate from which to begin. This course will take you through adding a blank report.

Add New Report [X]

Add Based On Report Template

Available Template Reports:

- ACH Report
- Deferment Application (Current Season)
- Legal Desc. Synopsis
- Mailing Labels Customized (Template)
- Mortgage Code/Parcel # with Barcode
- Report Template

Add Blank Report

Include Page Header Include Report Footer

Master Report Table: ParcelMaster

Available Child Tables

Table Name
HistoryHeader
ParcelAdjustments
ParcelSpecials
ParcelTaxBills
ReceiptHeaders

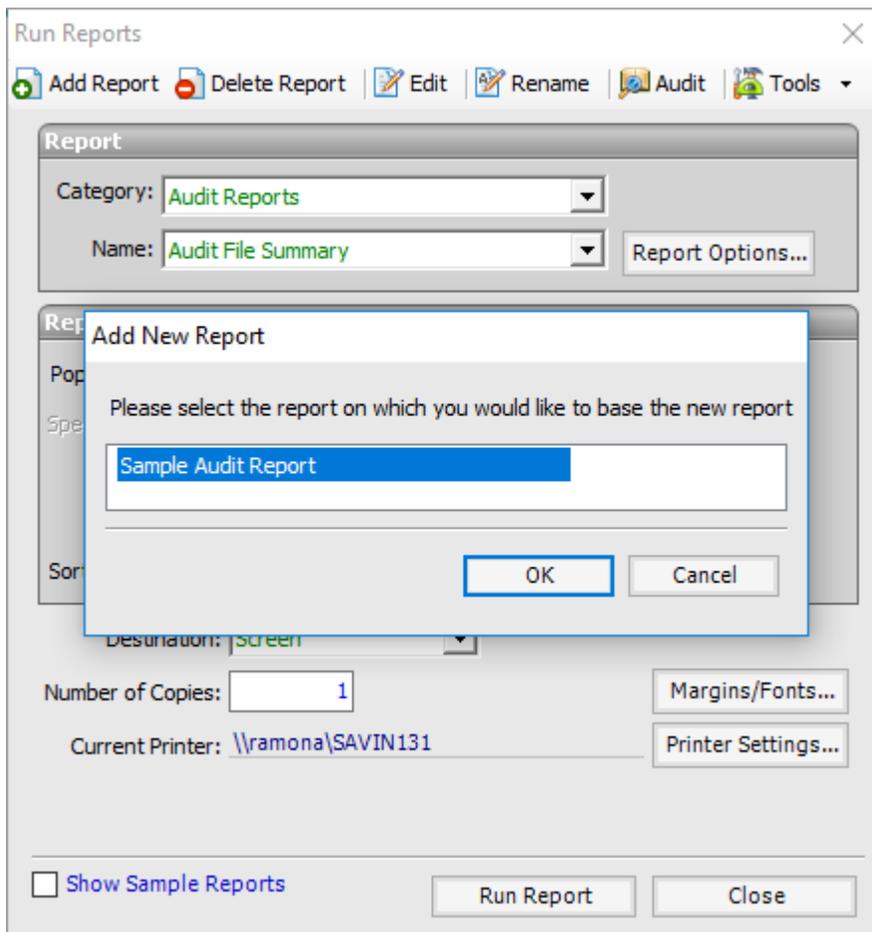
>> << All None

Child Tables To Include On Report

Table Name

OK Cancel

The "Audit Reports" Category only allows you to base your report on a system report.



The "Tax Journal" and "Custom Reports for Various Jurisdictions" Categories do not allow user report creation.

Add the Report

1. Select the Parcel Reports Category and click the Add Report button.

Run Reports

Add Report Delete Report Edit Rename Audit Tools

Report

Category: Parcel Reports

Name: Sample Parcel Report Report Options...

Report Population

Population: All Records Pop. Options...

Spec. Pop.: Ad Valorem+Special Acts

Apply Advanced Query to Population

Advanced Query...

Sort Index: Parcel #...

Destination: Screen

Number of Copies: 1 Margins/Fonts...

Current Printer: \\ramona\SAVIN131 Printer Settings...

Show Sample Reports Run Report Close

2. Select Add Blank Report.

Add New Report

Add Based On Report Template

Available Template Reports:

- ACH Report
- Deferment Application (Current Season)
- Legal Desc. Synopsis
- Mailing Labels Customized (Template)
- Mortgage Code/Parcel # with Barcode
- r

Add Blank Report

Include Page Header Include Report Footer

Master Report Table:

Available Child Tables	Child Tables To Include On Report								
<table border="1"> <thead> <tr><th>Table Name</th></tr> </thead> <tbody> <tr><td>HistoryHeader</td></tr> <tr><td>ParcelAdjustments</td></tr> <tr><td>ParcelSpecials</td></tr> <tr><td>ParcelTaxBills</td></tr> <tr><td>ReceiptHeaders</td></tr> </tbody> </table>	Table Name	HistoryHeader	ParcelAdjustments	ParcelSpecials	ParcelTaxBills	ReceiptHeaders	<table border="1"> <thead> <tr><th>Table Name</th></tr> </thead> <tbody> <tr><td> </td></tr> </tbody> </table>	Table Name	
Table Name									
HistoryHeader									
ParcelAdjustments									
ParcelSpecials									
ParcelTaxBills									
ReceiptHeaders									
Table Name									

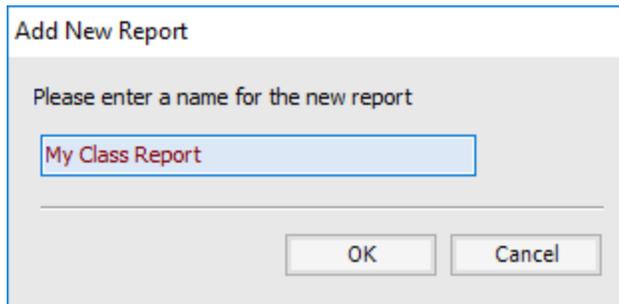
>> << All None

OK Cancel

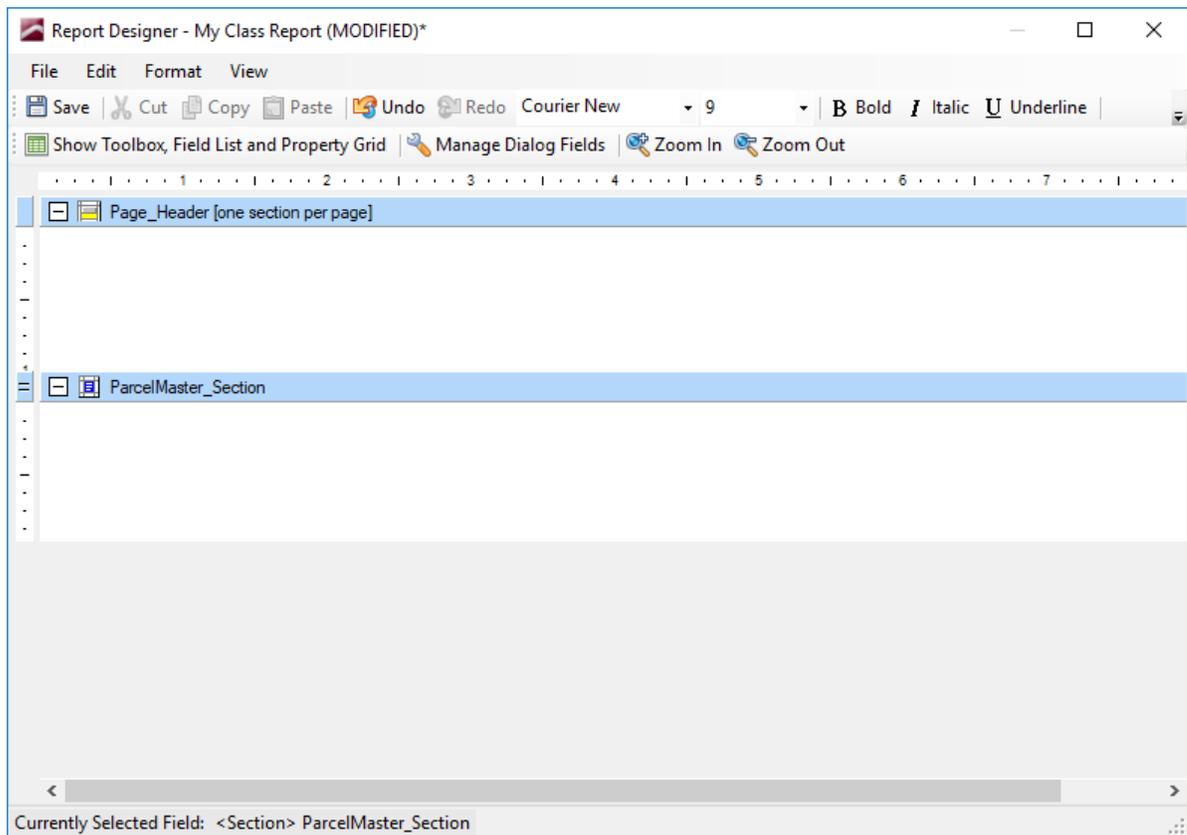
Include Page Header defaults to on; Include Report Footer defaults to off; Master Report Table defaults to ParcelMaster (in this example). We will accept these defaults. Adding a footer will be covered separately. Utilizing Child Tables will be a class discussion, time permitting.

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3. Click OK, then click Yes when prompted to continue. You are prompted to enter a name.

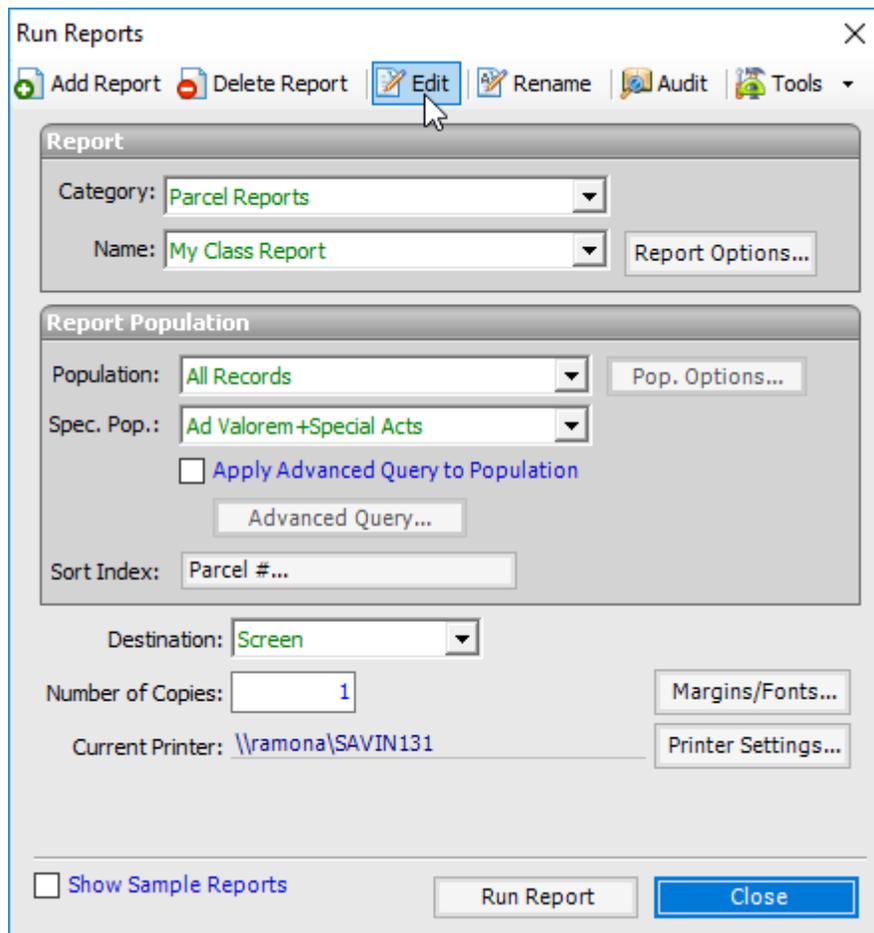


4. Click Ok. The Report Designer opens.

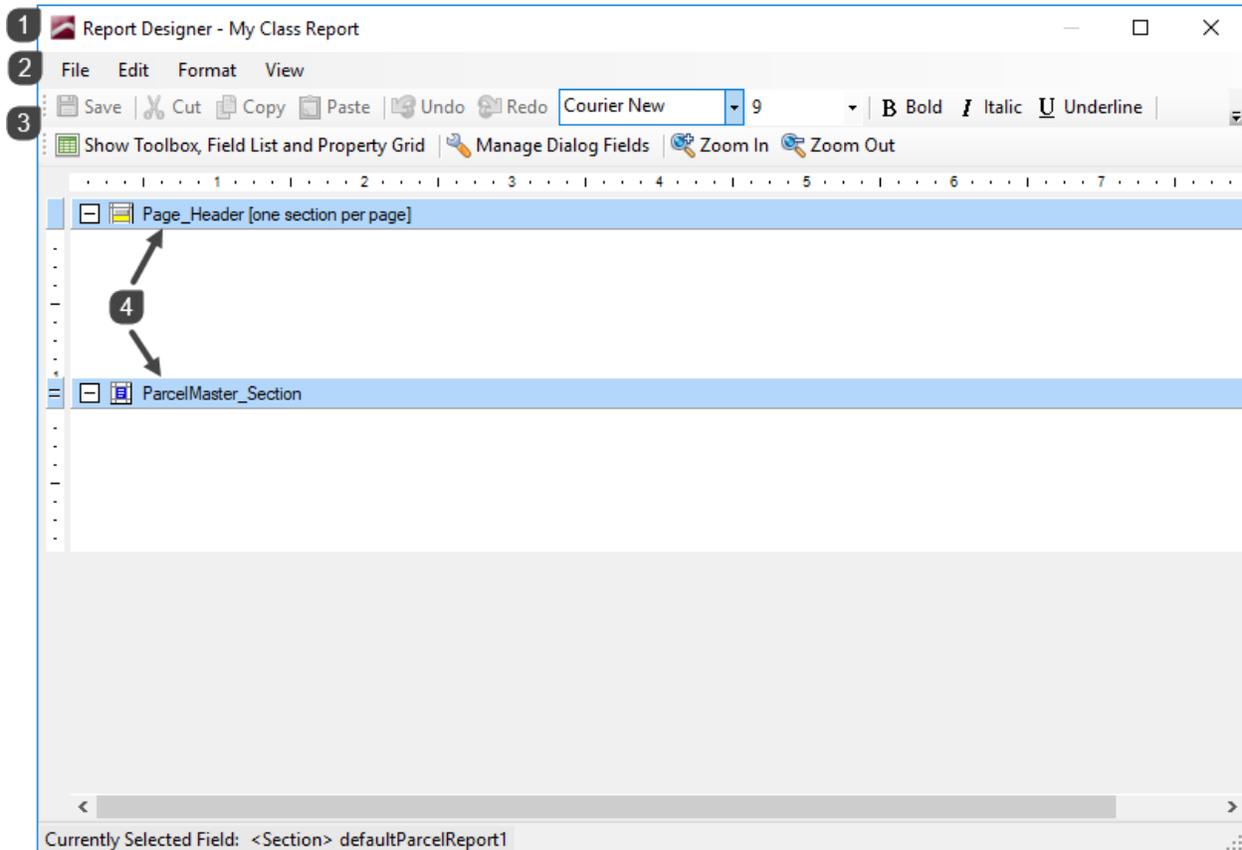


Edit the Report

Designing a report can be an elaborate undertaking. You may need to exit the designer from time to time. You can easily return to edit mode by clicking the Edit button in the Run Reports dialog.



Report Designer Layout



1 - Title Bar

The Title Bar includes the name of your user report.

2 - Menu Bar

File, Edit, Format, and View contain numerous options to aid in report design.

3 - Tool Bar

In addition to typical formatting buttons, the following tool buttons are available:

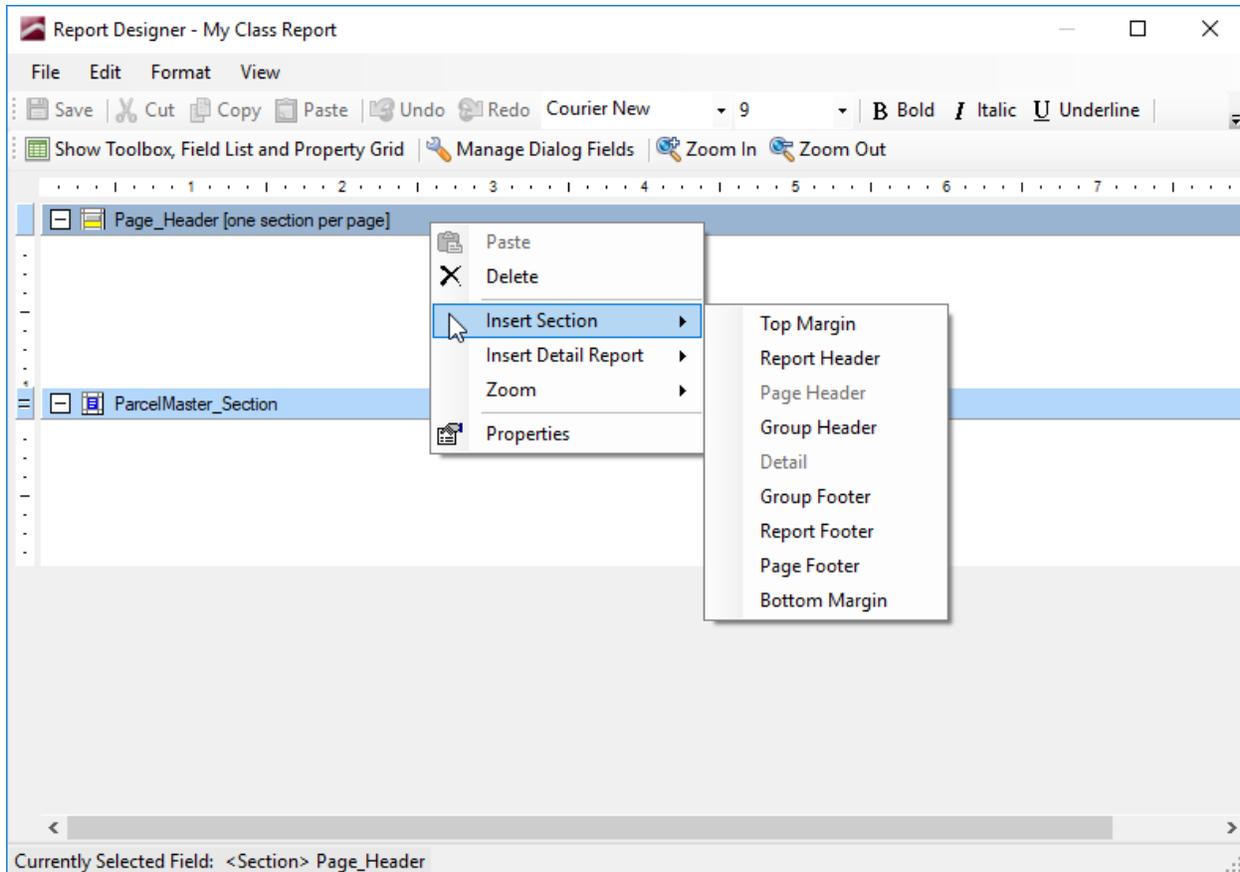
Show/Hide Toolbox, Field List, and Property Grid: This button acts as a toggle to show or hide a pane that provides tools, fields, and property settings. This will be covered in detail later.

Manage Dialog Fields: A dialog field prompts users for input. Dialog fields will be covered in detail later.

Zoom In; Zoom Out: These buttons are used to zoom in and out of the design field.

4 - Sections

Available sections and their titles vary by report Category. Sections can be quite complex; the following is a rough sketch of their use in report design. Each section has a specific location in the report body.



Top Margin: Fields placed here appear in the top margin of every page generated.

Report Header: Fields placed here appear at the beginning of the report.

Page Header: Fields placed here appear at the top of every page generated.

Group Header: This is used in reports for which separate totals are wanted. Fields placed here appear once at the top of the data group.

Detail: Fields placed in this section appear once for each record found.

Group Footer: This is used in reports for which separate totals are wanted. Fields placed here appear once at the bottom of the data group.

Report Footer: Fields placed here appear at the end of the report.

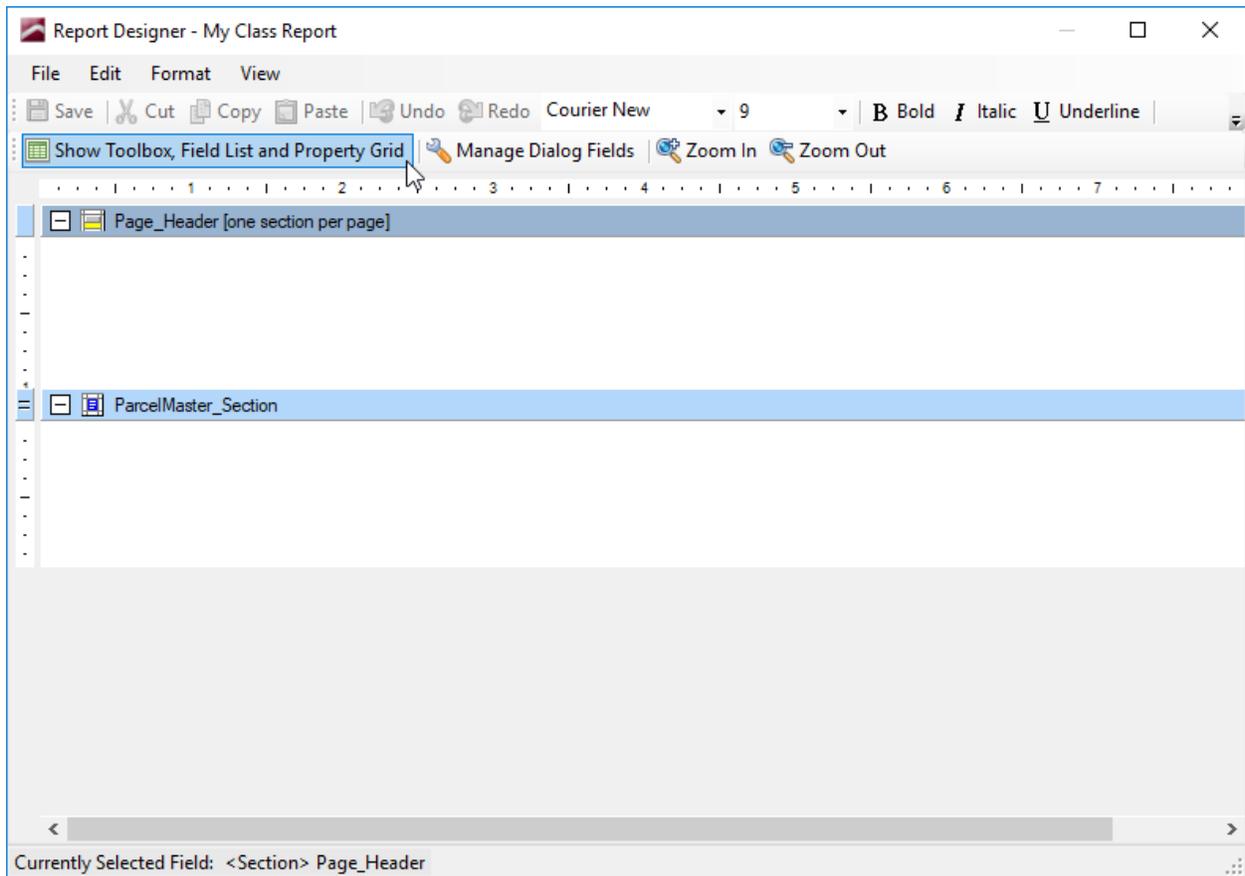
Page Footer: Fields placed here appear at the bottom of every page generated.

Bottom Margin: Field placed here appear in the bottom margin of every page generated.

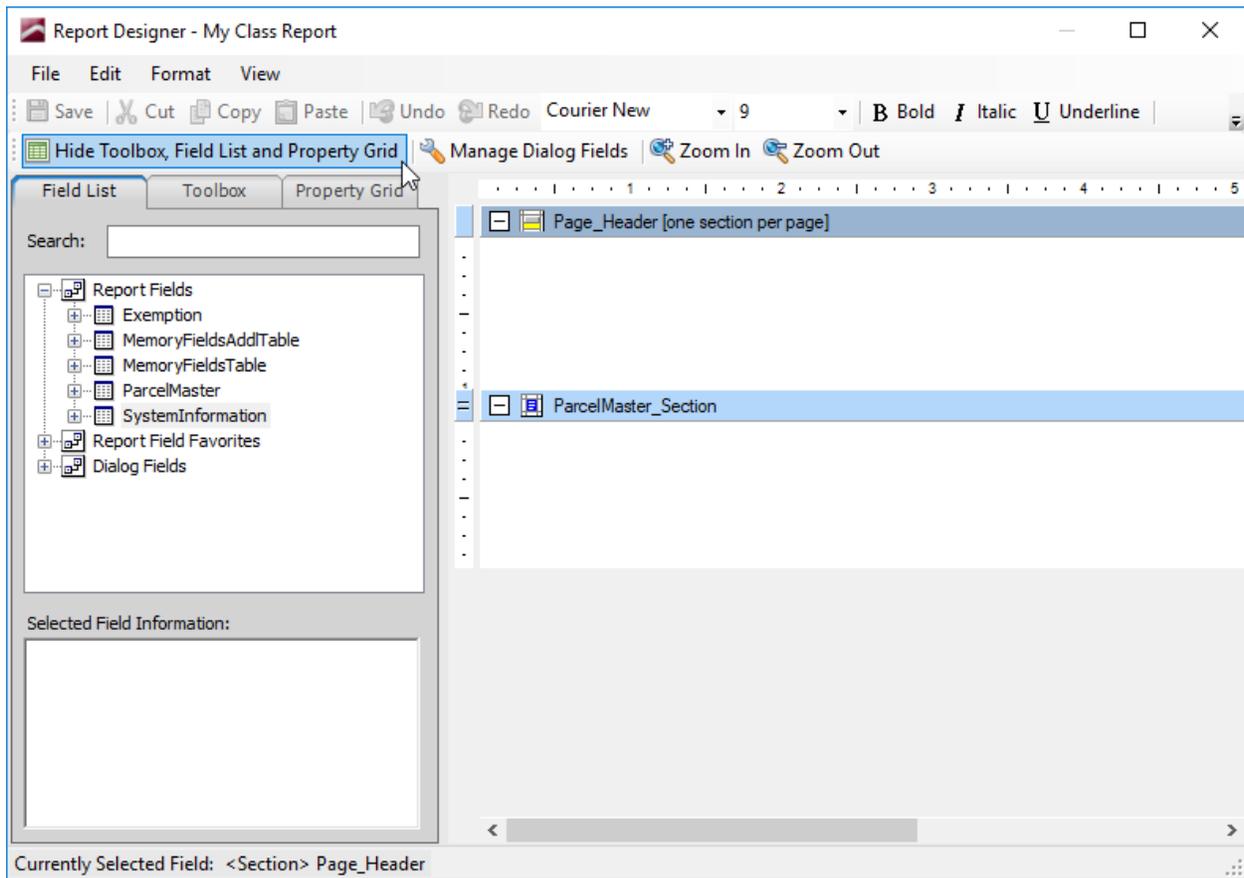
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Toolbox; Field List; Property Grid

When the Report Designer opens, this pane is hidden; the button uses the term, "Show."



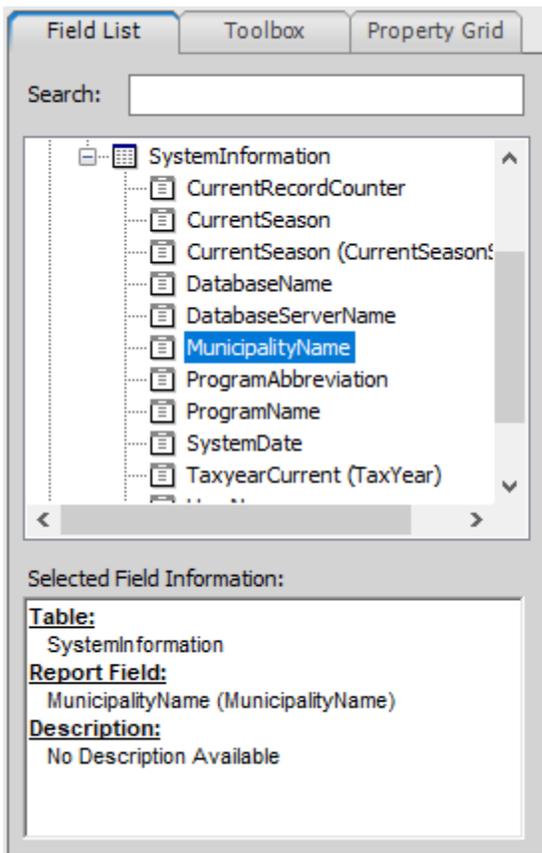
It is recommended that you click this button upon accessing the report designer. The button will change to "Hide."



Field List

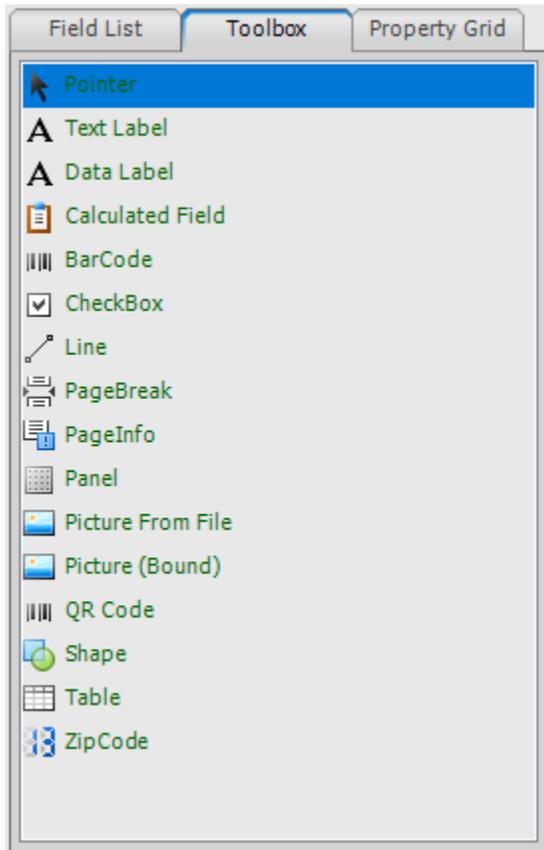
This tab contains the fields that you can place in the different report sections. It is divided into three groups of fields: **Report Fields** are fields drawn from the program, subject to the type of report you are designing. **Report Field Favorites** contains fields you marked as favorites. **Dialog Fields** contains dialog fields you set up for the current report.

Report Fields is further divided into fields specific to the Category in which you added the user report, and "SystemInformation" fields. System Information is data that spans Categories, including the database name, system date, and - in the case of Tax - the current season. When you highlight a field in the Field List, a snapshot of information is provided in the Selected Field Information box.



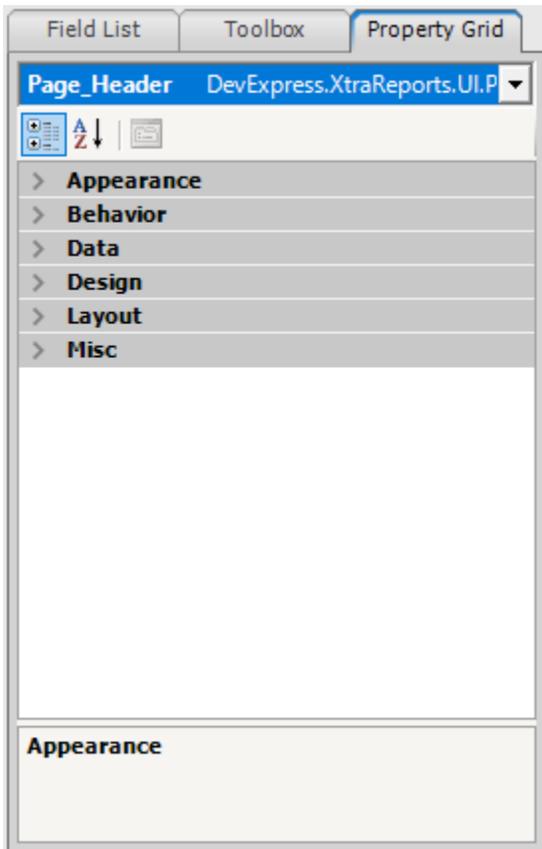
Toolbox

This tab offers tools to aid you in the design of your report (text labels, lines, pictures, etc.).



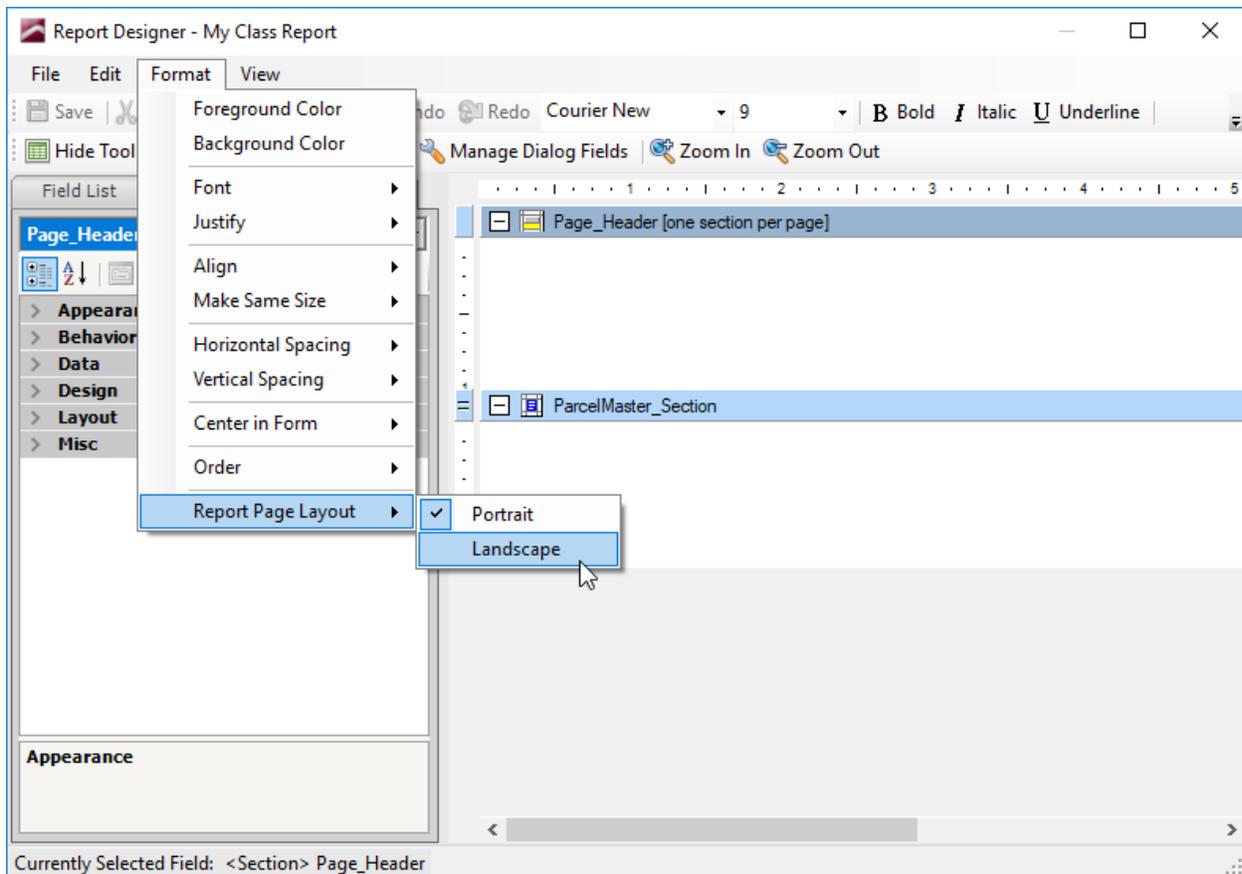
Property Grid

This tab lets you set the properties of the currently-selected field or section, such as font and size, text alignment, etc.



Set the Report Page Layout (Portrait or Landscape)

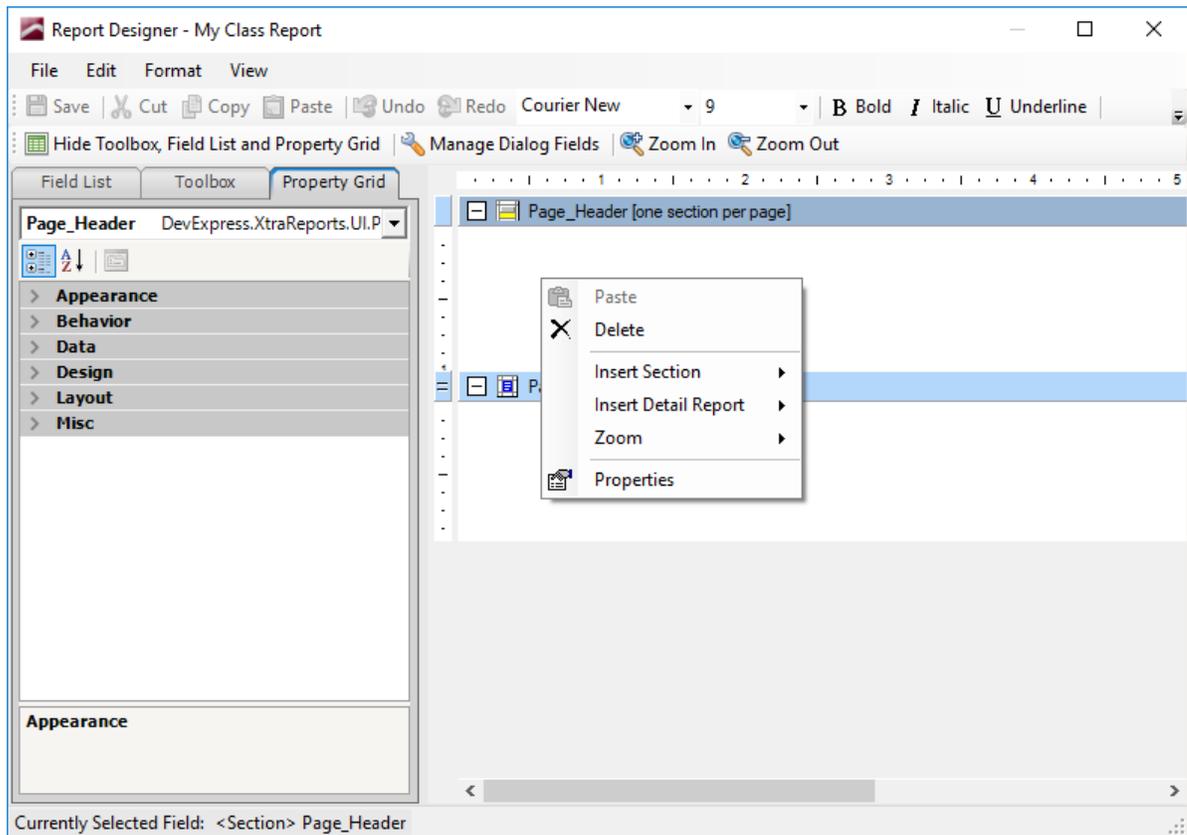
For the purpose of this course, we will use the default Portrait page layout. To change the page layout to Landscape, go to Format>Report Page Layout.



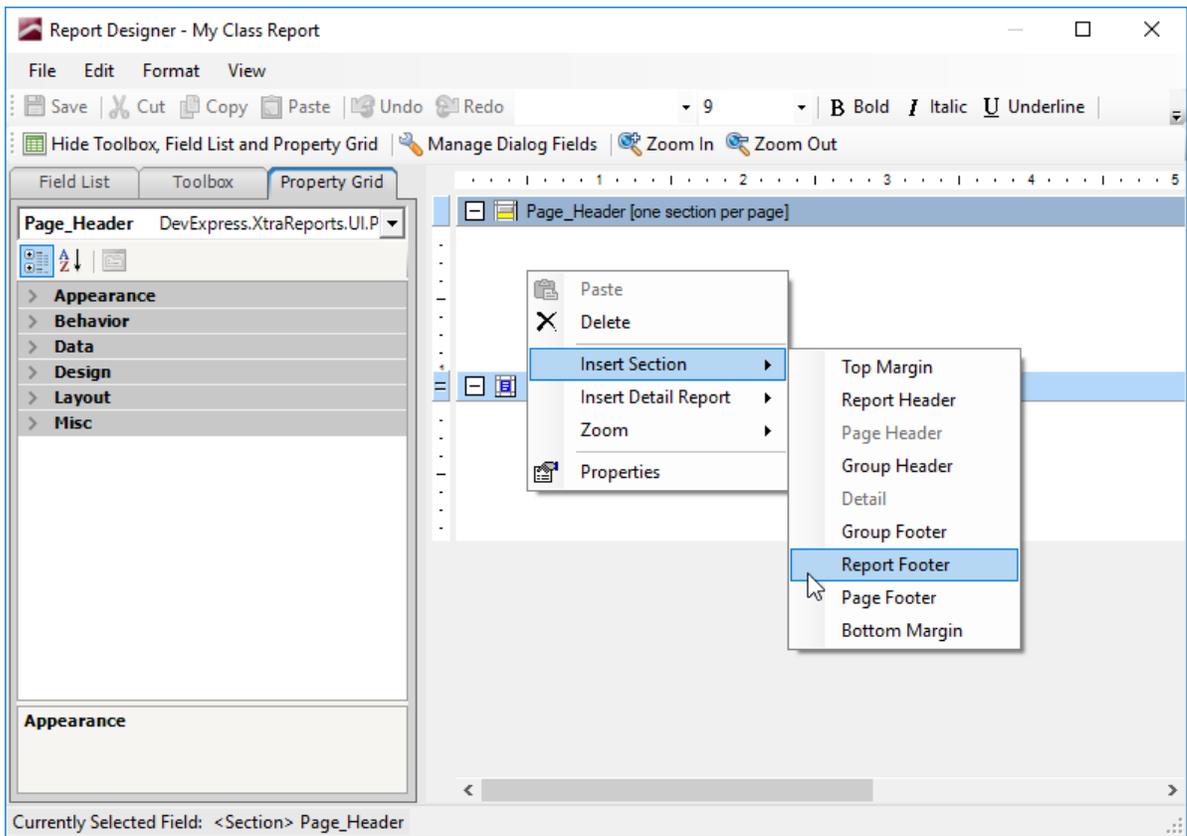
Add a Section

When we added the report, we did not include the Report Footer.

1. Right-click in any section.

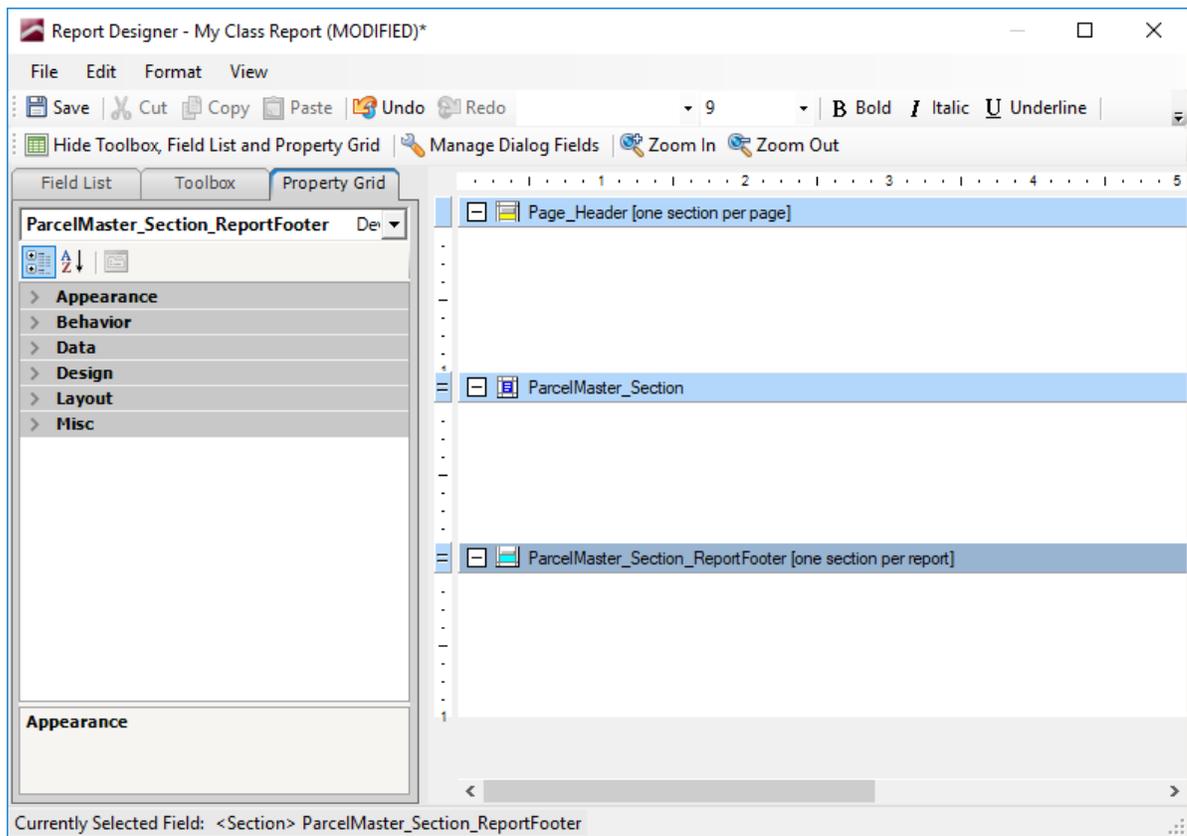


2. Select Insert Section, then Report Footer.



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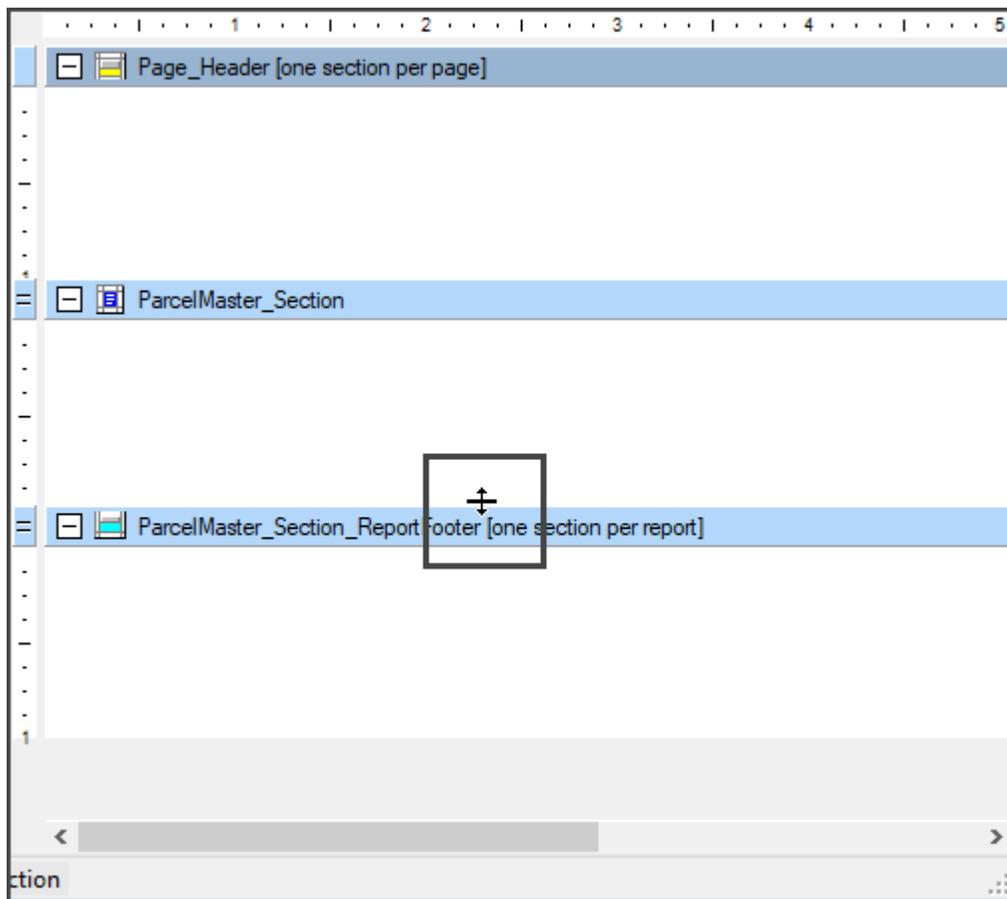
The section is added in its "natural" location.



Resize a Section

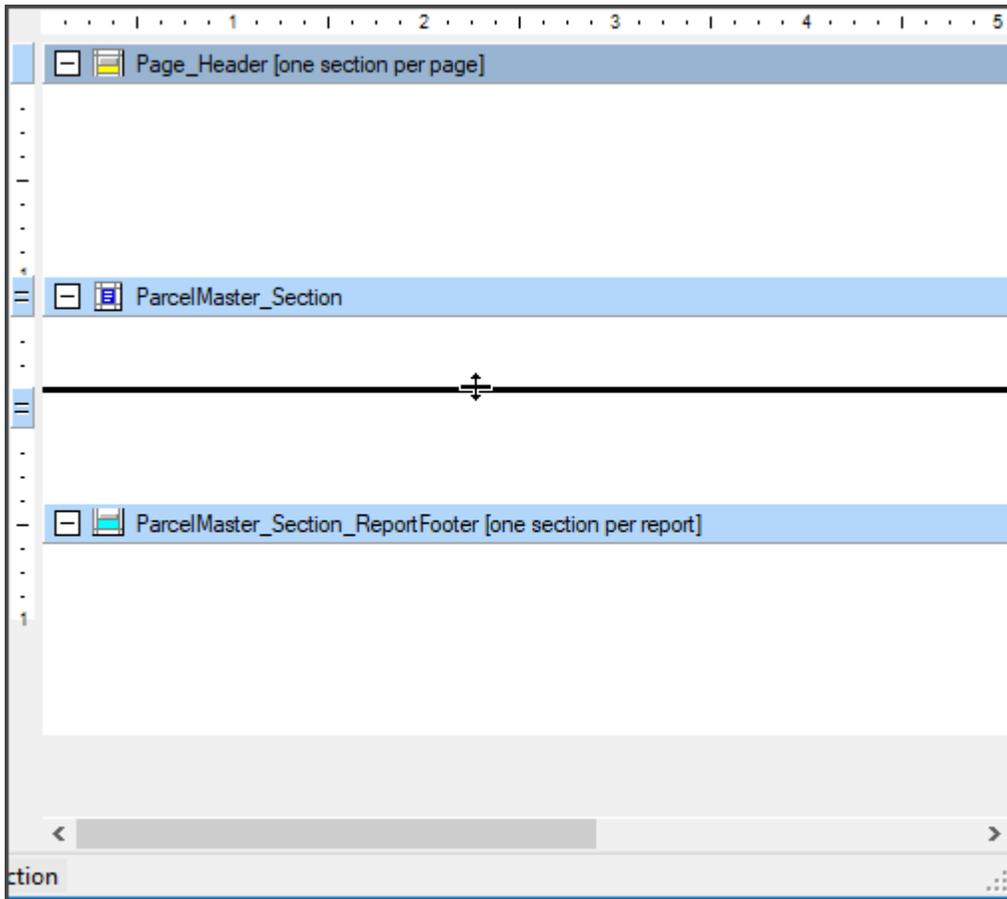
In our example, the ParcelMaster_Section is the Detail section. Fields placed in this section will repeat for every record found. To keep the report from containing too much "white space" between records, we need to shrink this section.

1. Position your cursor on the border between the **ParcelMaster_Section** (Detail) and **ParcelMaster_Section_Report Footer**.

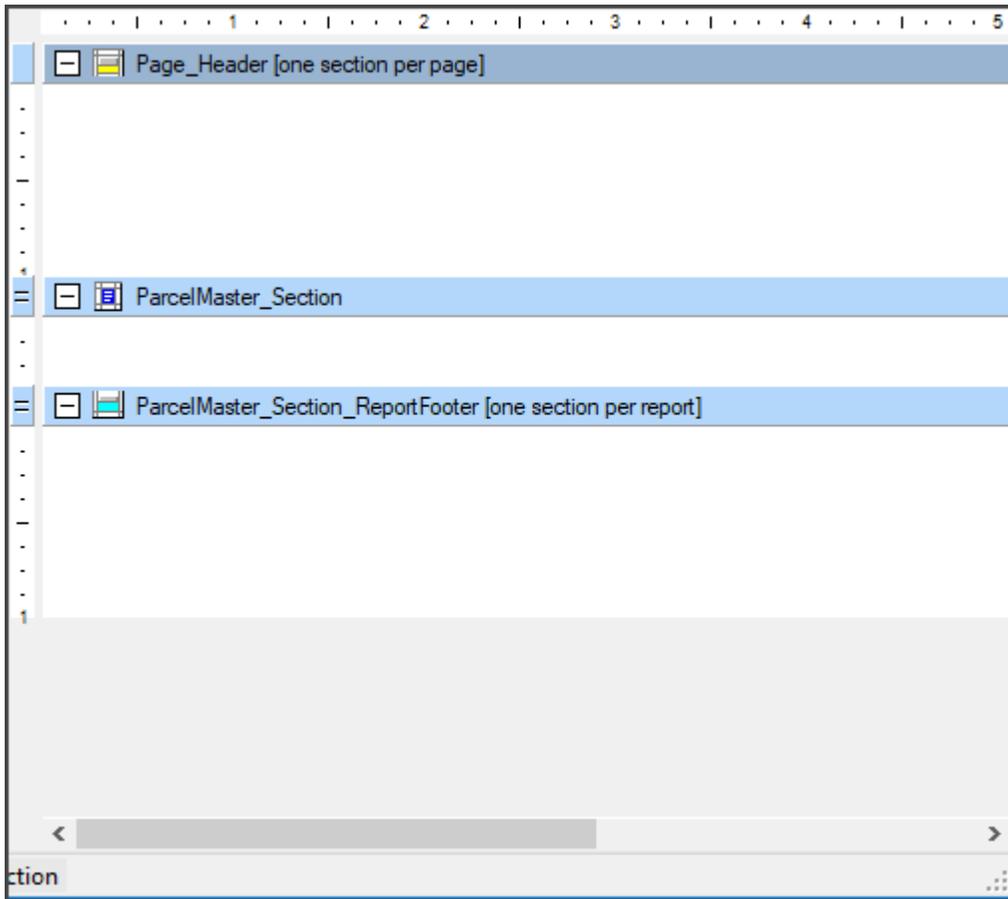


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2. Press and hold down your left mouse button and drag your mouse up.

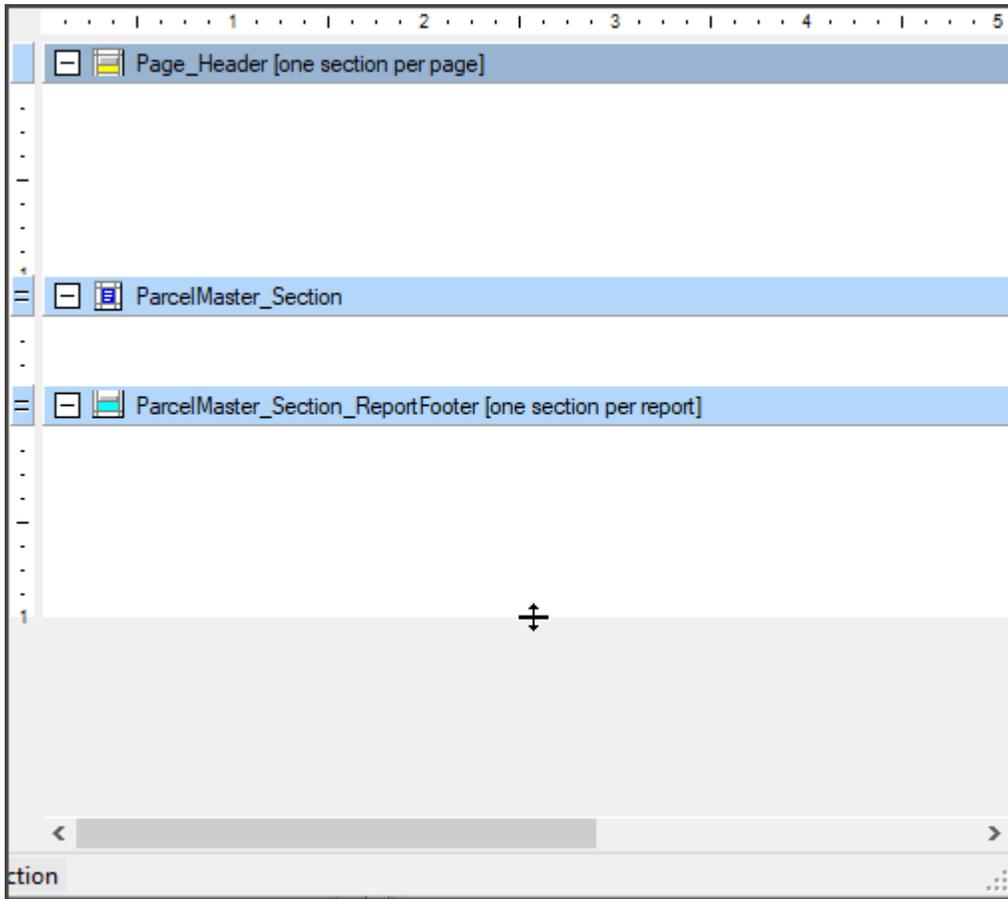


3. Release your mouse button.



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If you wish to increase or decrease the depth of the header and/or the footer section (pictured), place your cursor at the bottom of that section and repeat, moving up or down.

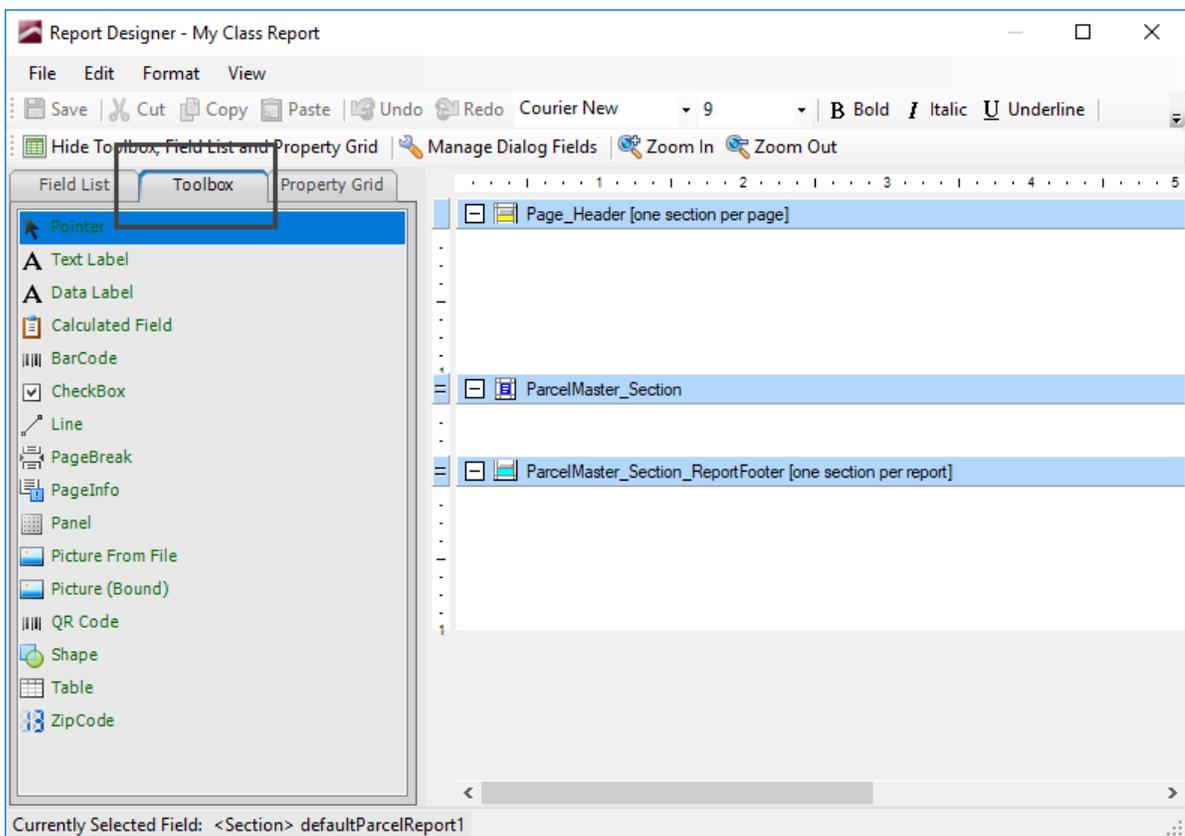


Add Fields

This lesson will add a label field and a data field, in two different sections. The label field "describes" the data that will appear in the data field.

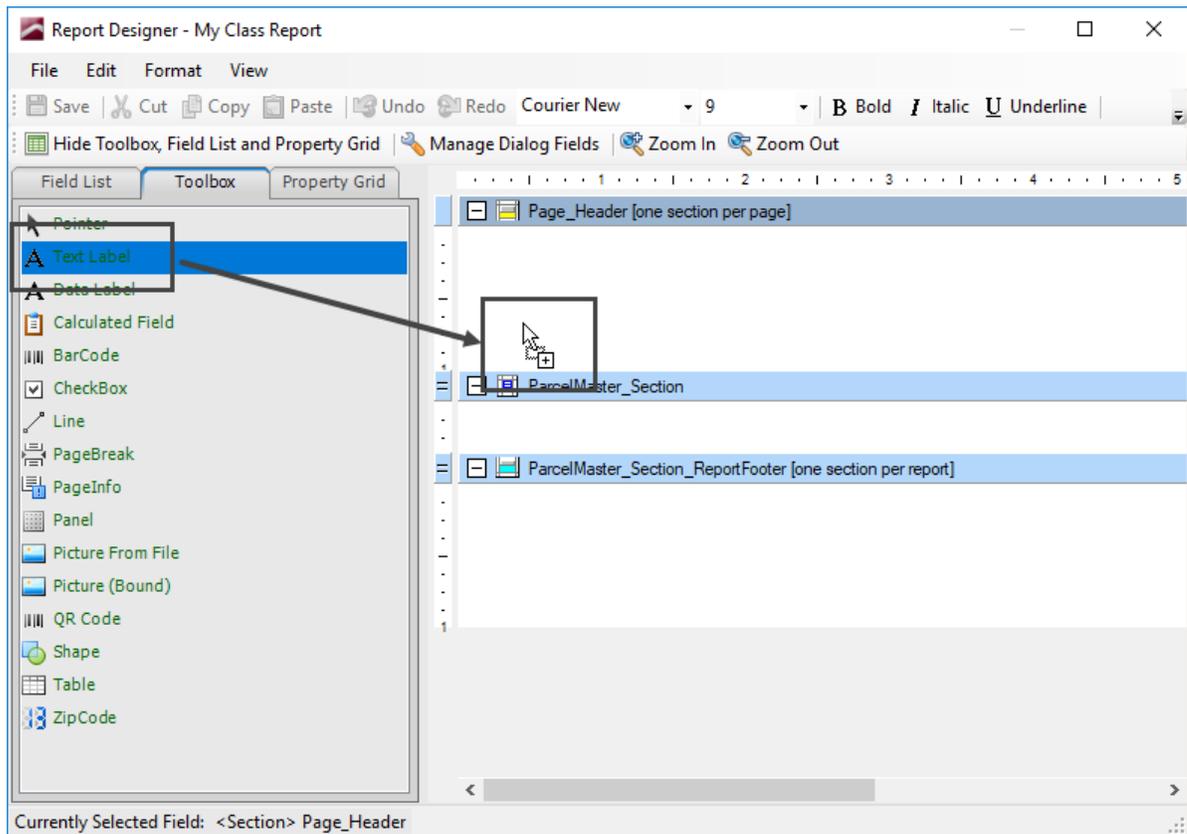
Label Field

1. Click the Toolbox tab.

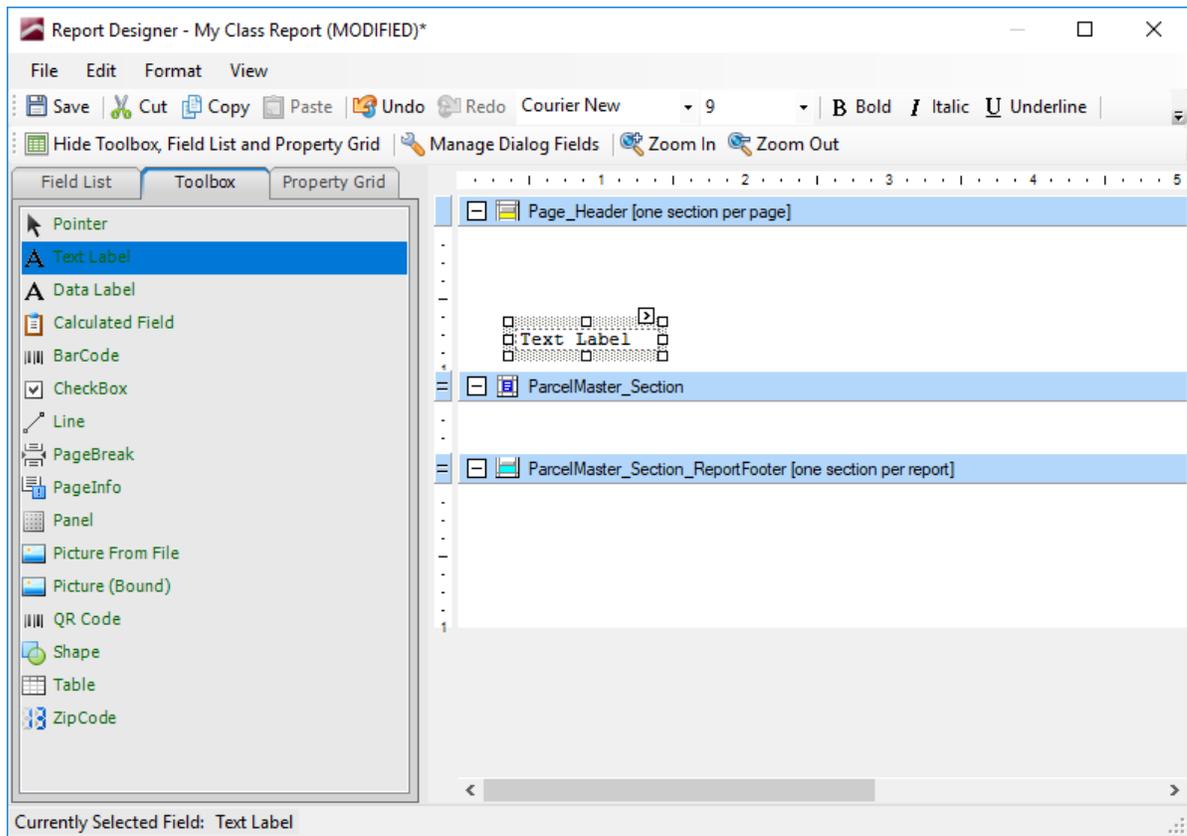


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2. Position your cursor on top of Text Label, press and hold down the left mouse button, and drag your cursor to the bottom left of the Page Header.

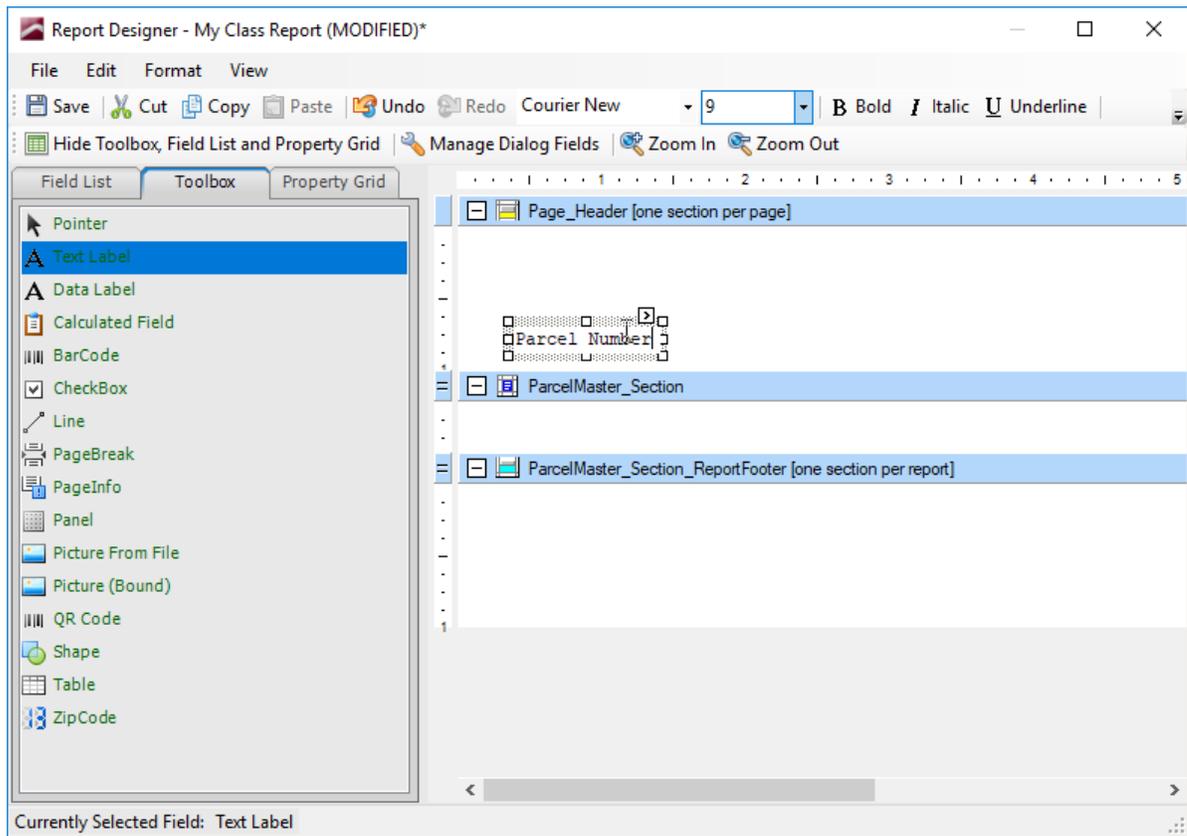


3. Release your mouse button. The label is placed, and defaults to Text Label.

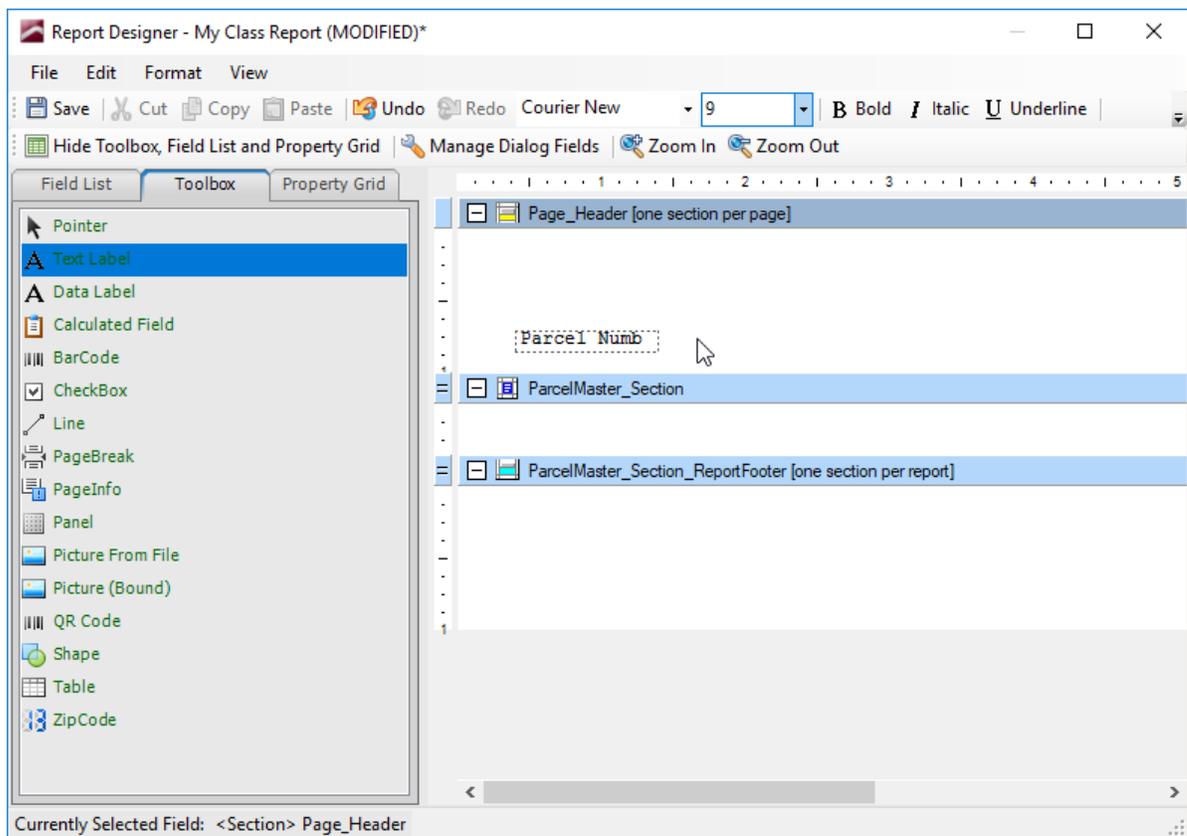


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4. While the field is "selected" (surrounded by a border and handles), type Parcel Number. Do not press Enter.



5. Click an area outside the selection box to "place" the label field.

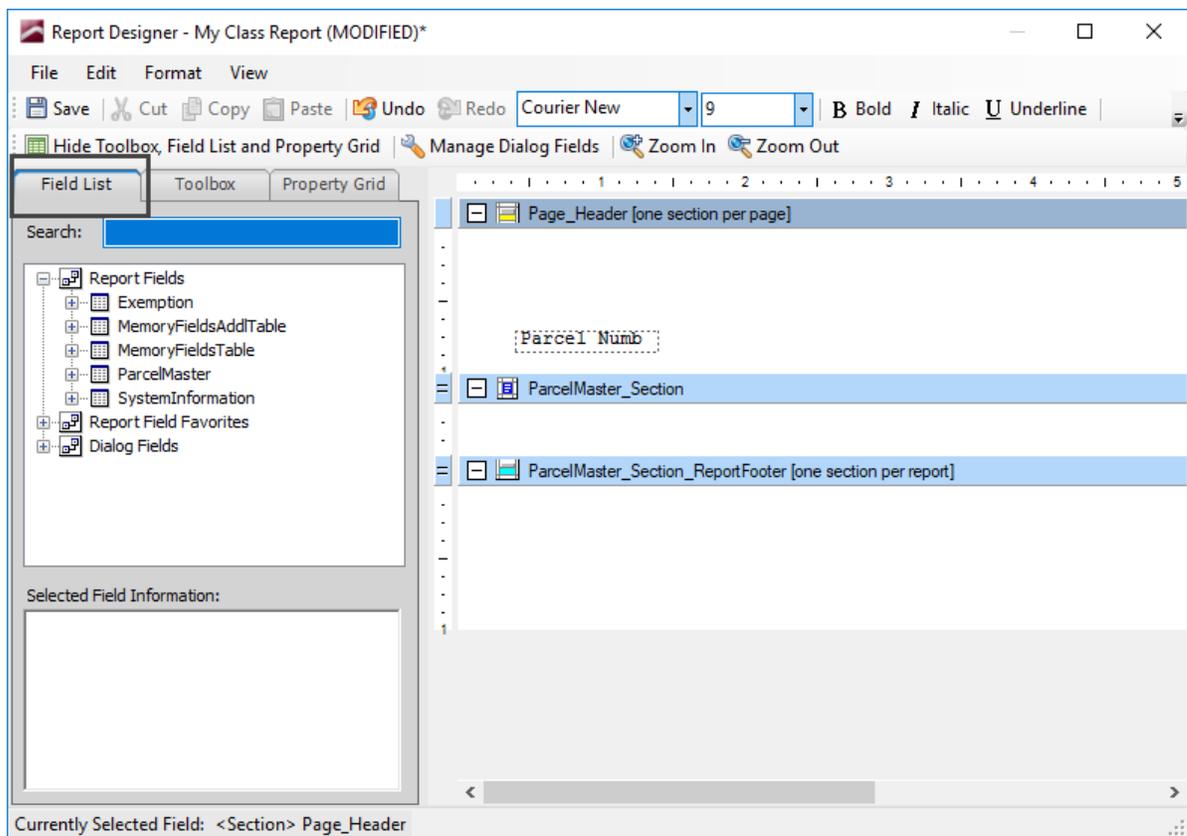


Your screen may resemble the screen shot above, where we can't see the entire word, "Number." Resizing a field will be covered shortly.

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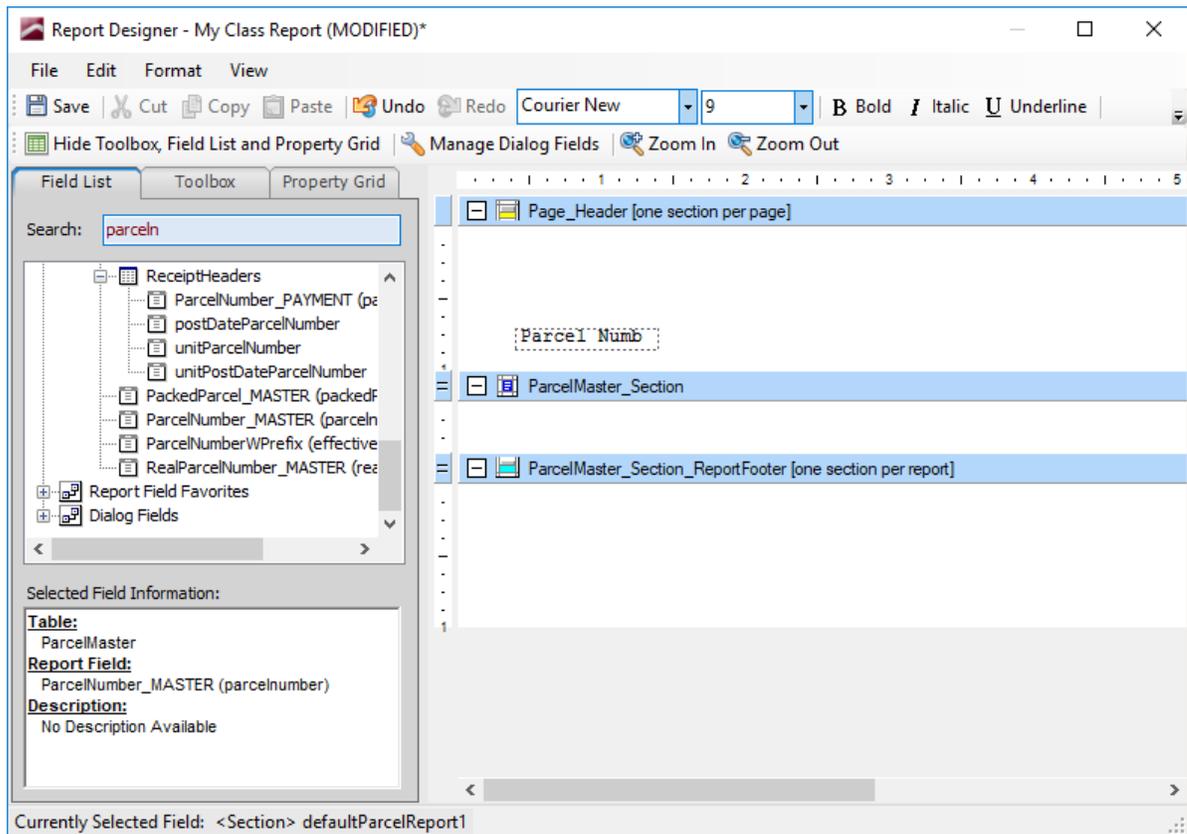
Data Field

1. Click the Field List tab.



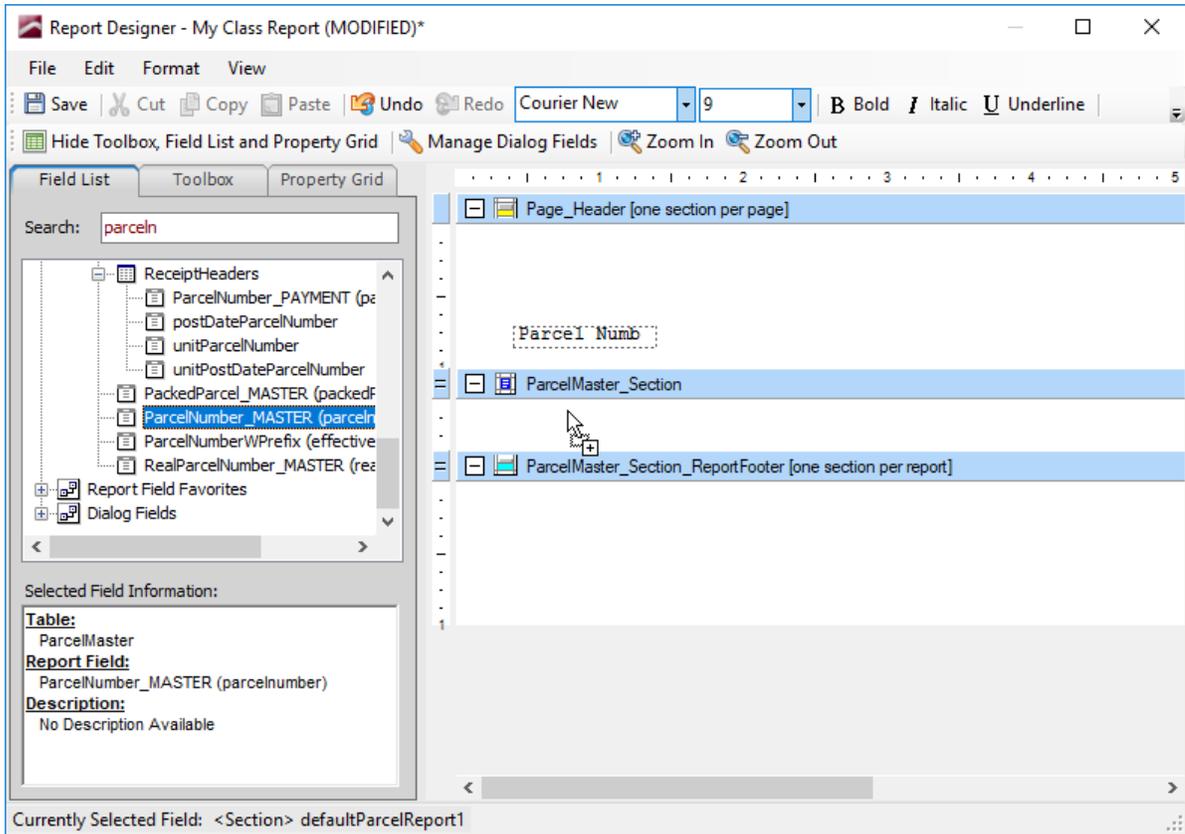
2. We want to add the data field that will bring in the parcel number. We can expand the ParcelMaster list beneath Report Fields and scroll until we find it, or we can search for it.

Position your cursor in the Search box and type **parceln**. As each character is typed, the intelligent search features kicks in and tries to find matching fields.

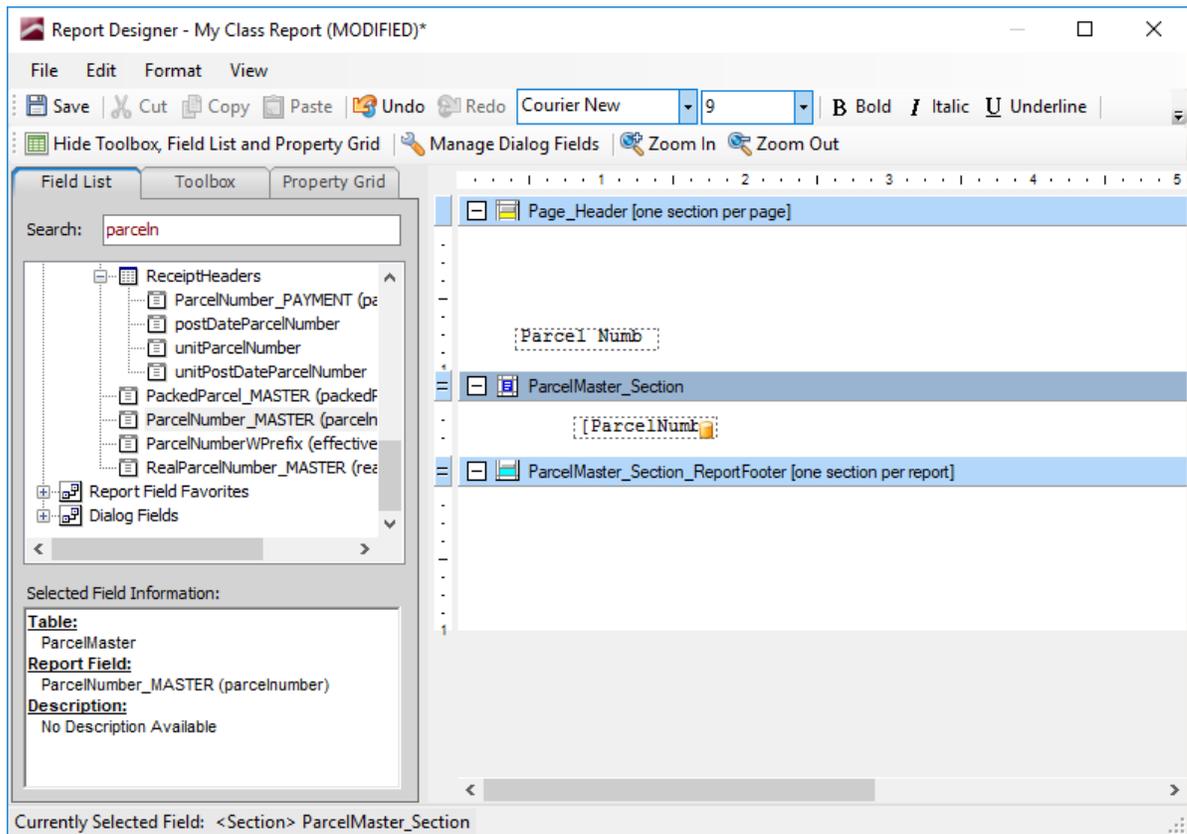


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3. Position your cursor on top of ParcelNumber_MASTER, press and hold down the left mouse button, and drag your cursor to the Detail section, below the location of the label field from the last exercise.



4. Release your mouse button and click an area outside the selection box to place the data field.

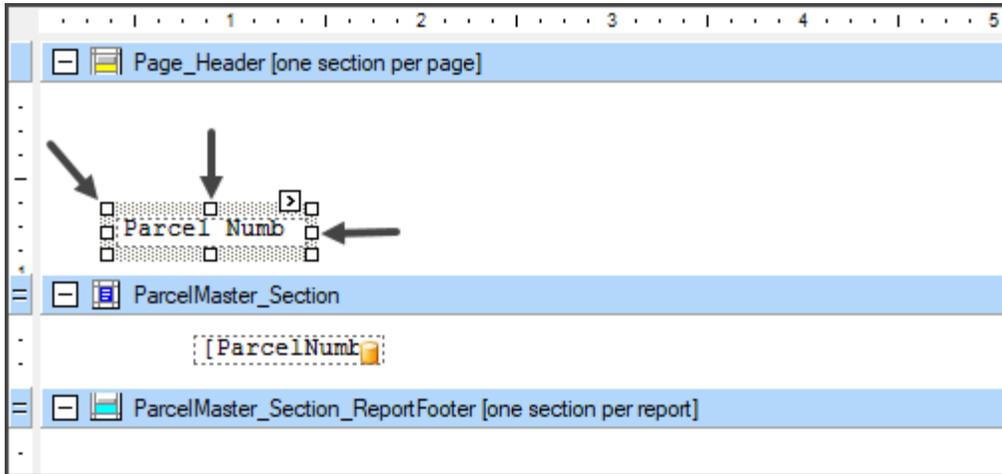


Your screen may resemble the screen shot above, where the alignment of the label field and the data field is off. Aligning fields will be covered shortly.

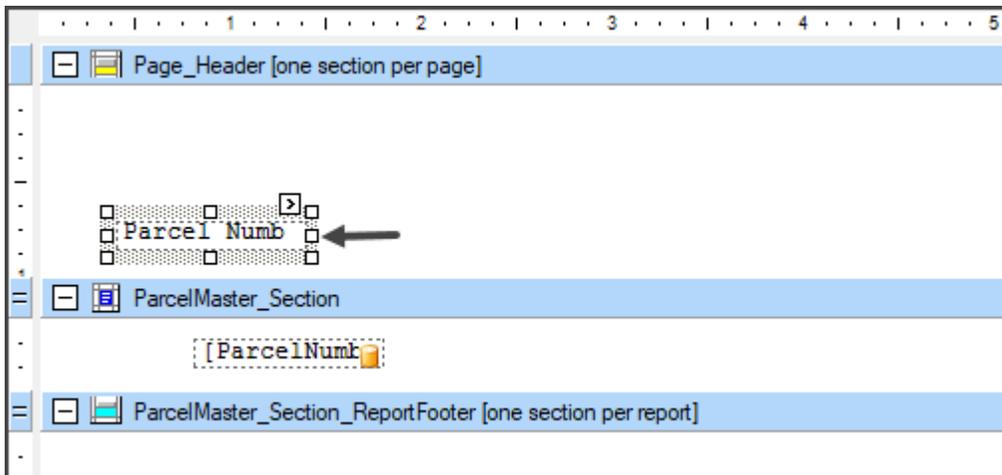
Resize a Field (Stretch; Shrink)

The Parcel Number label field from our last lesson is too small to accommodate the visibility of all letters.

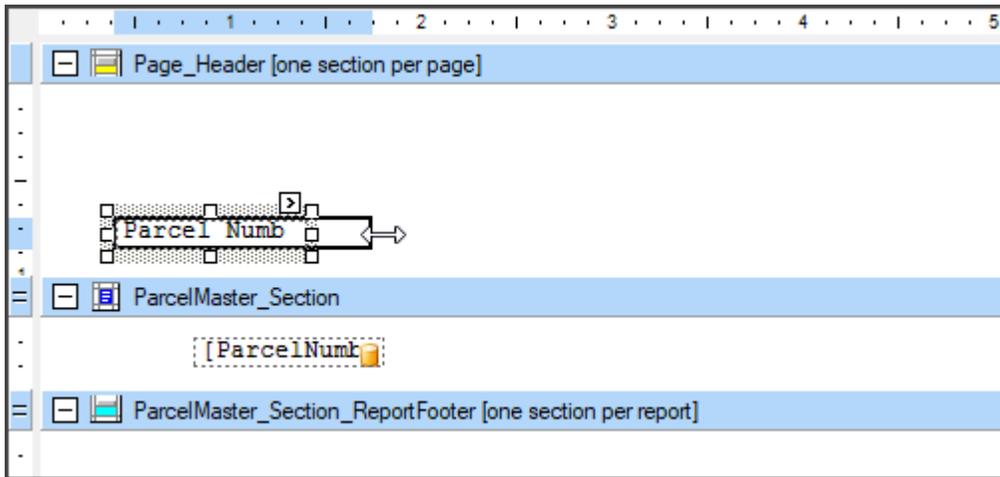
1. Click on top of the Parcel Number label field. Notice the handles that surround it.



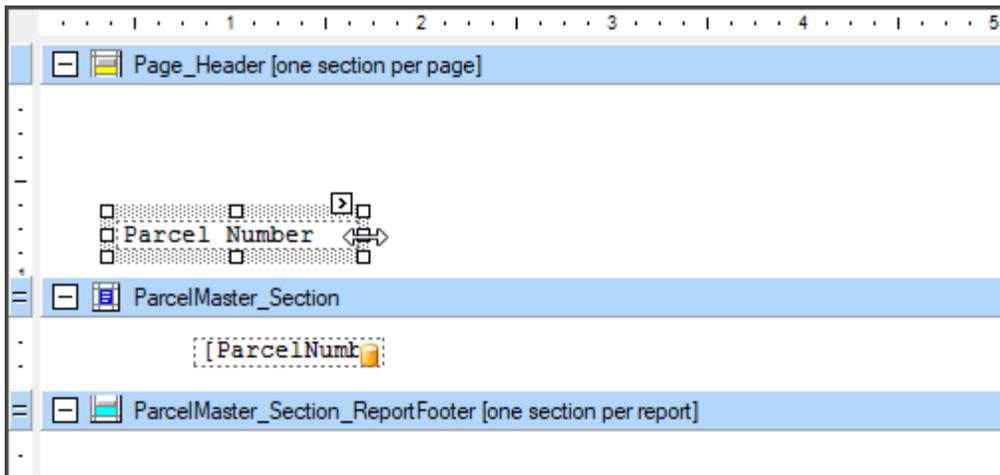
2. Position your cursor over the handle that appears along the right side of the selection box.



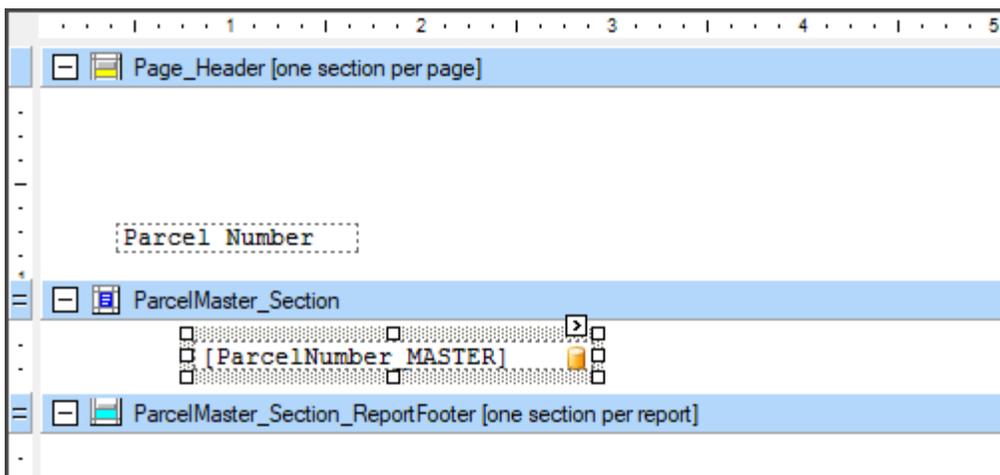
3. Press and hold the left mouse button and drag your cursor to the right.



4. Release the mouse button.



5. Repeat for the data field.

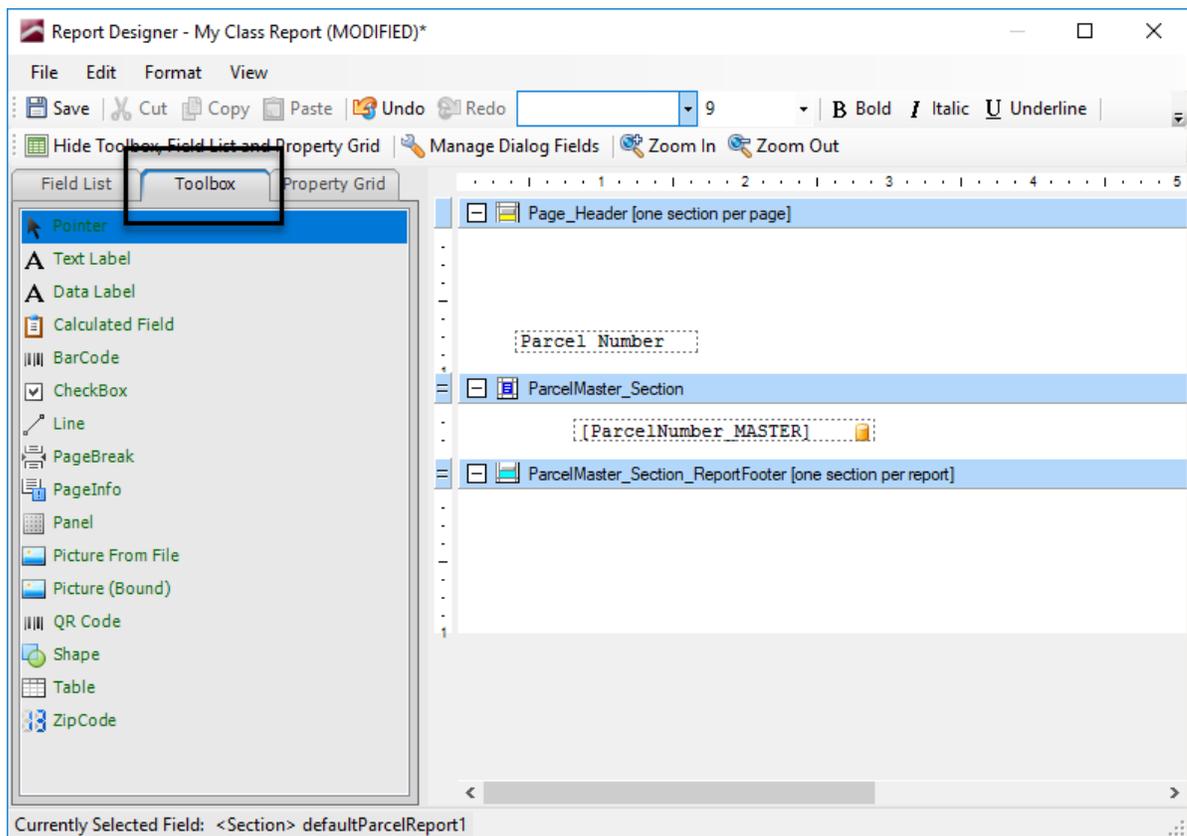


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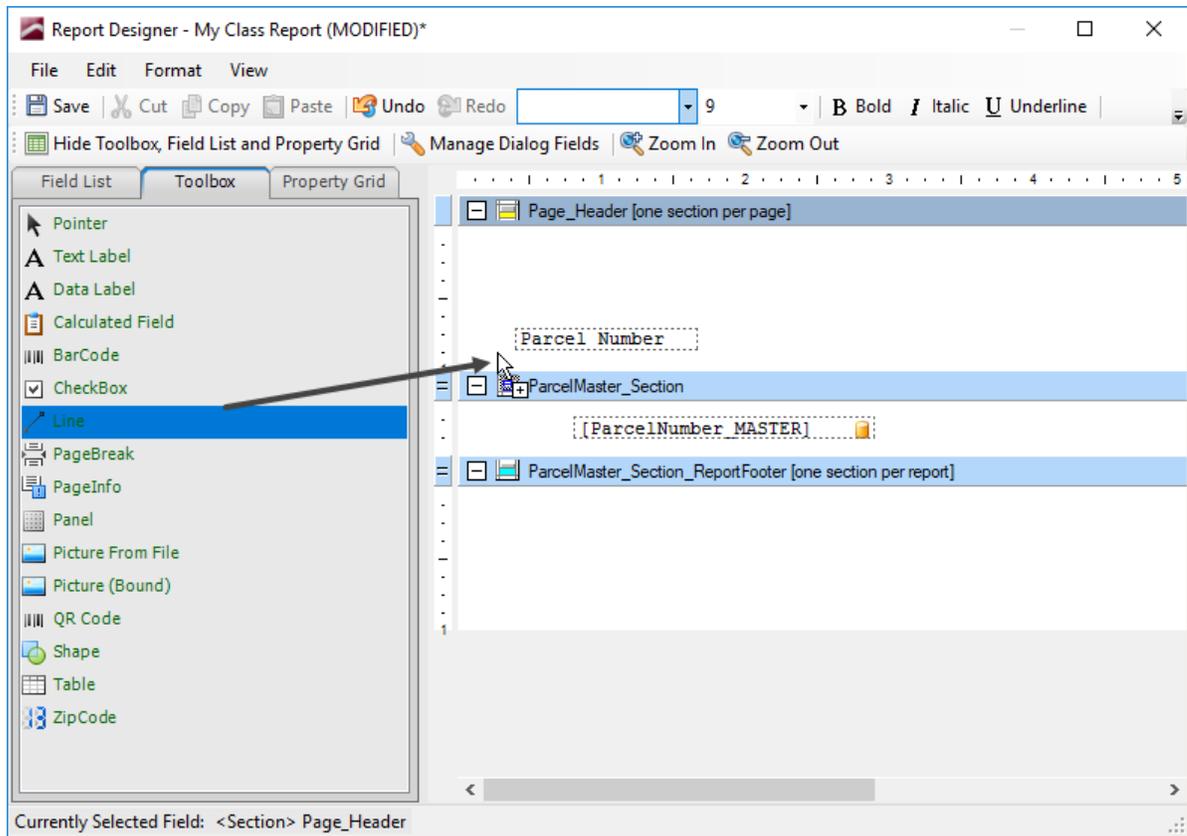
Add an Object (Line; Shape; Picture; etc.)

This lesson adds a line to the Page Header, to make the label fields that get placed there "pop" as headings.

1. Click the Toolbox tab.

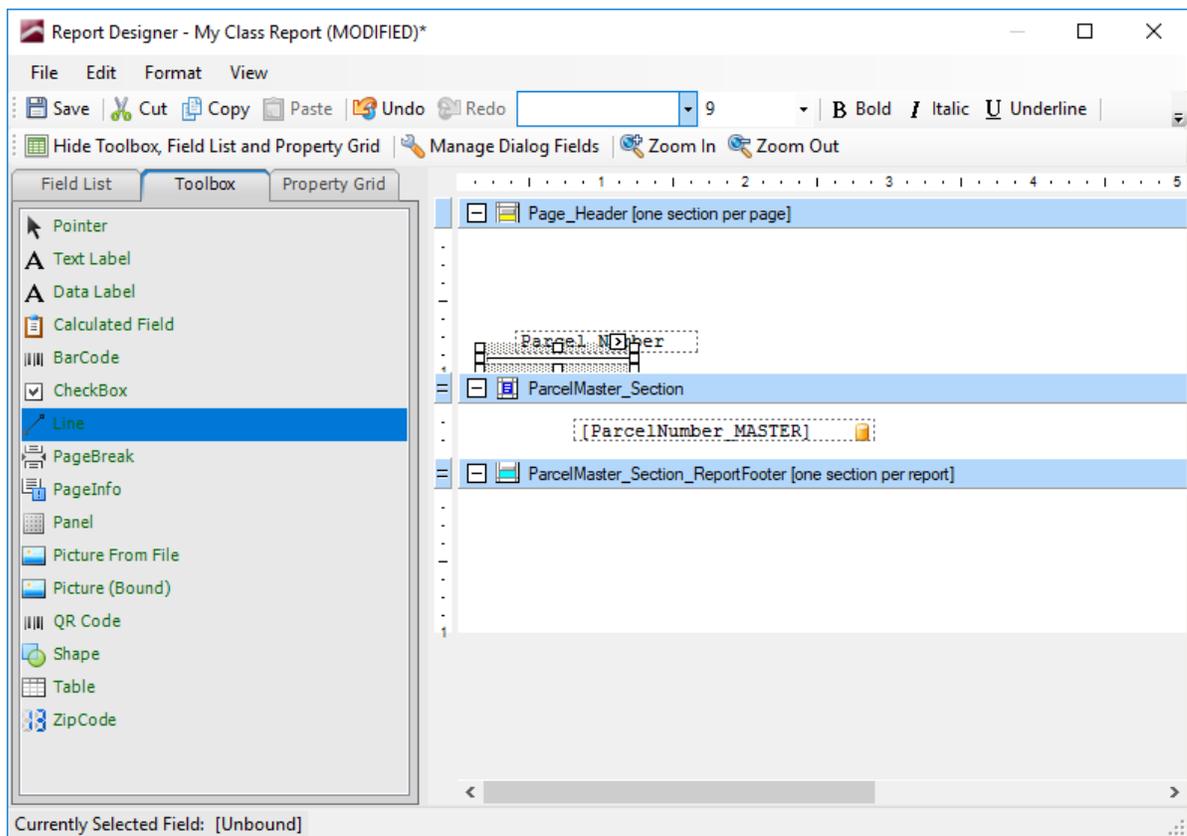


2. Position your cursor on top of Line, press and hold down the left mouse button, and drag your cursor to a location beneath the Parcel Number label field in the Page Header.



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3. Release your mouse button. The line is placed.

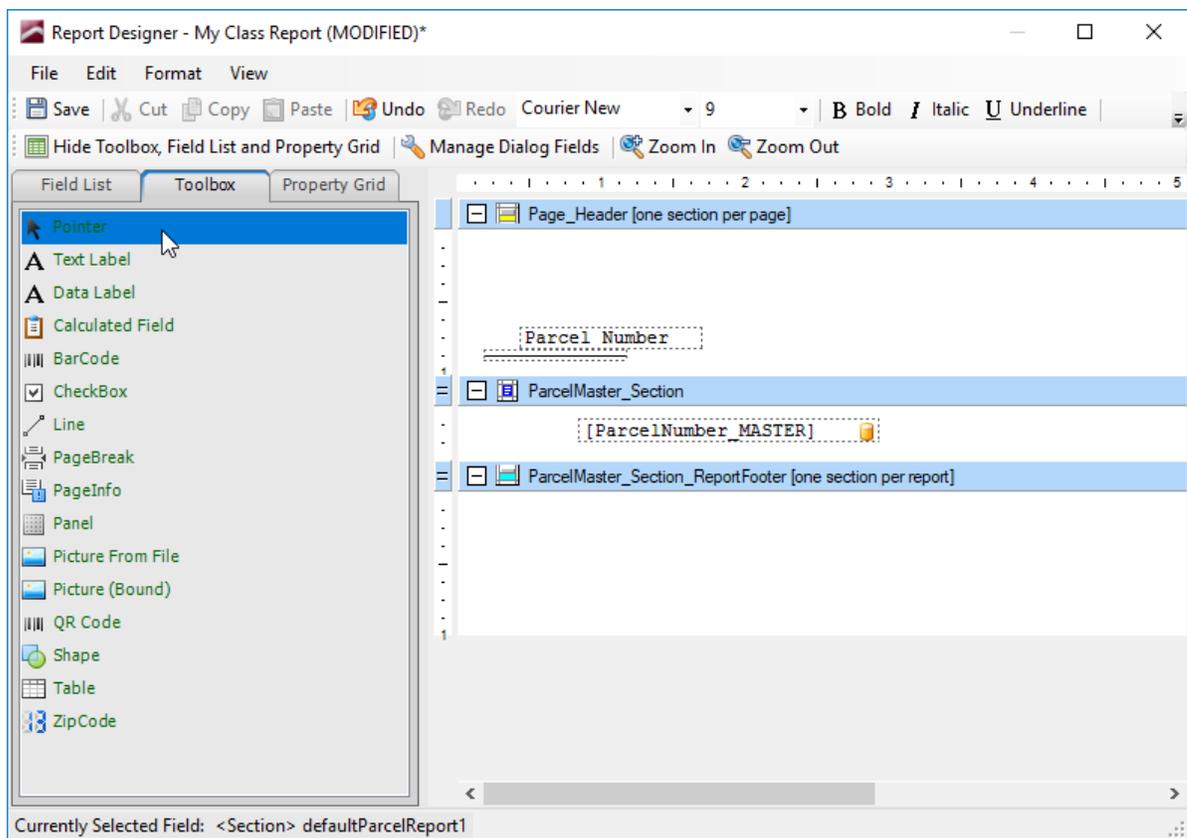


We can increase the length of the line by way of the handle, like we did for the label and data fields, or we can use the Property Grid tab. This will be covered shortly.

Align Fields

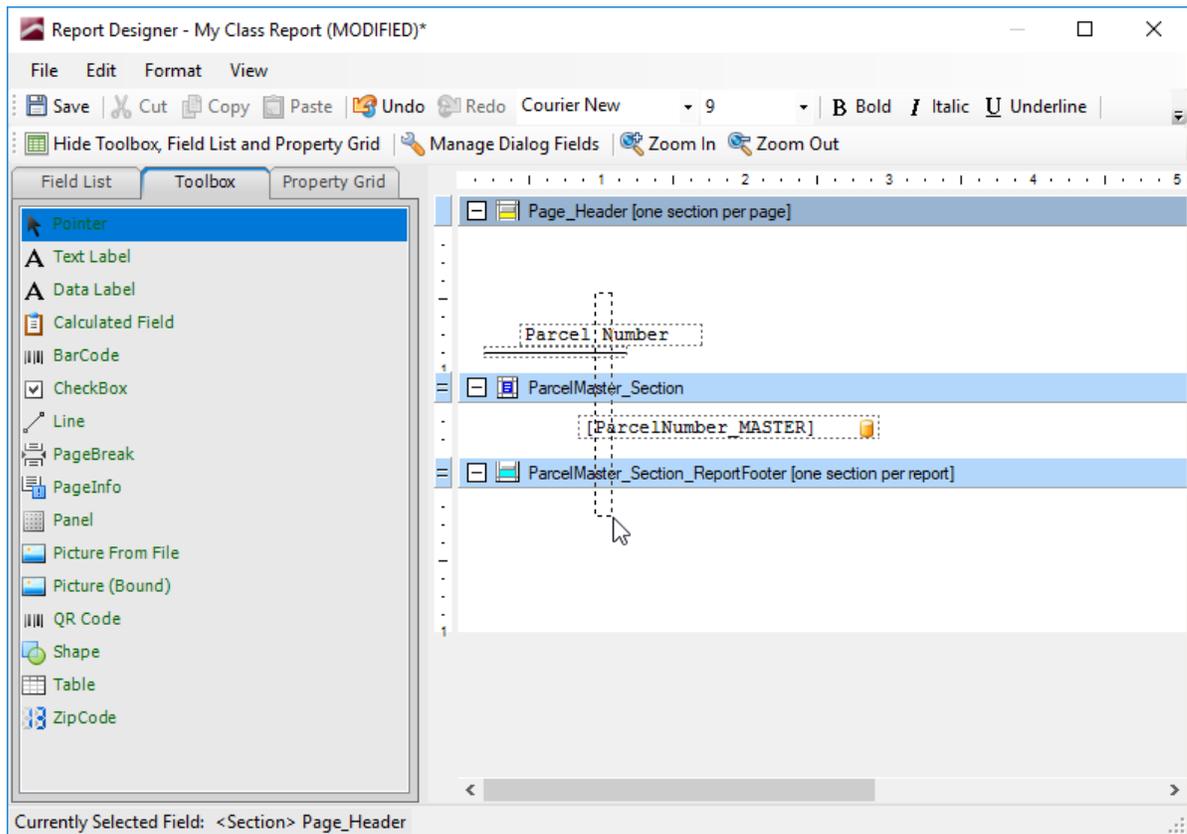
We now have three fields (two fields and one object; but for these purposes, we'll just use the term "fields") on our report, none of which are aligned along the same axis.

1. You should still be on the Toolbox tab. Click on Pointer.

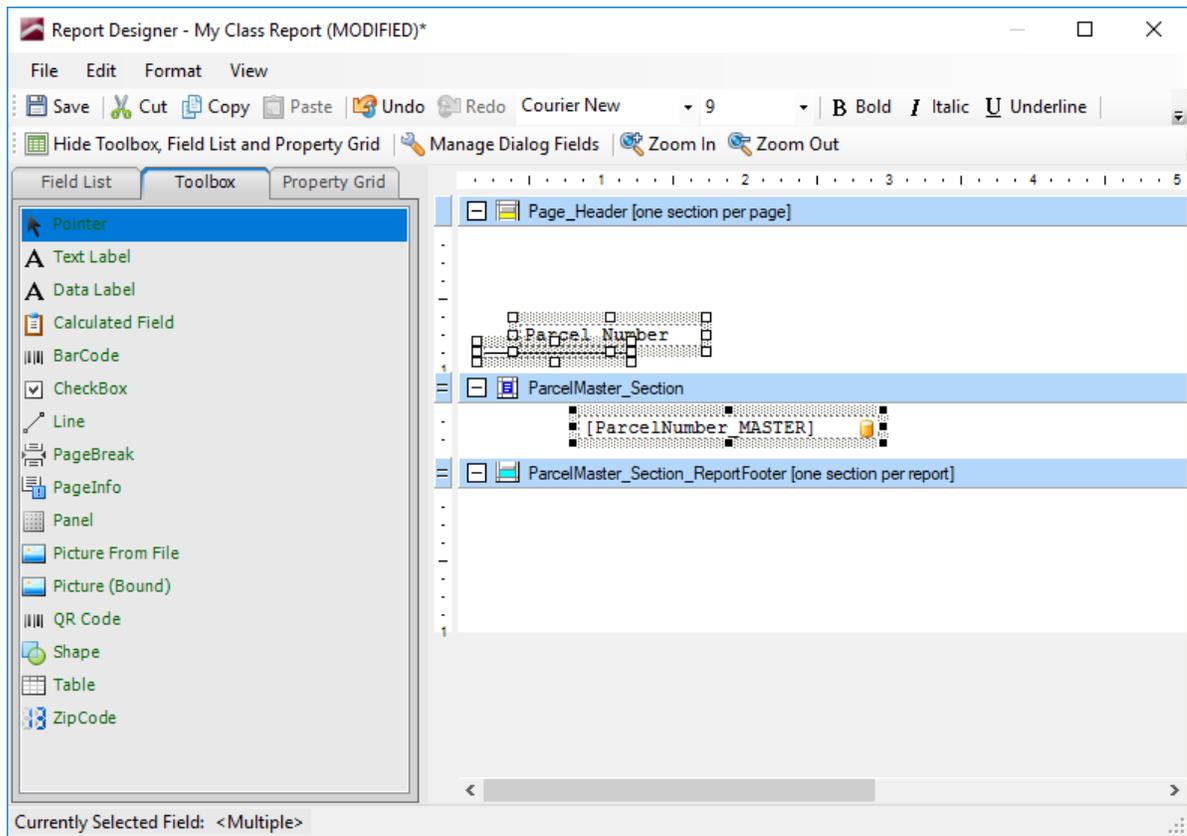


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2. Position your cursor above the Parcel Number label field, press and hold down the left mouse button, and drag your mouse down through all three fields.

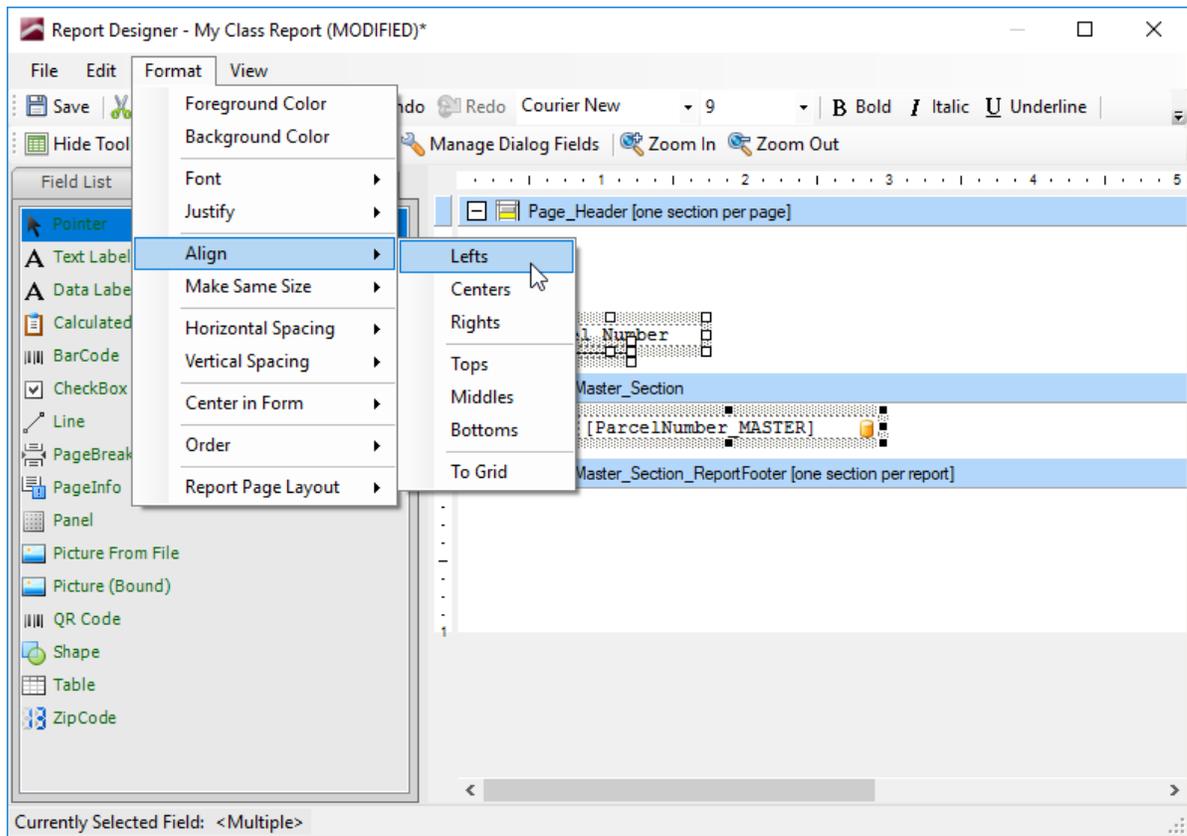


3. Release your mouse button. All three fields are selected.

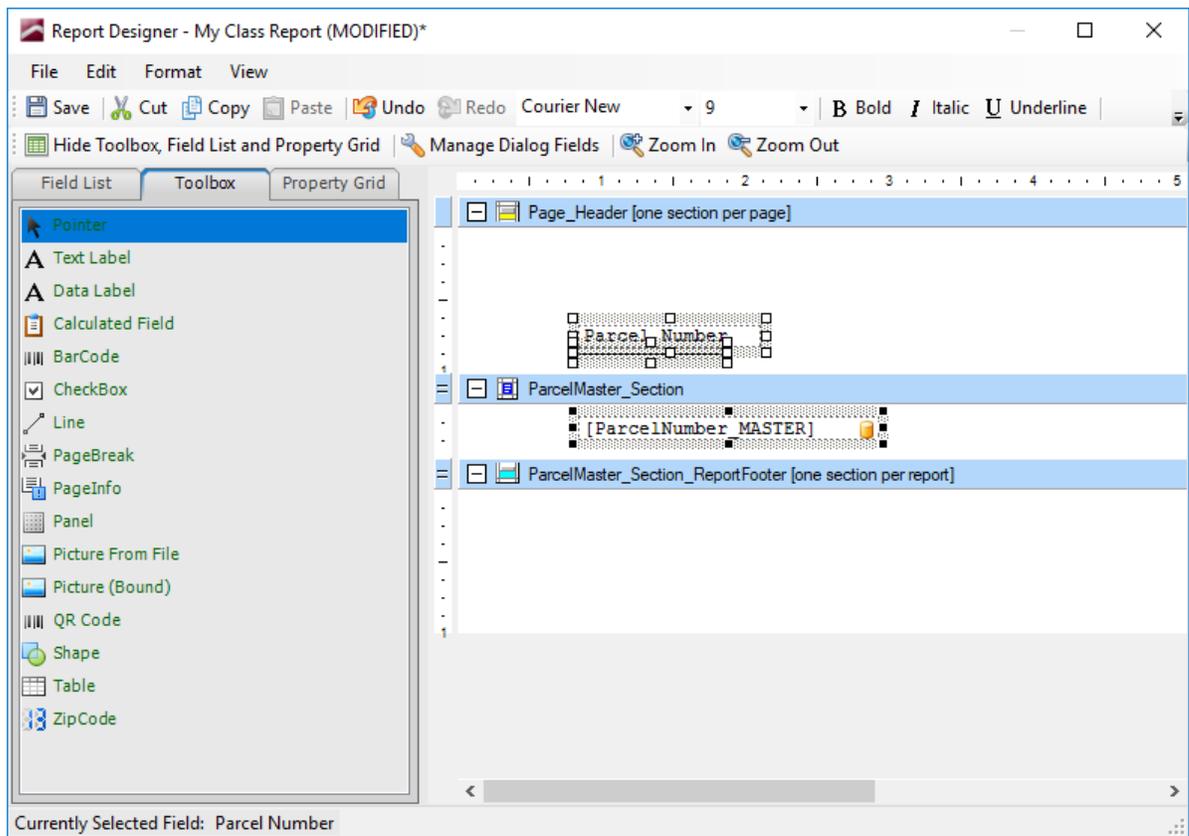


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4. Go to Format>Align and select Lefts.



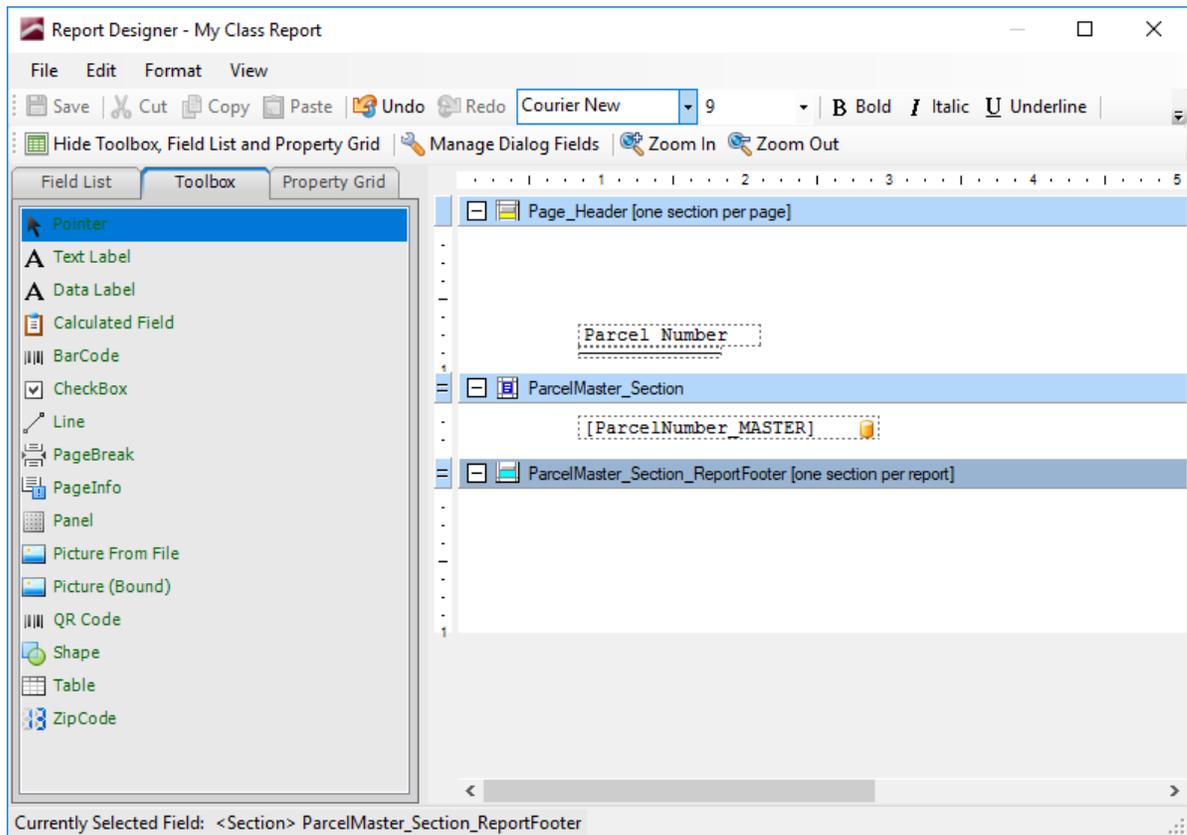
The fields are aligned.



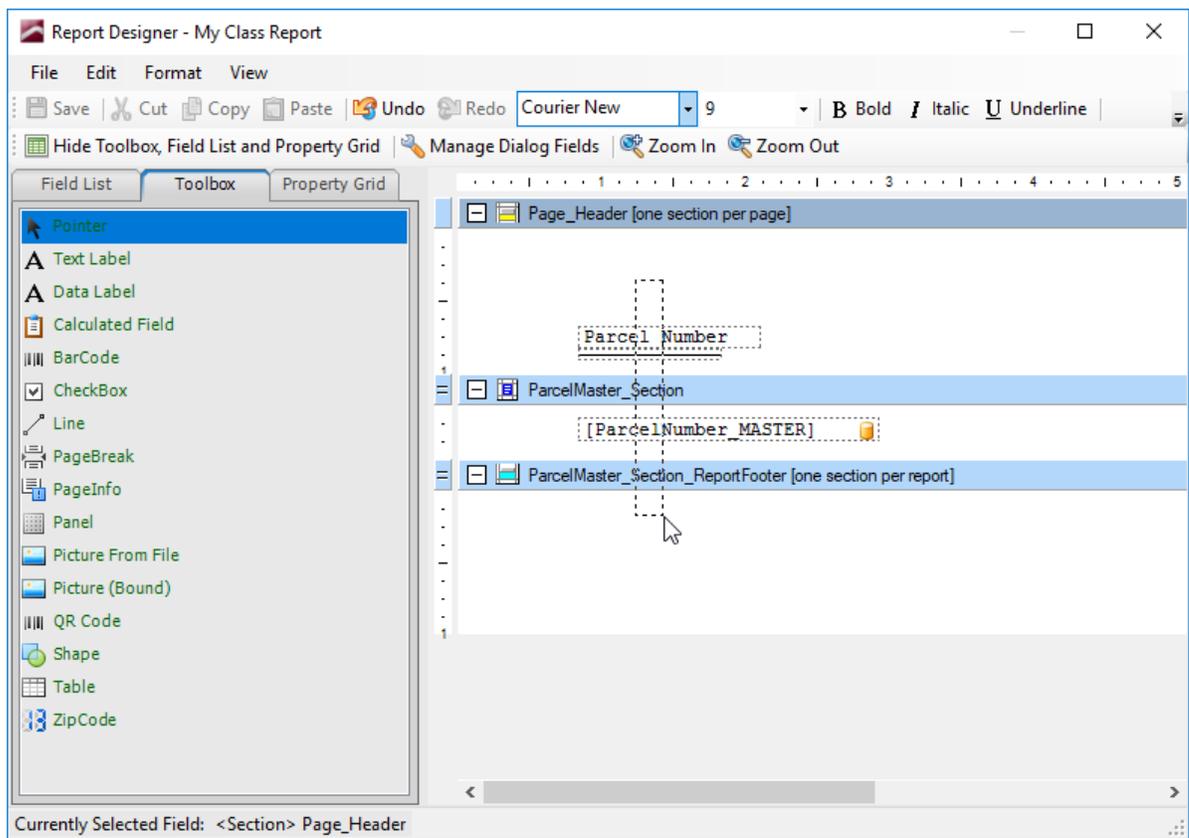
Move Fields

This lesson takes the three fields from the previous lesson and moves them to the left.

1. You should still be on the Toolbox tab, and Pointer should still be the active tool.

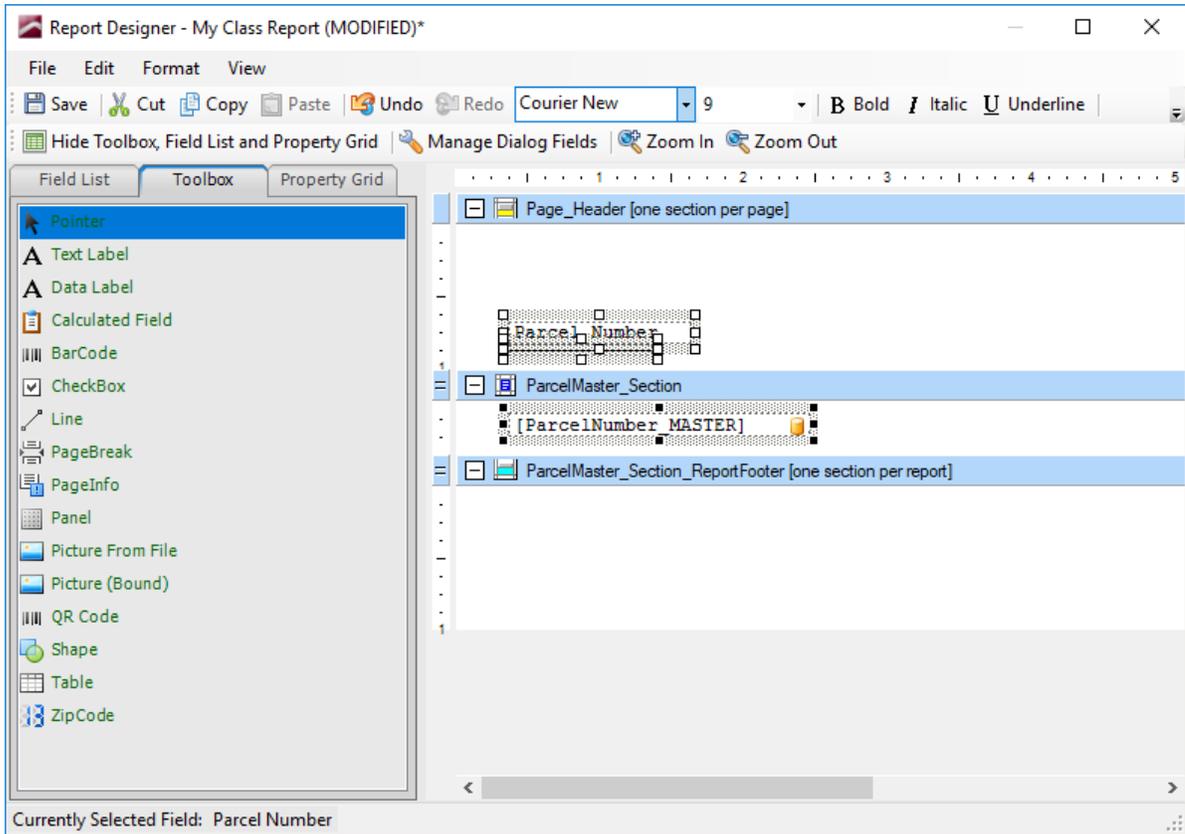


2. Repeat the selection method shown in the previous lesson.

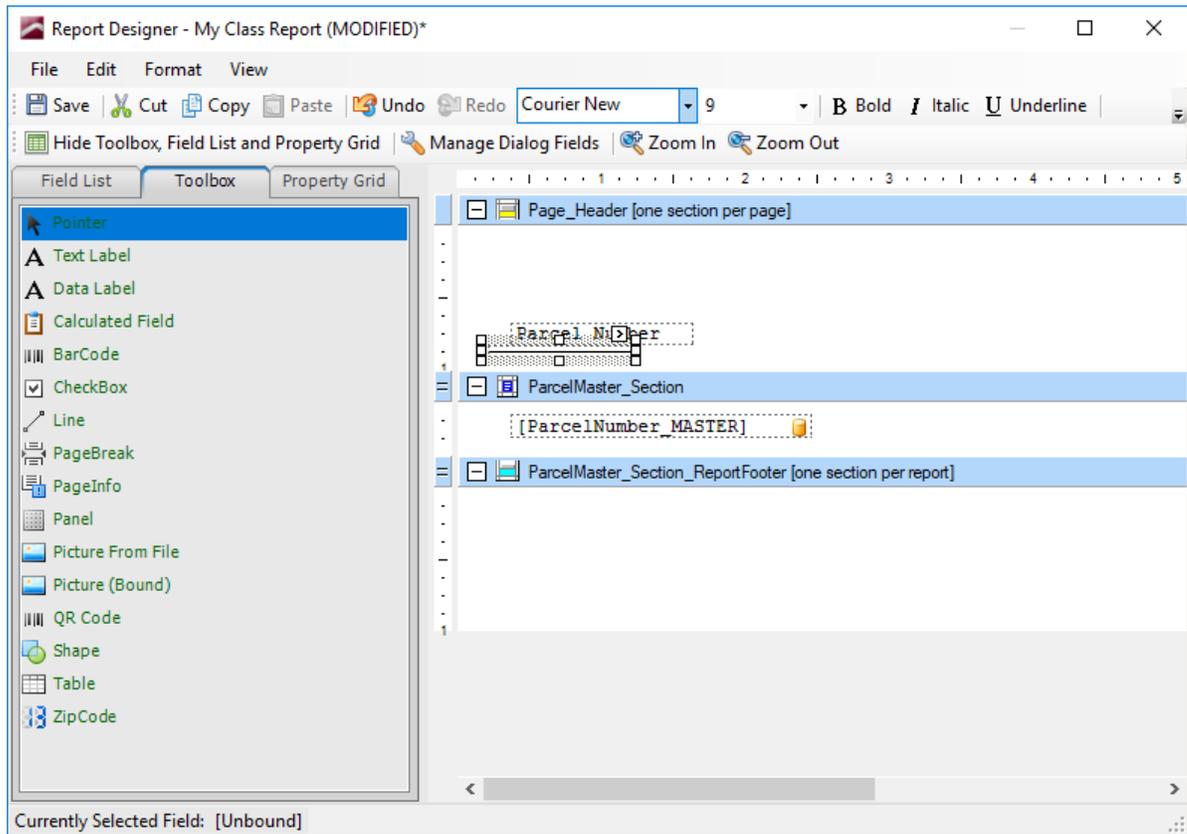


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3. You can either press and hold your left mouse button on any of the fields and click/drag, or use your keyboard's arrow keys. Regardless of your chosen method, move the fields to the left.



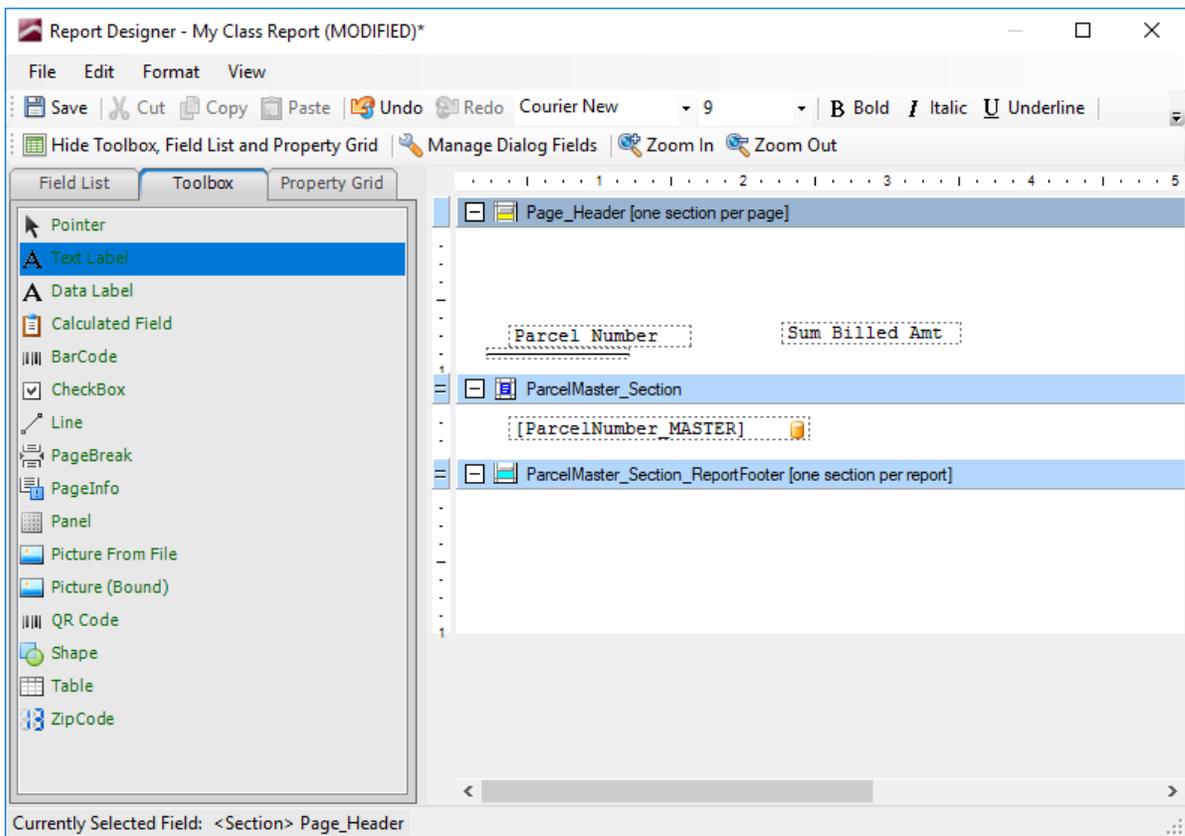
- Click outside any of them to remove the selection. Move the line object a little further left, using whichever method you're comfortable with.



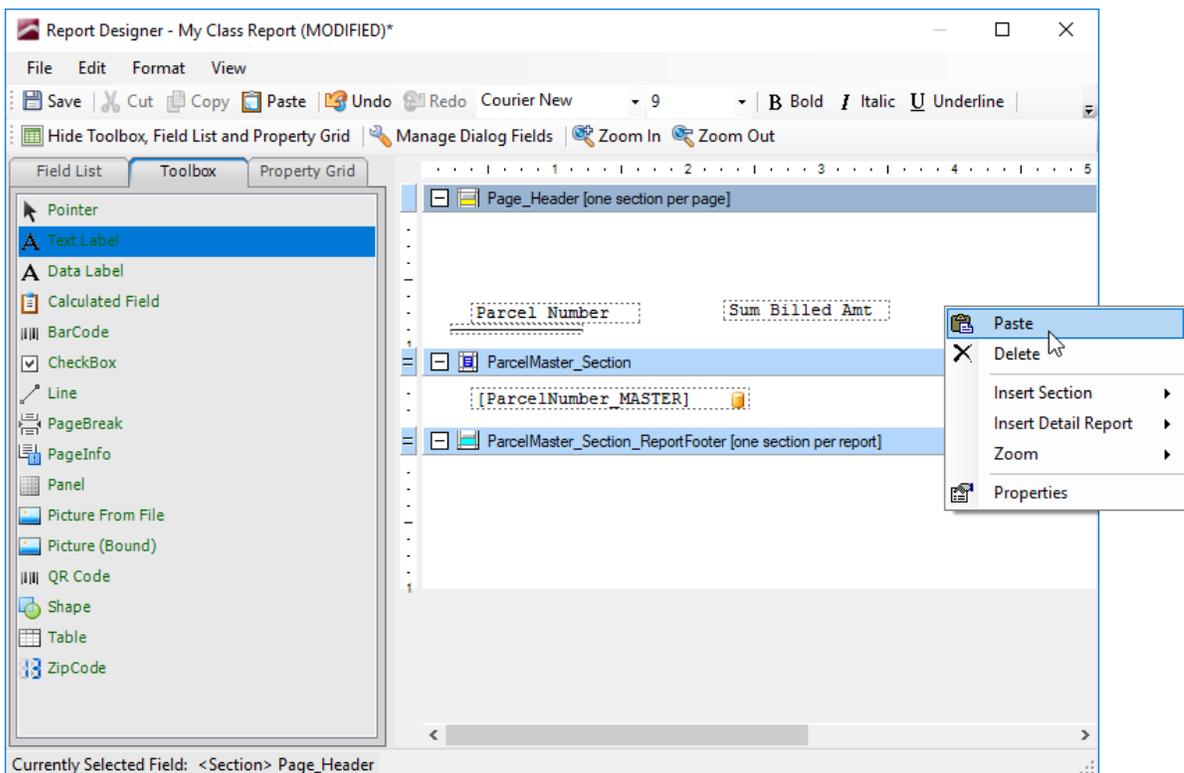
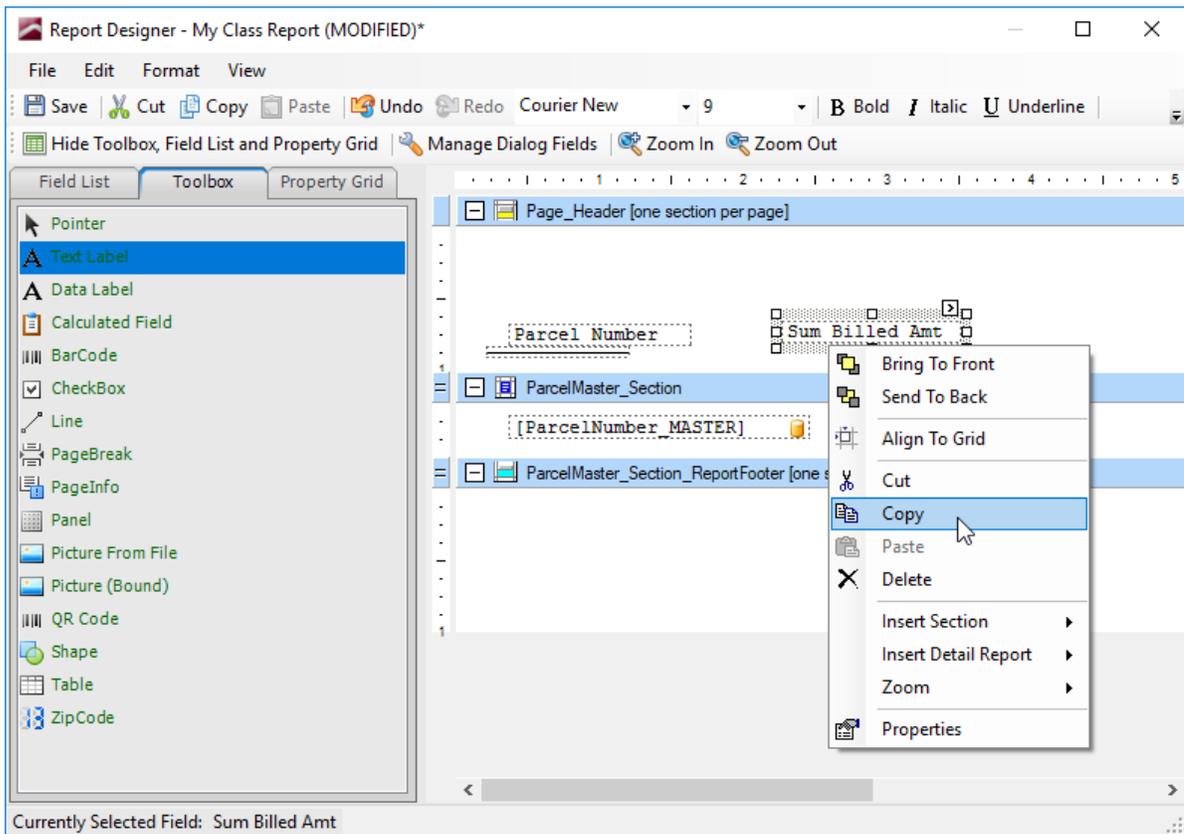
Summarize Fields

Numeric fields can be summarized in the footer of a report. In this lesson, we will add two additional data fields (and their accompanying label fields) that will be summarized in the Report Footer.

1. Click the Toolbox tab and add a Text Label called Sum Billed Amt. If necessary, stretch the field to accommodate the letters.

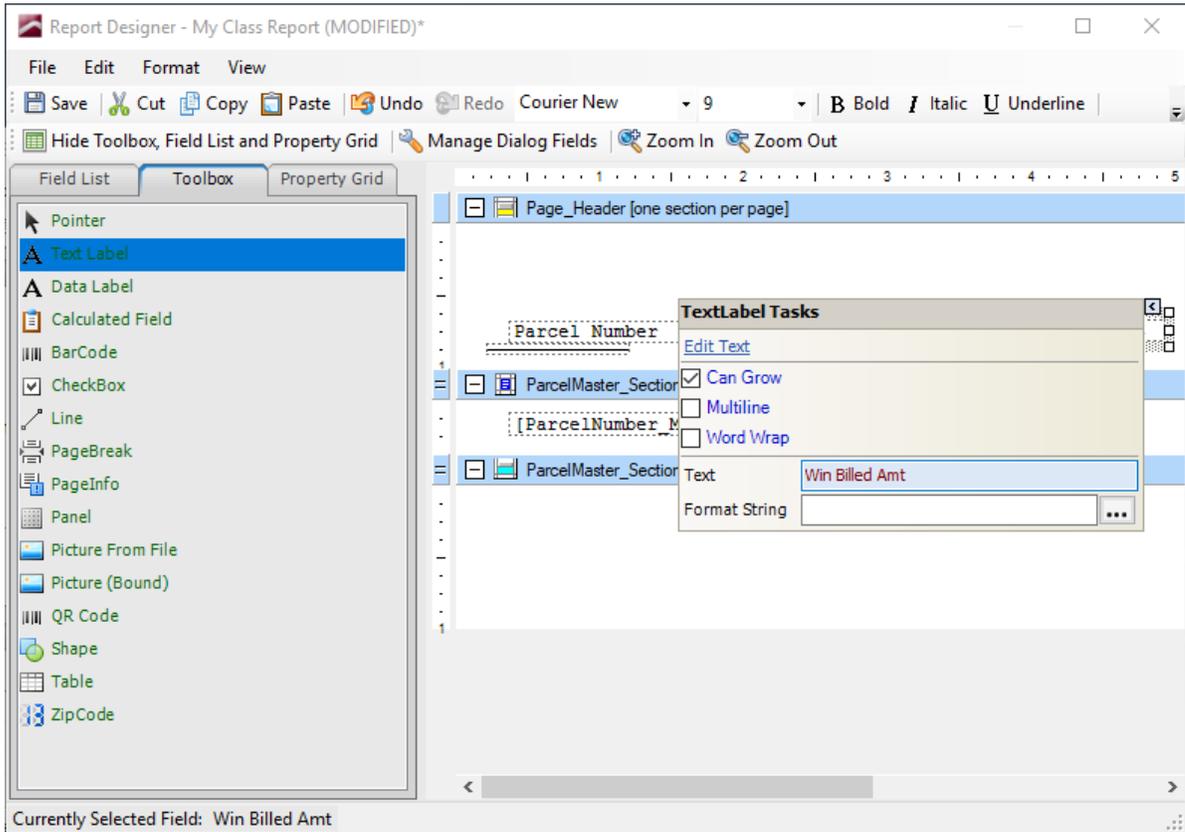


2. Add another label field for Win Billed Amt. You can either repeat the action from step 1, or copy/paste the label from step 1 (used in this example).

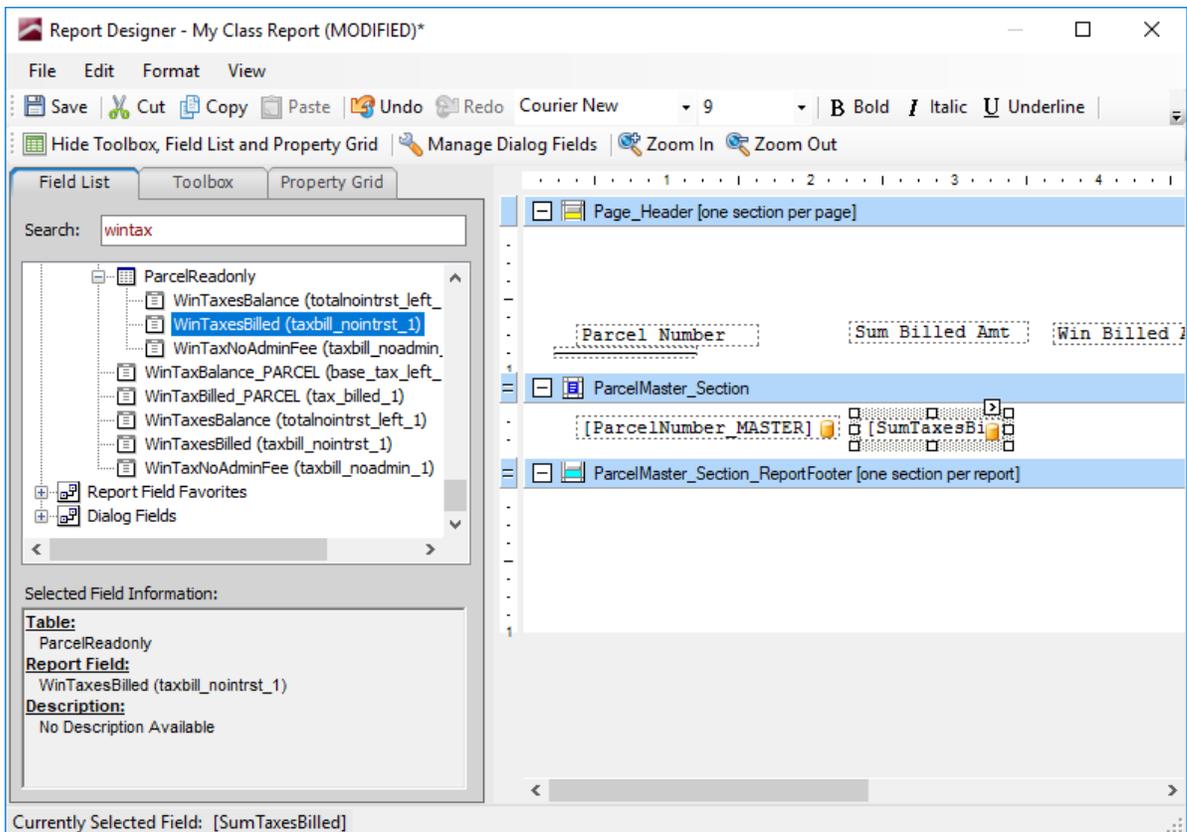
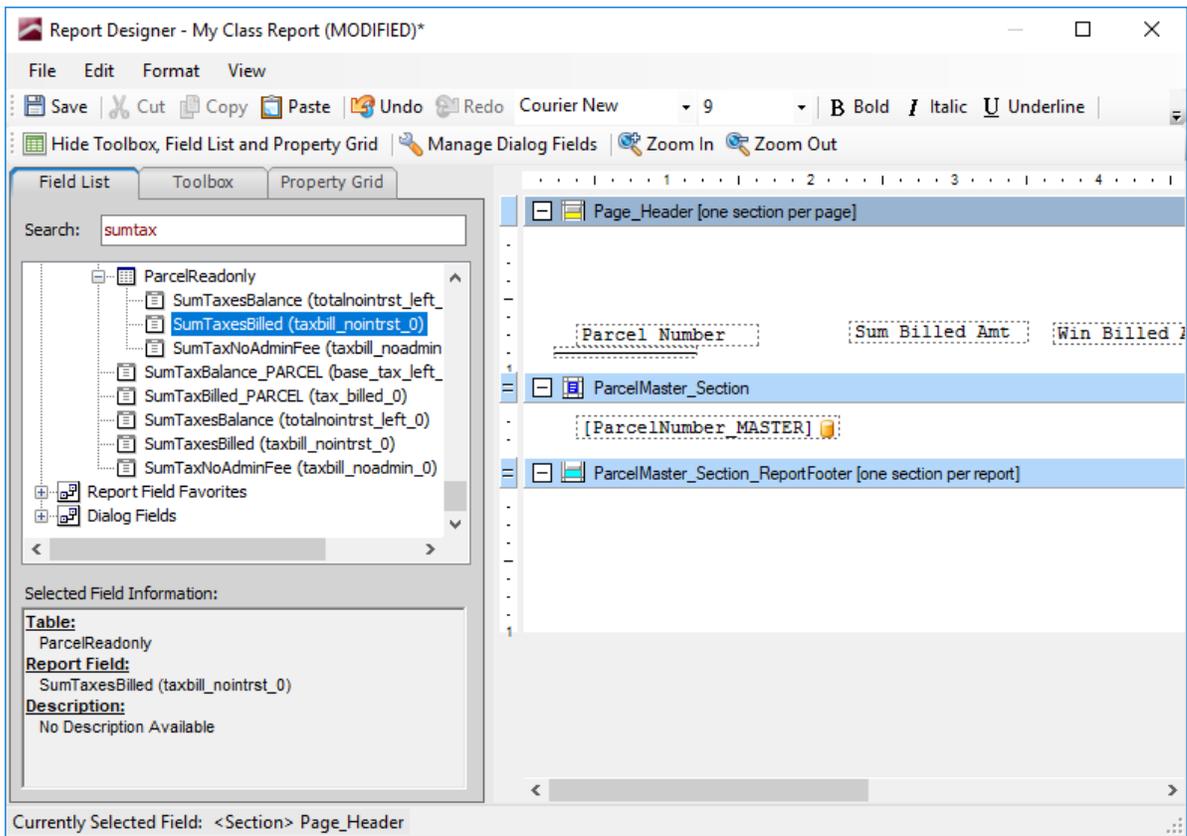


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Click the caret in the upper right of the label field and change Sum to Win (field properties will be covered in more detail later in the class).

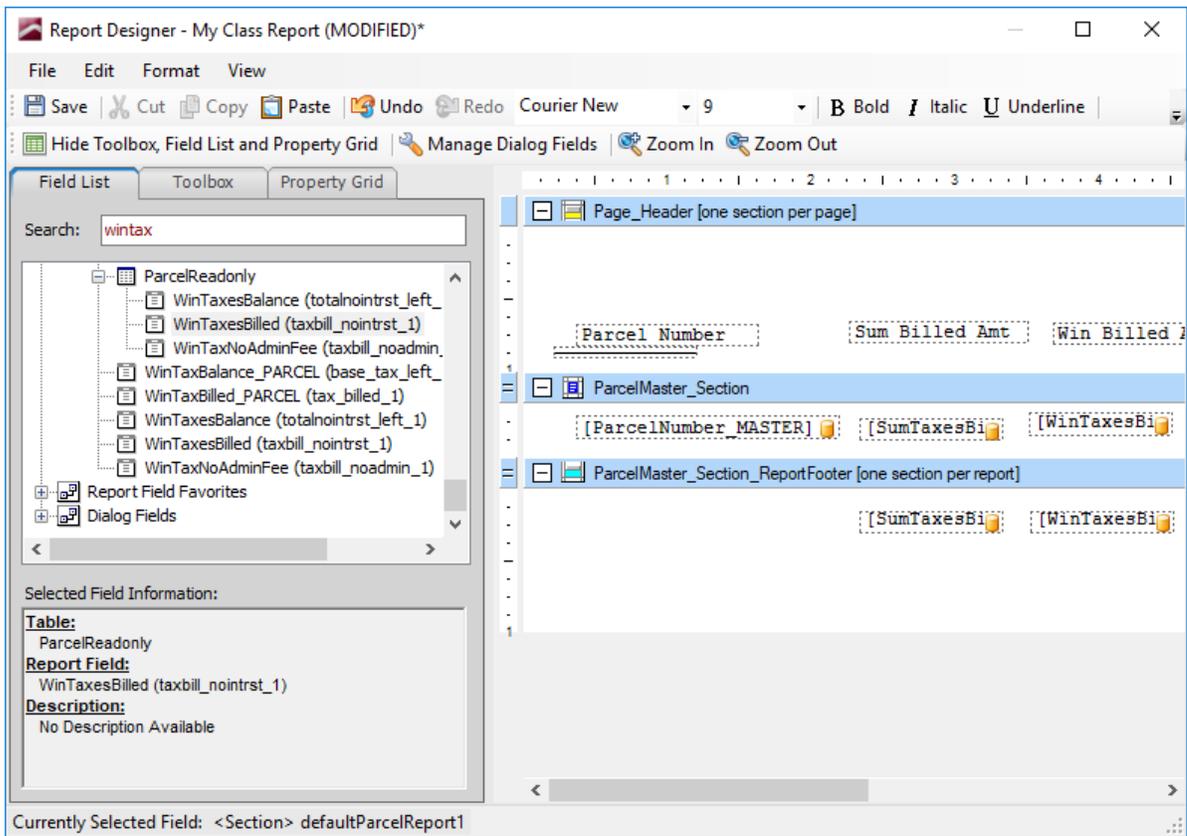


3. Add the data fields to pull in the summer and winter billed amounts.

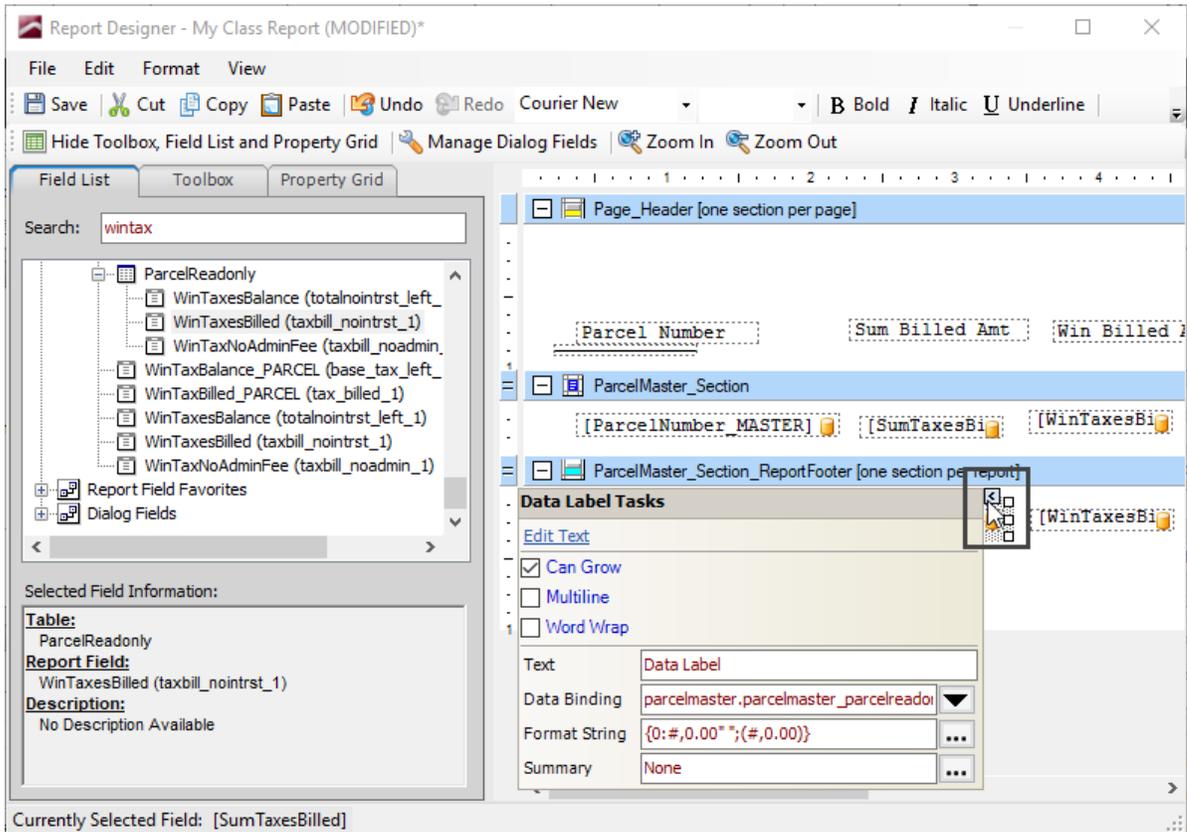


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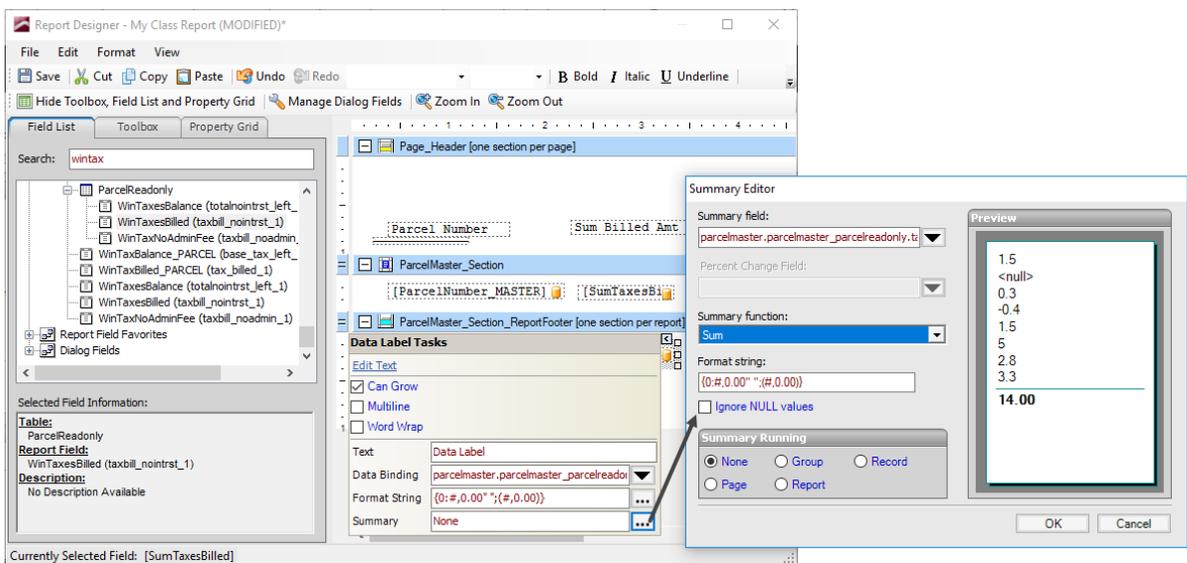
4. Copy/paste both of them into the Report Footer.



- Click the SumTaxesBilled data field to select it, then click the caret to open its properties.

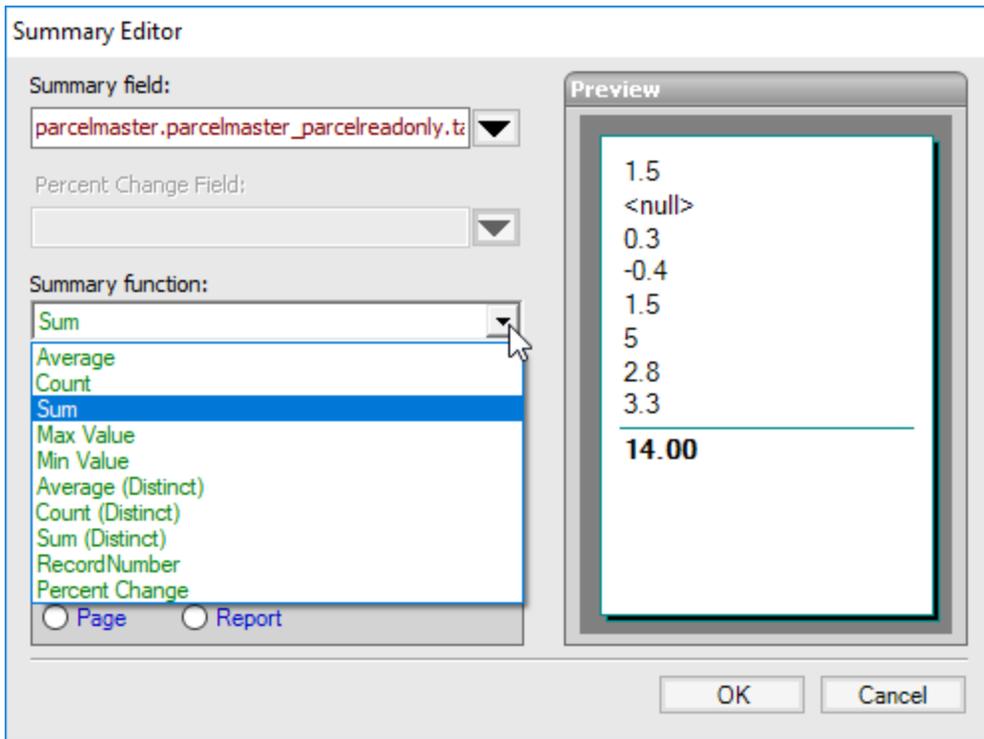


- Click the ellipsis at the right edge of the Summary setting.



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7. Click the dropdown at the right edge of the Summary Function setting.



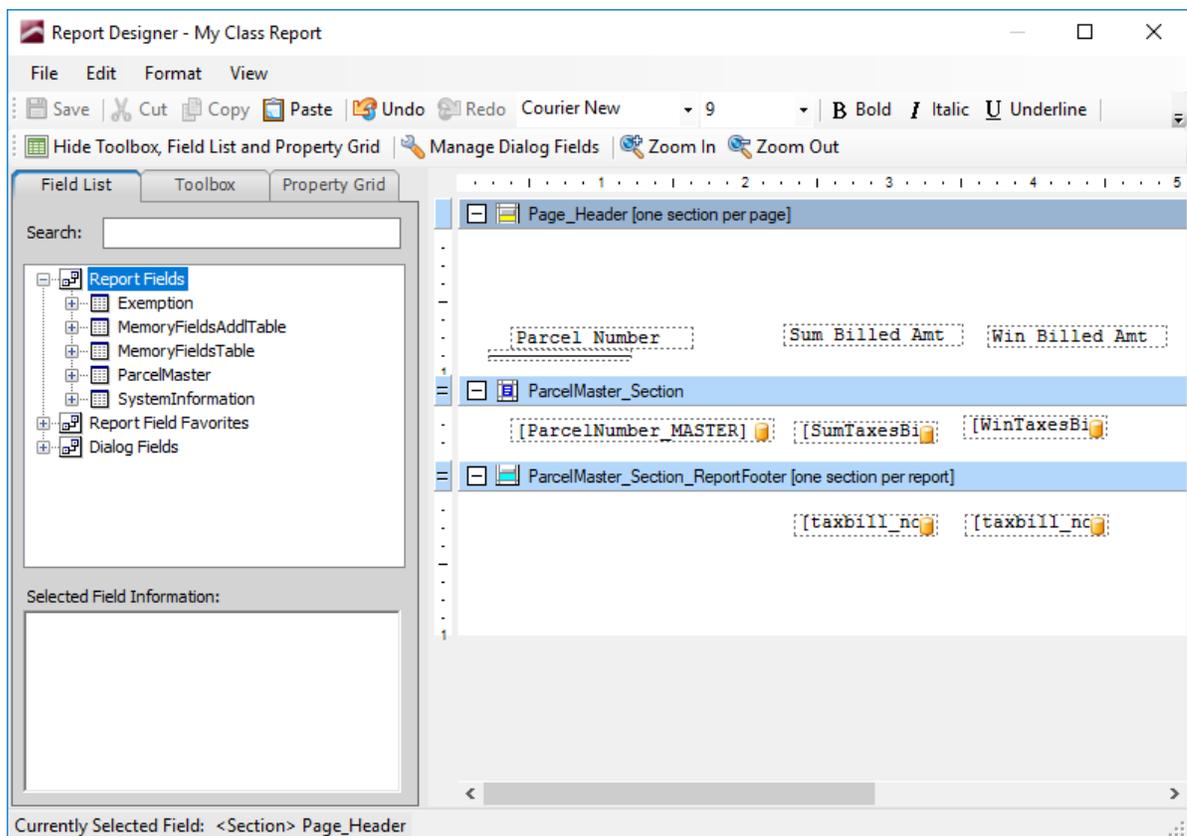
The image shows the Summary Editor dialog box. The Summary field is set to 'parcelmaster.parcelmaster_parcelreadonly.ta'. The Summary function dropdown is open, showing a list of functions: Sum, Average, Count, Sum, Max Value, Min Value, Average (Distinct), Count (Distinct), Sum (Distinct), RecordNumber, and Percent Change. The 'Sum' function is selected. The Preview window shows a list of values: 1.5, <null>, 0.3, -0.4, 1.5, 5, 2.8, and 3.3. A horizontal line is drawn below the last three values, and the total '14.00' is displayed below the line. The dialog has OK and Cancel buttons at the bottom right.

[class discussion of the options]

Add Date and Page Numbering

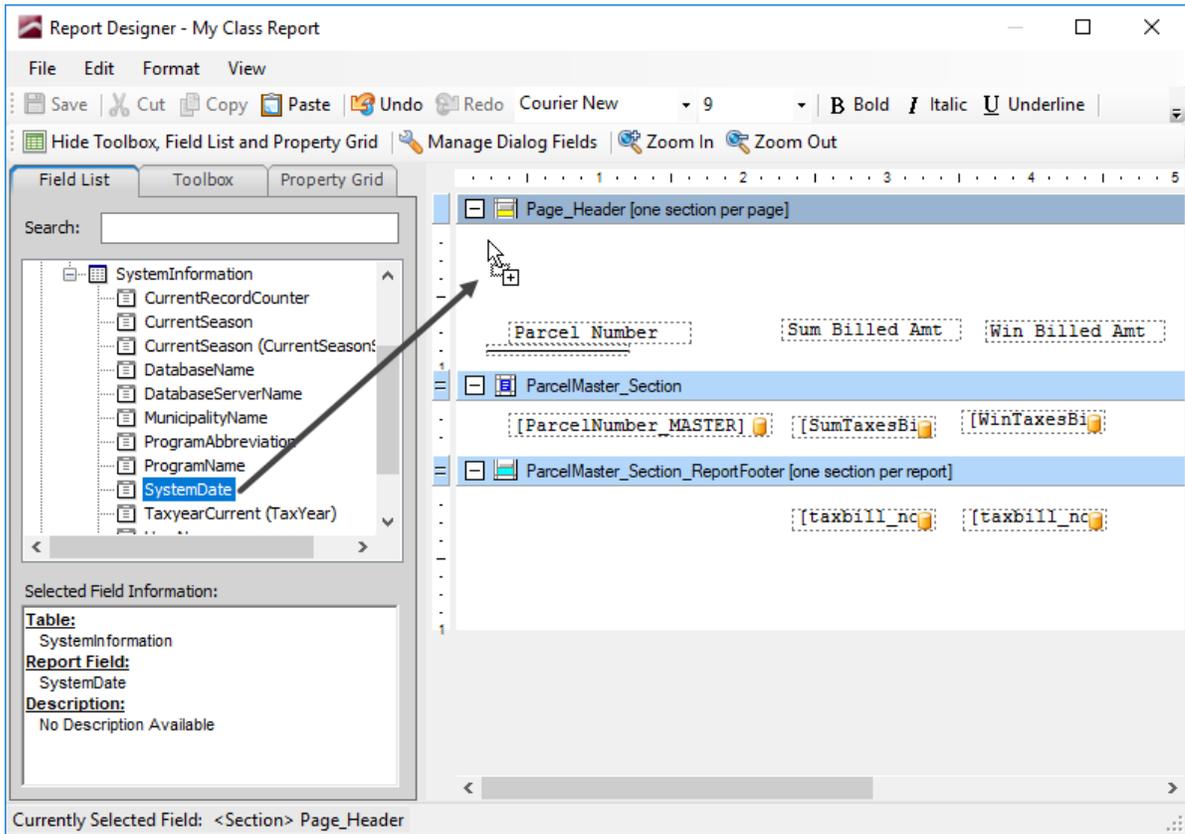
To include the date on which the report is generated, we will add a SystemInformation field from the Field List. Page numbering is added from the Toolbox.

1. Click the Field List tab and expand the Report Fields category.

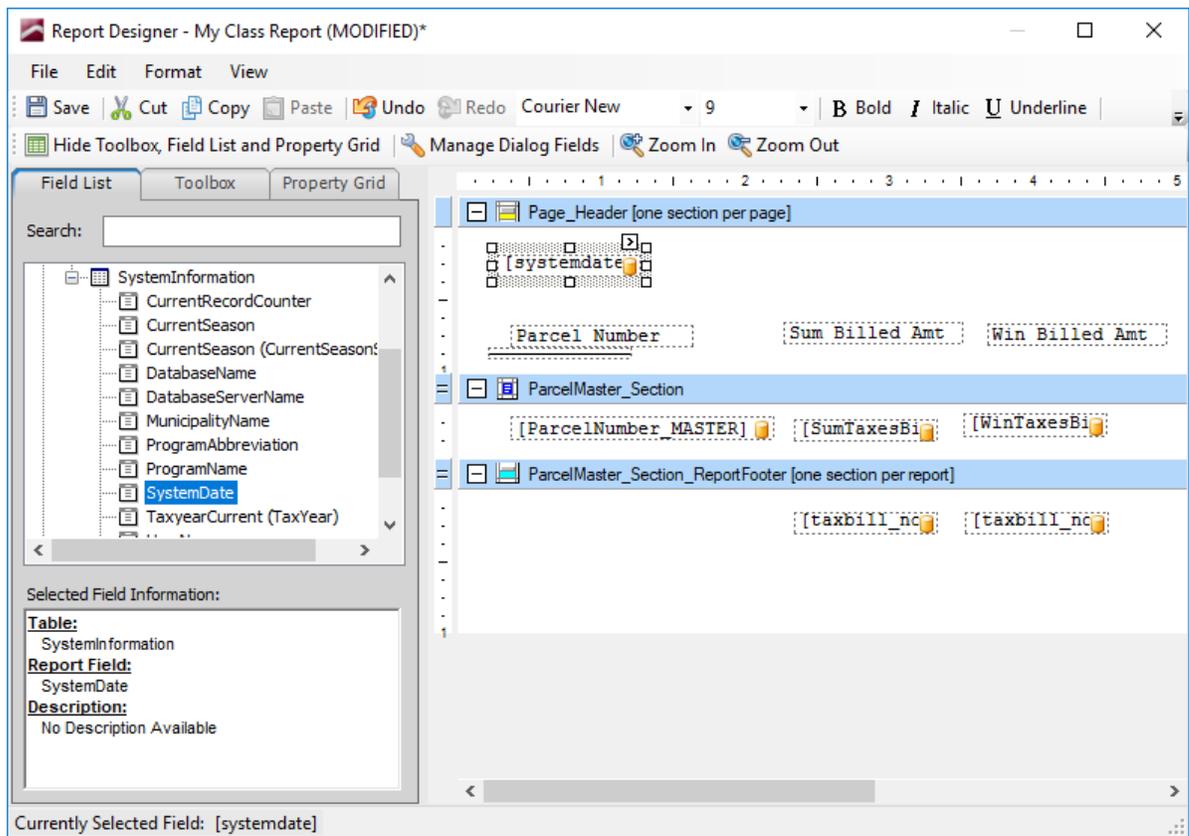


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2. Expand the SystemInformation category, then click/drag SystemDate to the upper left corner of the Page Header.

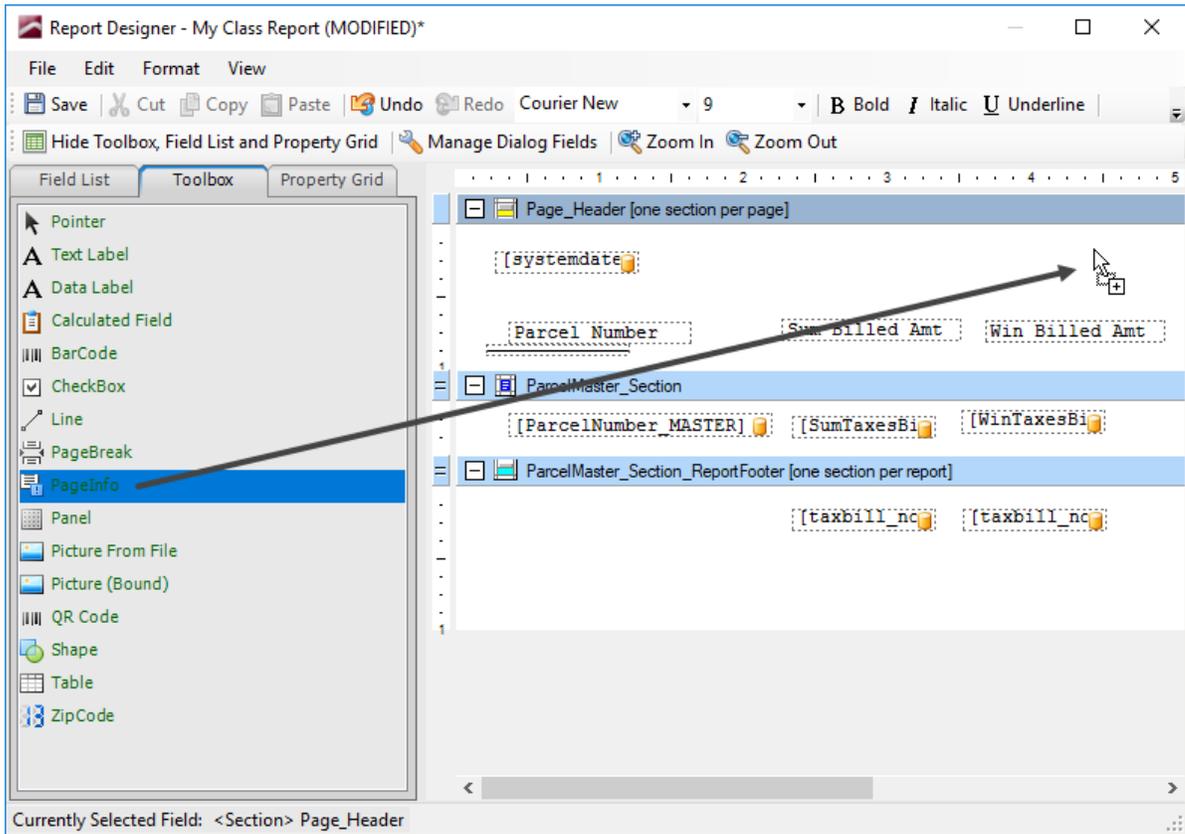


Release the mouse button to place the field.

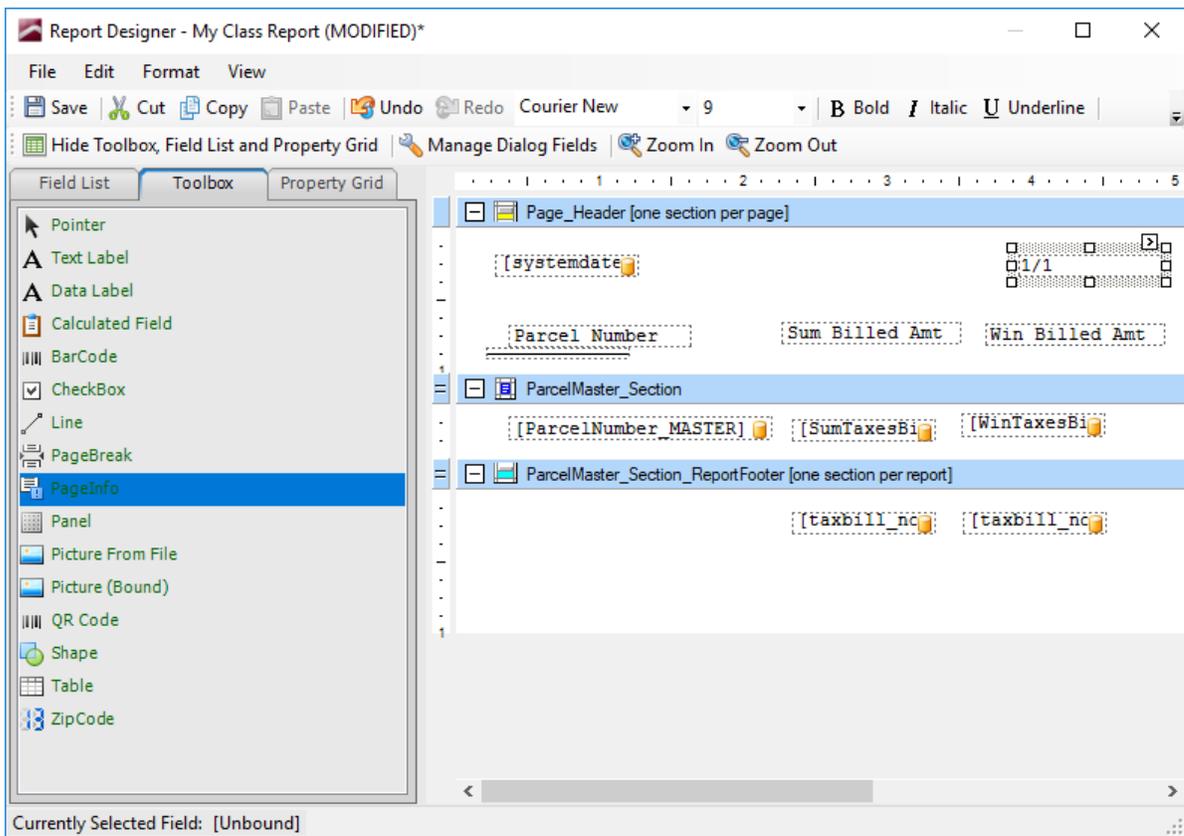


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3. Click the Toolbox tab, then click/drag PageInfo to the upper right corner of the Page Header.



Release the mouse button to place the field.

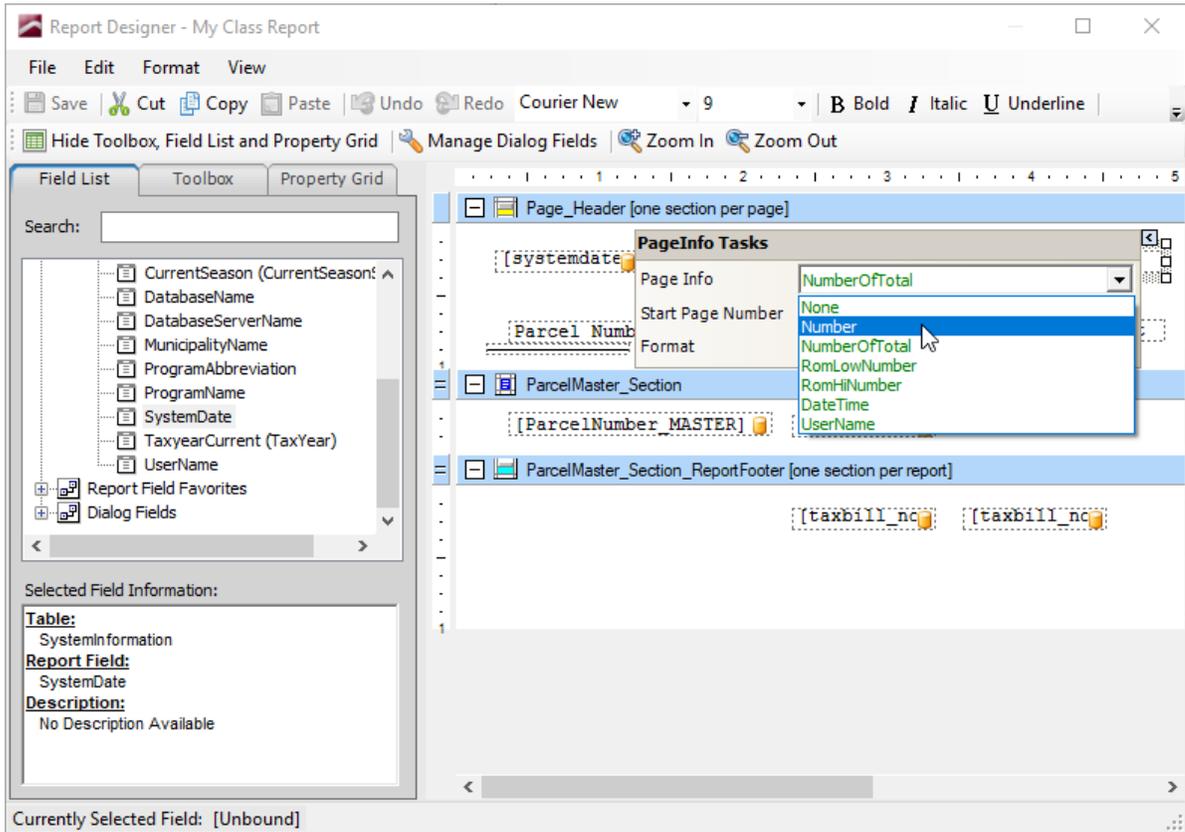


Notice how it defaults to 1/1. This means that when the report is generated, you will see [page number] / [number of pages].

09/09/2019		1/77
<u>Parcel Number</u>	<u>Sum Billed Amt</u>	<u>Win Billed Amt</u>
051-000-000-02		
051-000-000-03		
051-000-000-04		

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If you would rather see just the page number, click the caret, click the dropdown next to Page Info, and select Number.



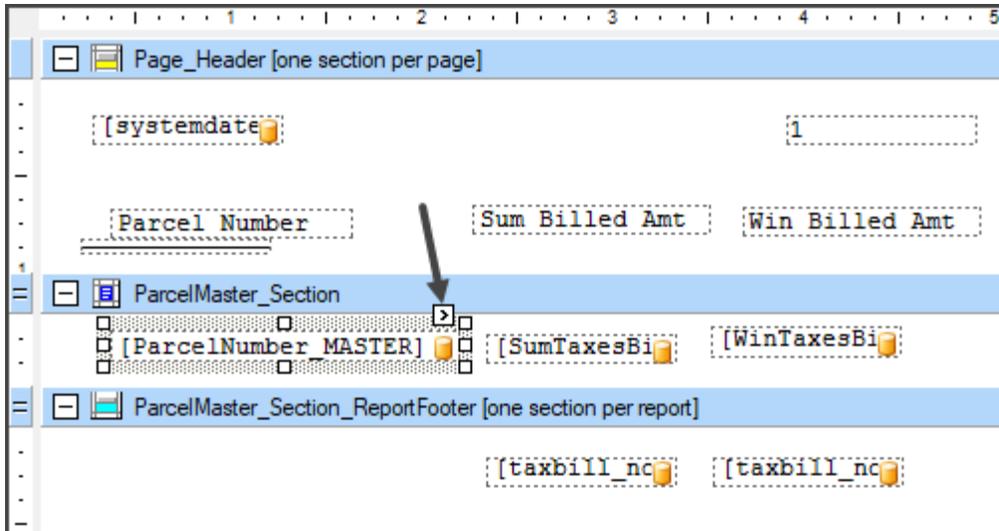
The printed result:

09/09/2019	1	
<u>Parcel Number</u>	<u>Sum Billed Amt</u>	<u>Win Billed Amt</u>
051-000-000-02		
051-000-000-03		
051-000-000-04		

Properties (Appearance) and Field Tasks

So far, field properties have been touched upon, but not explored in detail. This lesson will primarily consist of class discussion.

Each field on the report has its own "tasks" menu that is accessed by clicking on the caret that is provided in the upper right corner when the field is selected.



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The tasks menu is an abridged form of the properties available in the Property Grid. Pictured is an example using a data field. Label (Text) fields, System fields, and Objects all behave in a similar fashion.

The screenshot displays the Report Designer interface for 'My Class Report'. The main window shows a report layout with sections: Page_Header, ParcelMaster_Section, and ParcelMaster_Section_ReportFooter. A 'Data Label Tasks' dialog box is open, showing configuration options for a data label. Arrows point from the dialog box to various properties in the Property Grid on the left.

Property Grid (Left Panel):

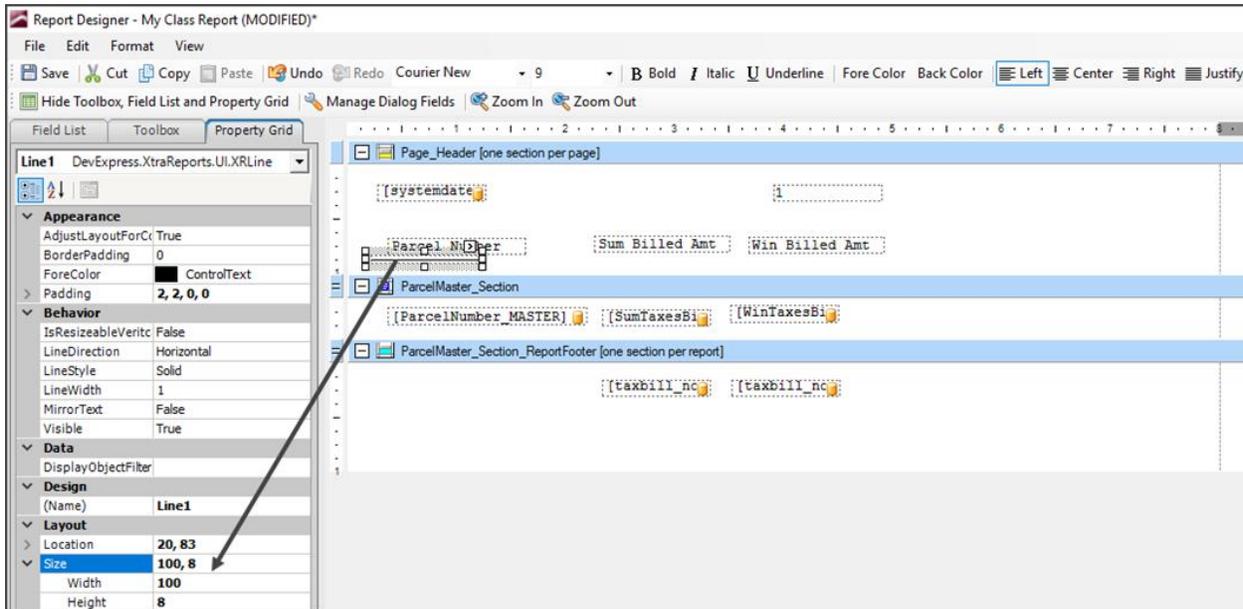
- Appearance:** AdjustLayoutForCt: True, BackColor: Transparent, BorderColor: ControlText, BorderPadding: 0, Borders: None, BorderWidth: 1, ForeColor: ControlText, Padding: 2, 2, 0, 0, TextAlignment: TopLeft
- Behavior:** Angle: 0, CanGrow: True, CompressEmptyFill: False, ForceSplitAcrossPage: False, MirrorText: False, Multiline: False, Visible: True, WordWrap: False
- Data (Data Bindings):** Text: Binding: parcelmaster.parcelnumber, FormatString: CalculatedExpression: DisplayObjectFilter: Summary: None, Text: Data Label
- Design:** (Name): Label1
- Layout:** Location: 36, 8, Size: 183, 16
- Misc:** Font: Courier New, 9pt, ForceCaps: False, IsTrueFalseLogical: False, LogicalFalseString: N, LogicalTrueString: Y, NoDBValueString: SuppressZeros: False

Data Label Tasks Dialog (Right Panel):

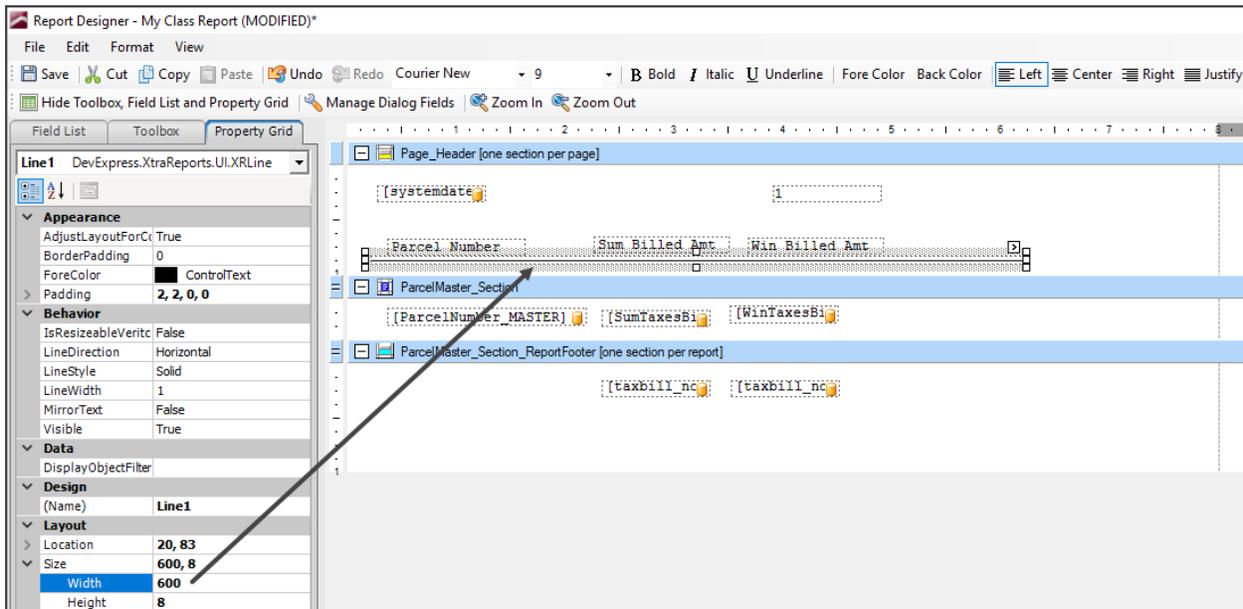
- Can Grow:
- Multiline:
- Word Wrap:
- Text: Data Label
- Data Binding: parcelmaster.parcelnumber
- Format String: ...
- Summary: None

Currently Selected Field: [ParcelNumber_MASTER]

In an earlier lesson, we showed you how to resize fields by using handles. Resizing can also be done in the Property Grid. In this example, we've selected the line object. Its length defaults to 100 pixels.

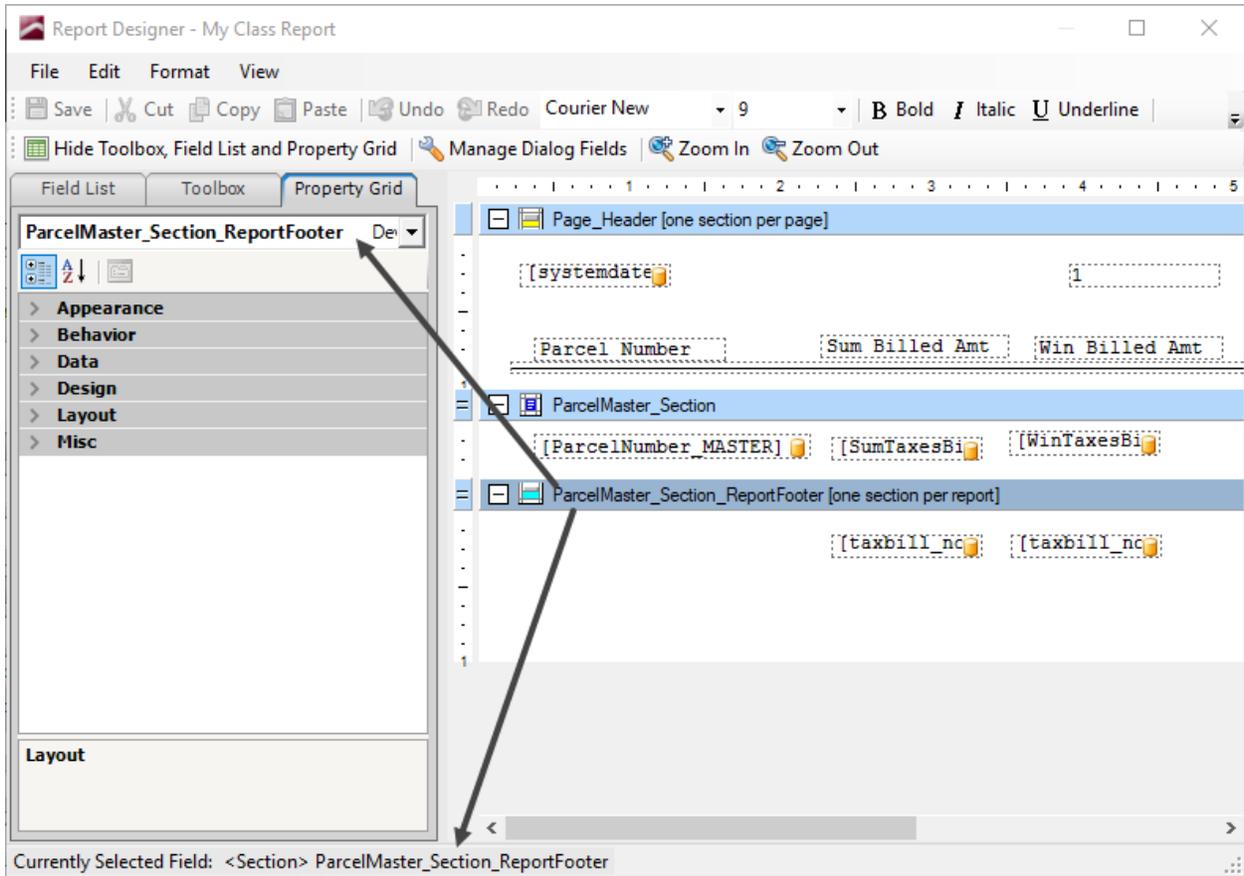


We've changed 100 to 600.



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The Property Grid tab reflects the element currently selected. This will be a data or label field, an object (line, box, etc.), or the section itself. Pictured is an example where the Report Footer section is the active selection.

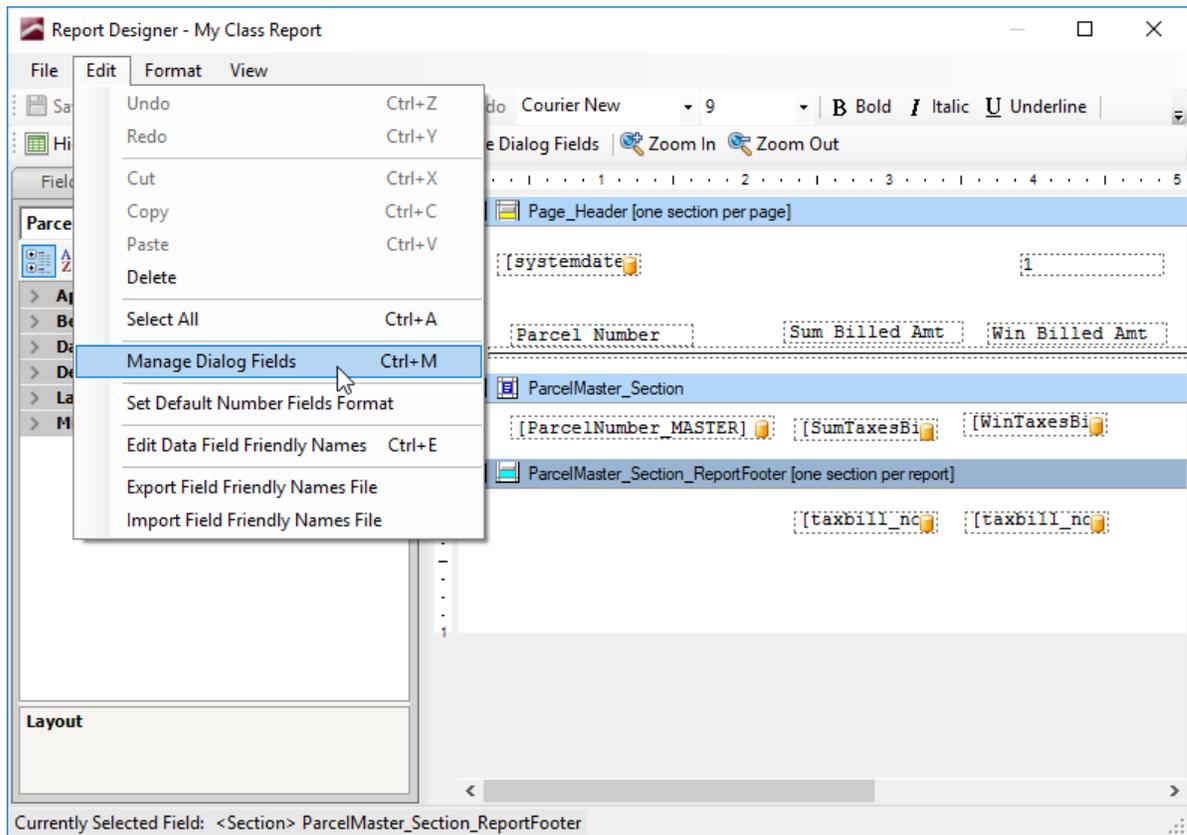


Dialog Fields

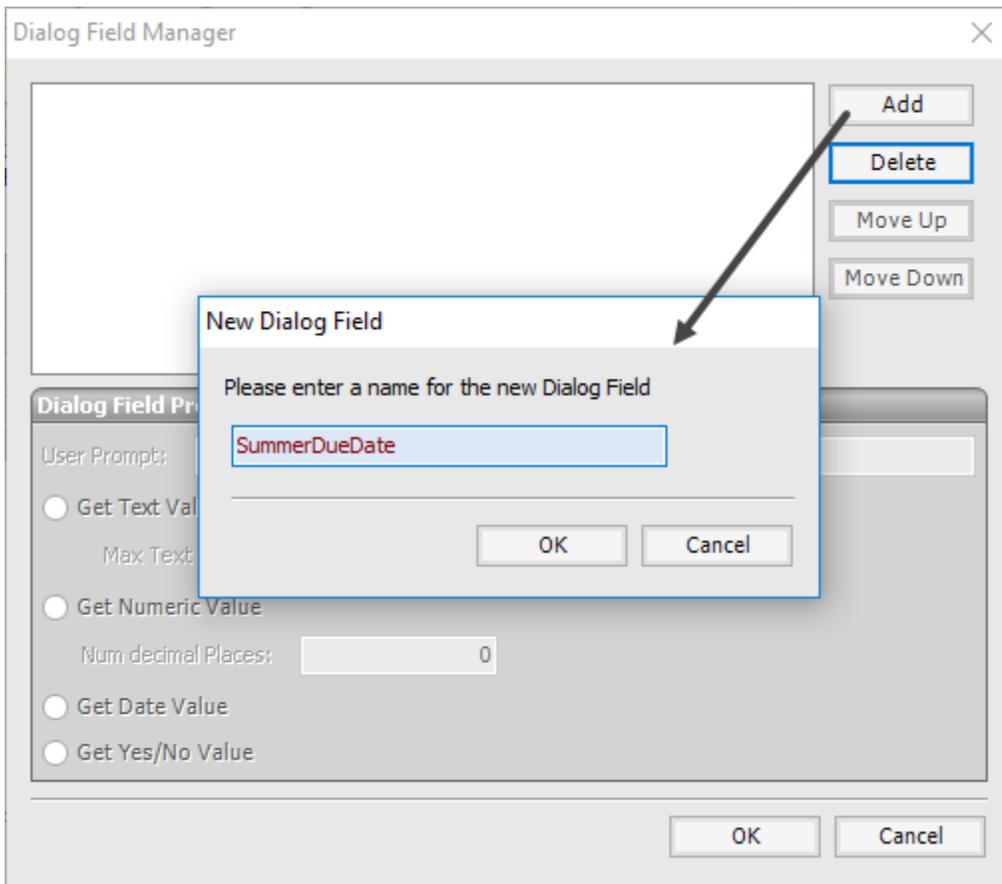
Set Up the Dialog Field

A dialog field prompts users for input.

1. Go to Edit>Manage Dialog Fields.



2. Click Add and enter a name - no spaces - for the dialog field.



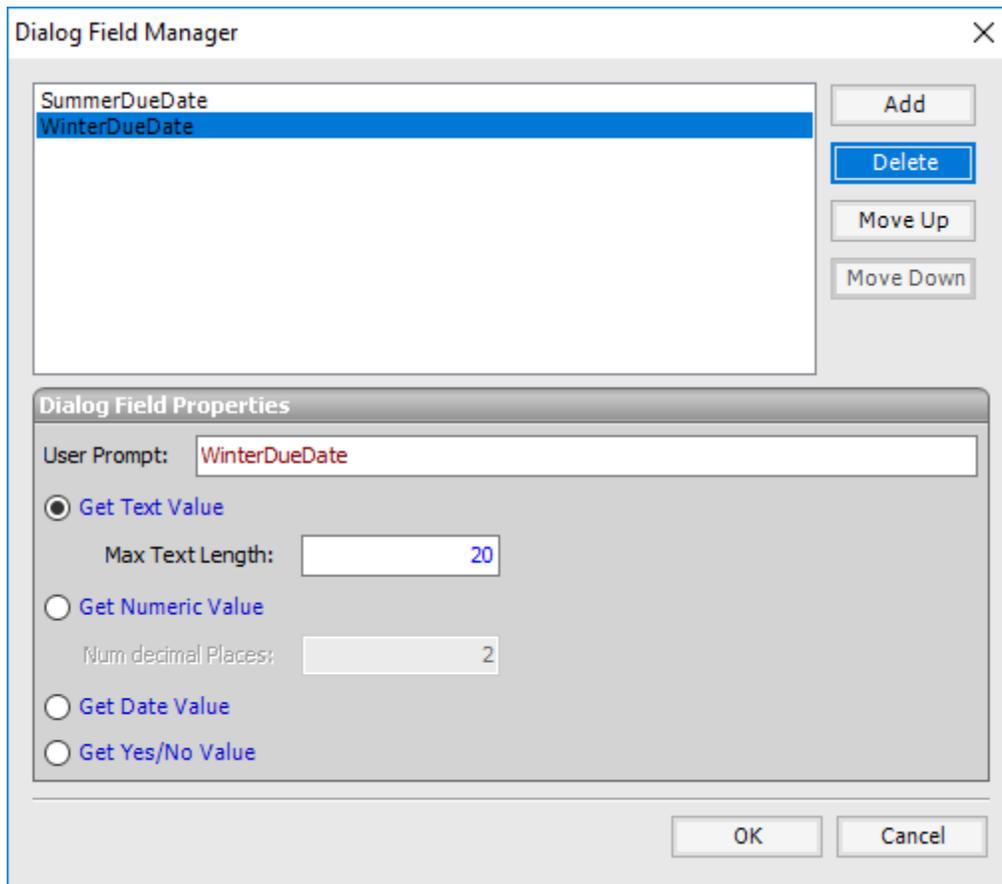
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3. Click Ok. You may now set the properties of the dialog field.

The screenshot shows the 'Dialog Field Manager' dialog box. At the top, there is a list of dialog fields with 'SummerDueDate' selected. To the right of the list are buttons for 'Add', 'Delete', 'Move Up', and 'Move Down'. Below the list is the 'Dialog Field Properties' section. It contains a 'User Prompt' field with the text 'SummerDueDate'. There are four radio button options: 'Get Text Value' (selected), 'Get Numeric Value', 'Get Date Value', and 'Get Yes/No Value'. Under 'Get Text Value', there is a 'Max Text Length' field with the value '20'. Under 'Get Numeric Value', there is a 'Num decimal Places' field with the value '2'. At the bottom of the dialog are 'OK' and 'Cancel' buttons.

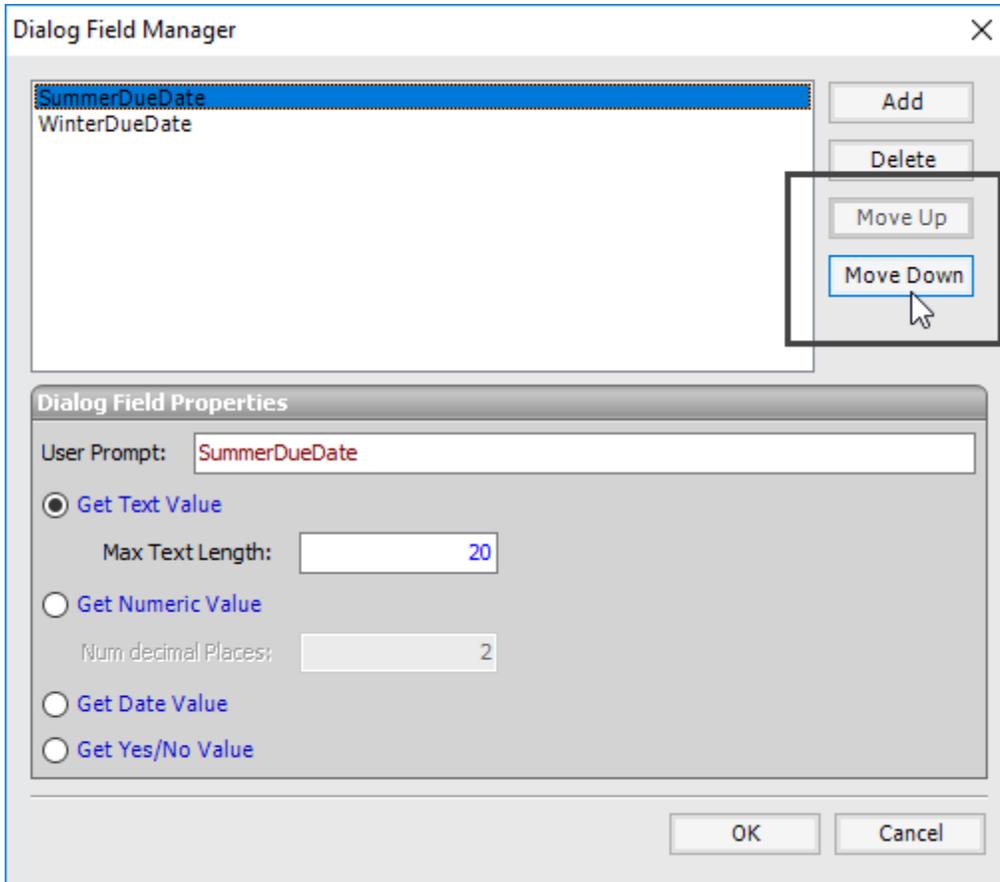
For our example, we will accept the default Get Text Value. When we receive the prompt, we will be able to enter the due date as (using Summer as an example) 9/15/xx, or Sept 15, xx, or September 15, xxxx; our only restriction will be the Max Text Length we can enter here. Examples of Numeric, Date, and Yes/No Values are given below.

4. Add a dialog field for the winter date, and call it WinterDueDate.



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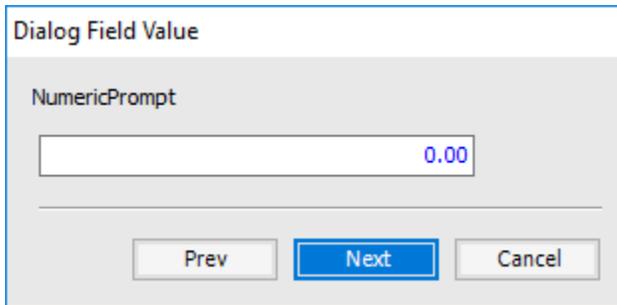
The order in which the dialog fields appear is the order in which the user will be prompted. In this example, the user will be prompted to enter the Summer due date, then the Winter due date. You control the order in which users get prompted by using the Move Up and Move Down buttons.



5. Click Ok.

Dialog Prompt Examples

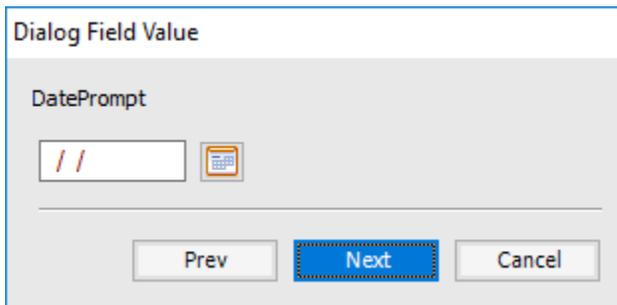
Once the dialog fields have been created, they will be available to add to the report (next lesson). Upon running the report (two lessons from now), users will be prompted for data entry according to the type of dialog fields that have been added. Our example above uses Text; pictured are what the prompts will look like for Numeric, Date, and Yes/No dialog fields.



Dialog Field Value

NumericPrompt

Prev Next Cancel

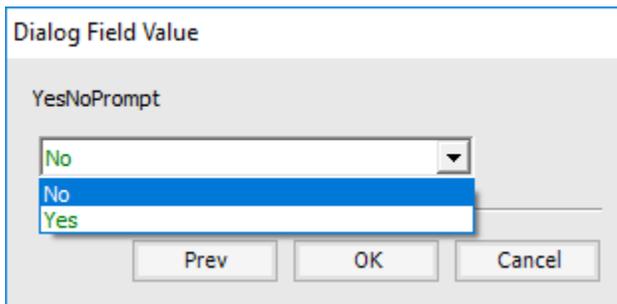


Dialog Field Value

DatePrompt

Prev Next Cancel



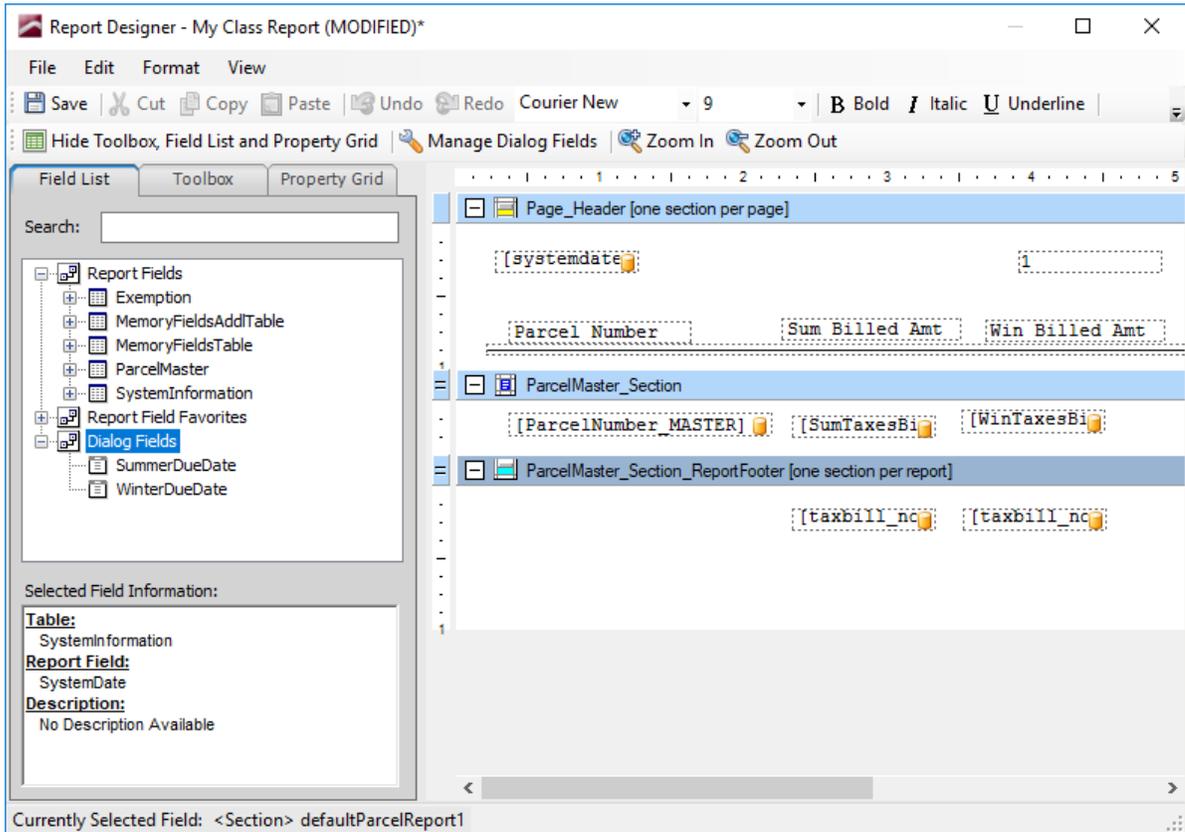
Dialog Field Value

YesNoPrompt

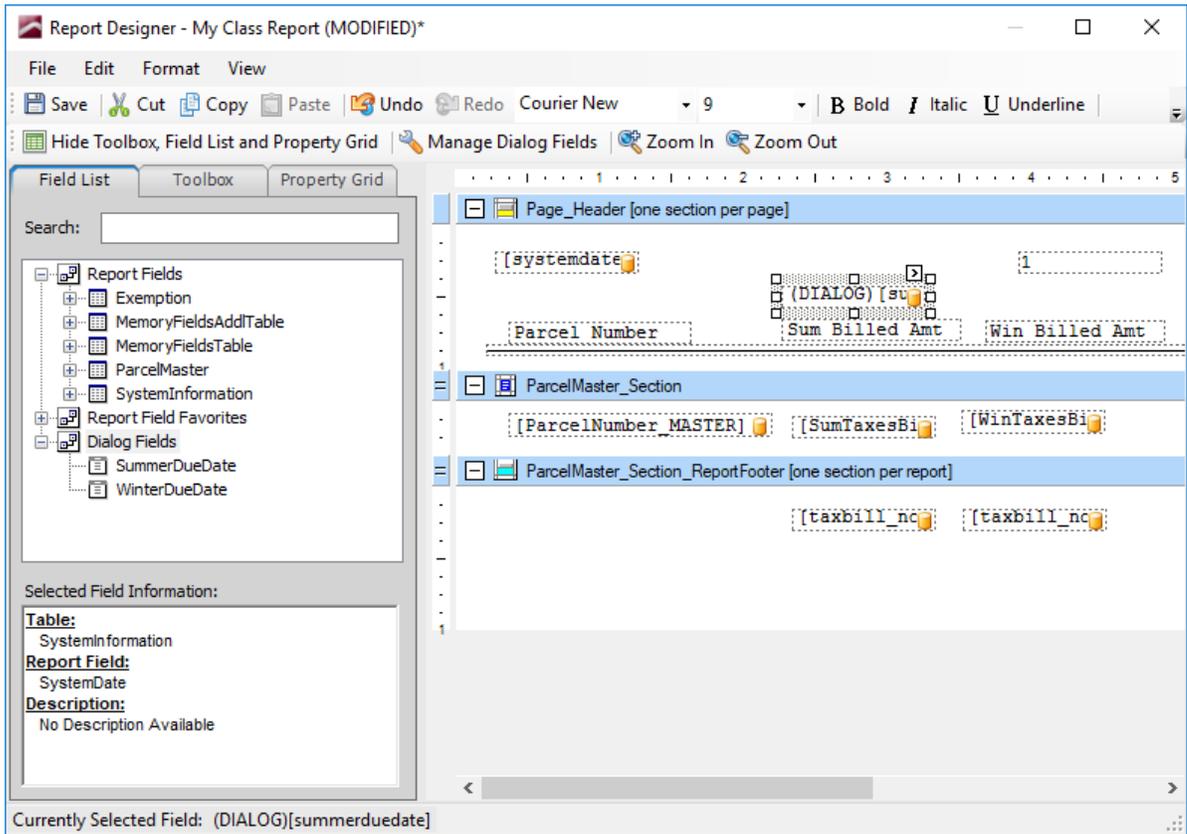
Prev OK Cancel

Add the Dialog Field to Your Report

1. Click the Field List tab and expand the Dialog Fields category. You will see the two dialog fields we created in the last lesson.

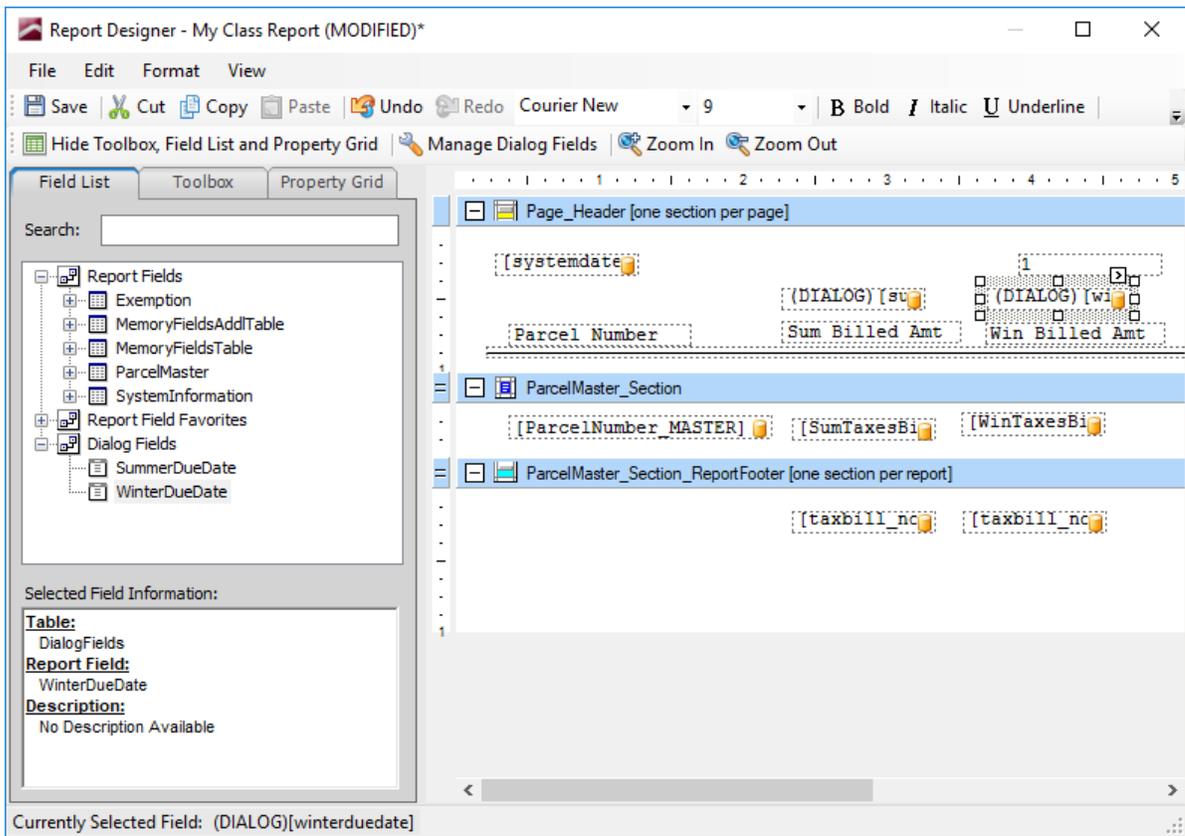


- Click/drag the SummerDueDate field to the Page Header, just above the Sum Billed Amt label field.



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3. Repeat for the WinterDueDate field.



4. Save and exit the report.

Test the Dialog Field

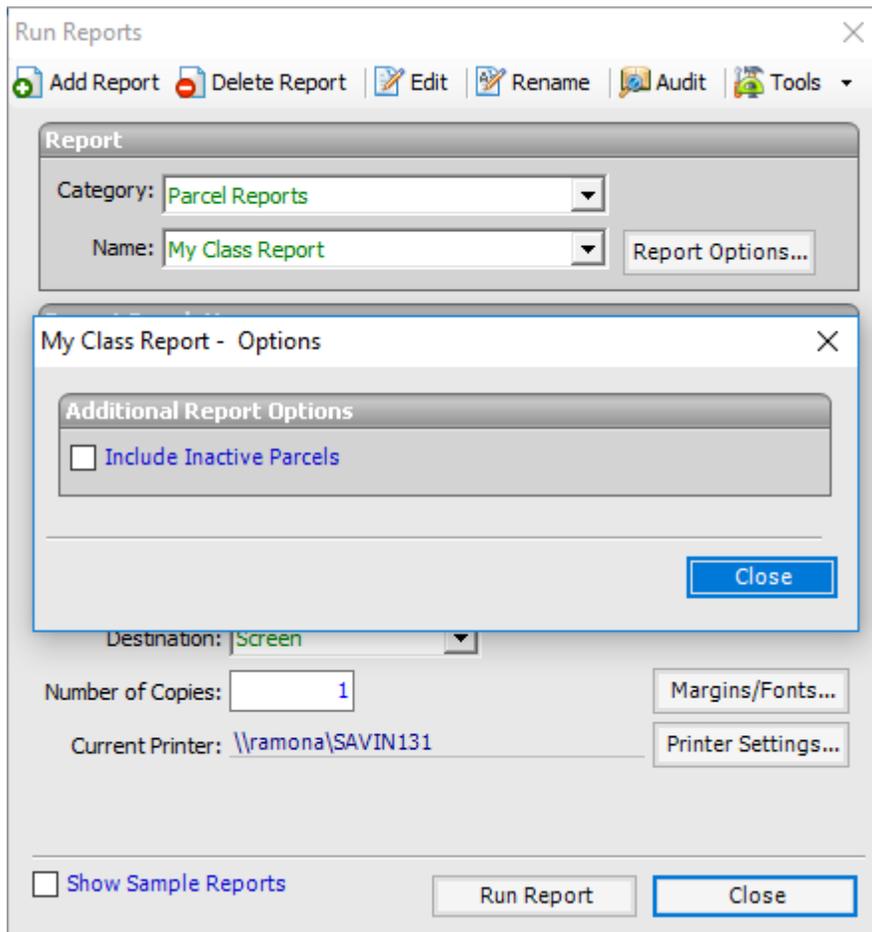
1. Make sure the Name field is displaying your user report and that the Destination is set to Screen, and click Run Report.

The screenshot shows the 'Run Reports' dialog box with the following settings:

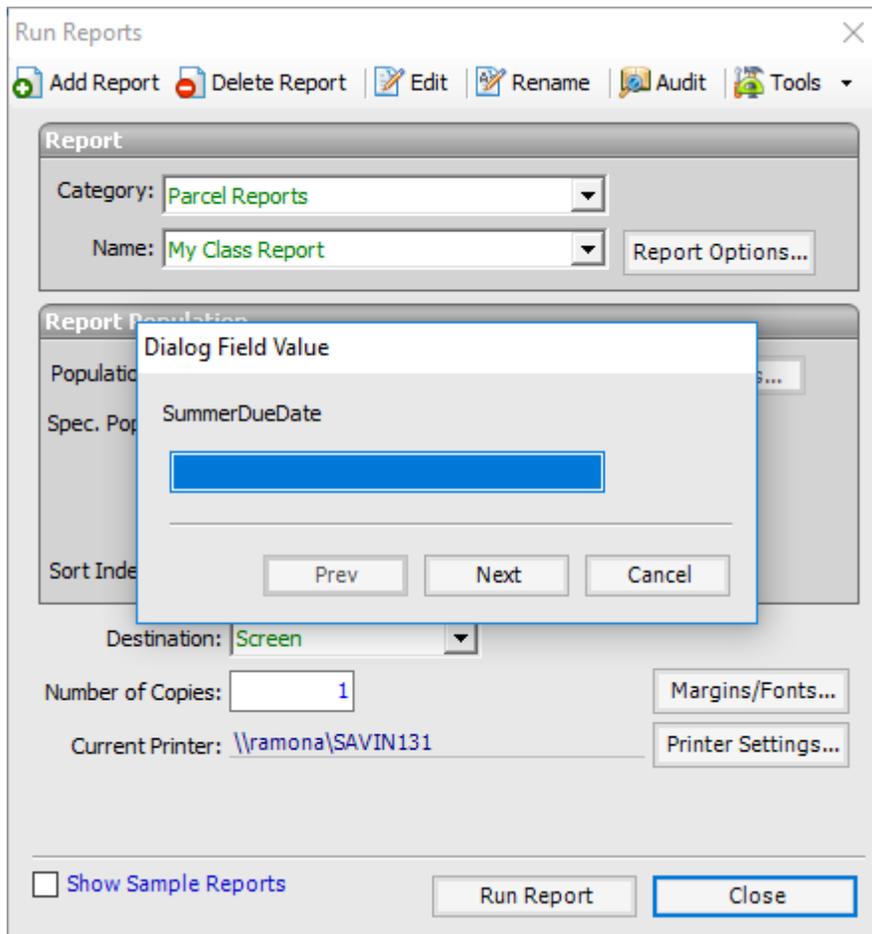
- Report Section:**
 - Category: Parcel Reports
 - Name: My Class Report
 - Report Options... button
- Report Population Section:**
 - Population: All Records
 - Spec. Pop.: Ad Valorem + Special Acts
 - Apply Advanced Query to Population
 - Advanced Query... button
 - Sort Index: Parcel #...
- Destination:** Screen
- Number of Copies:** 1
- Current Printer:** \\ramona\SAVIN131
- Buttons:** Margins/Fonts..., Printer Settings..., Show Sample Reports (unchecked), Run Report (highlighted), Close

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2. You will receive a Report Options dialog. Leave the Include Inactive Parcels setting unchecked and click Close.

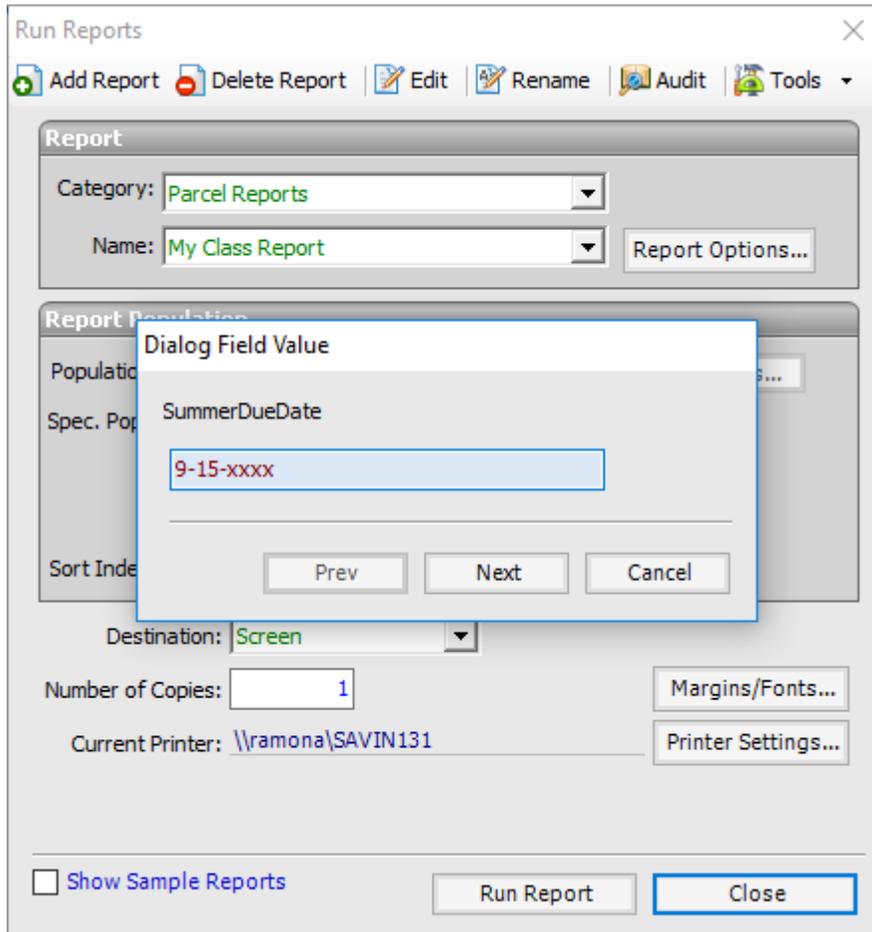


3. You are prompted to enter the SummerDueDate.



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4. Because we set this up for text entry, you may enter the date in any format you wish. Do so and click Next.



The button is labeled Next to indicate that more prompts are coming.

5. You are prompted to enter the WinterDueDate. Do so and click Ok. The button is labeled Ok to indicate that this is the final (if not the only) prompt.

The report processes and appears onscreen. For illustrative purposes, we have entered the due dates differently.

09/10/2019		1
	9-15-xxxx	Feb 15 xxxx
Parcel Number	Sum Billed Amt	Win Billed Amt
051-000-000-02	0.00	0.00
051-000-000-03	0.00	0.00
051-000-000-04	0.00	0.00

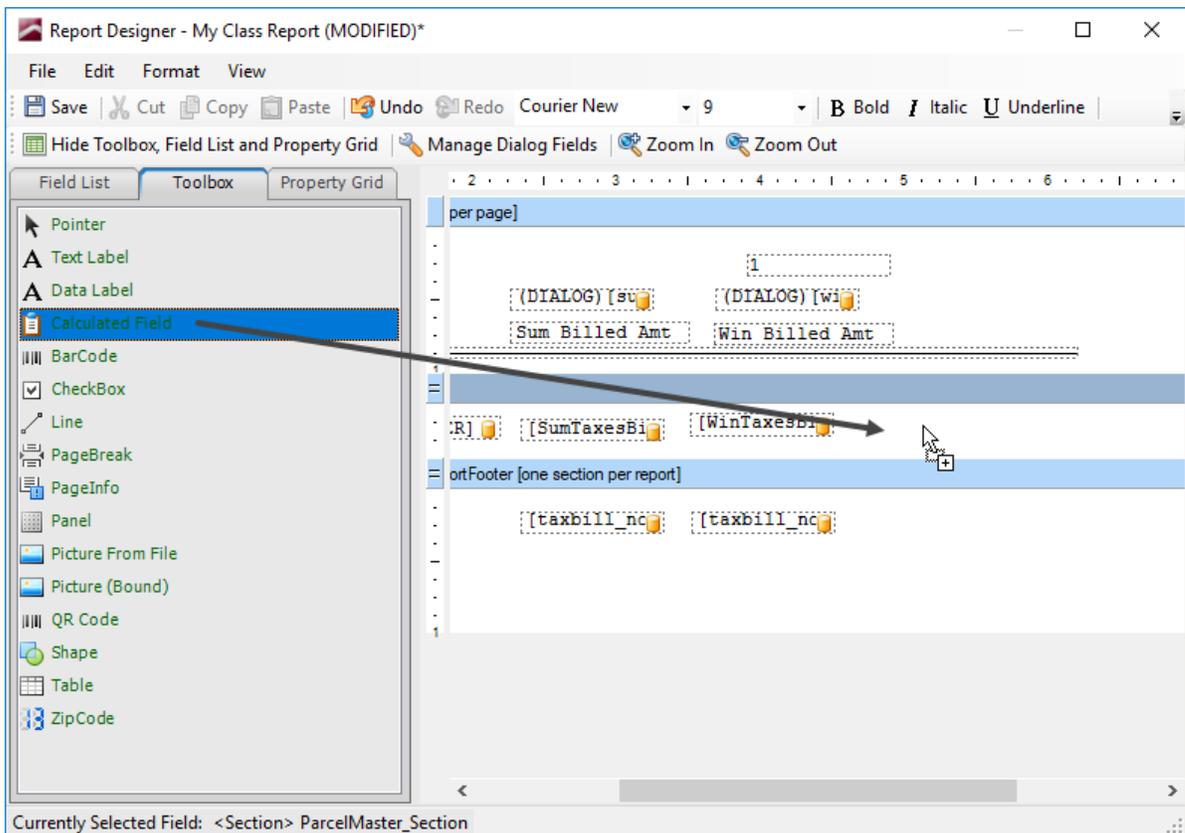
6. Close the report to return to the Run Reports dialog, then click the Edit button to return to the Report Designer.

Calculated Fields and If Statements

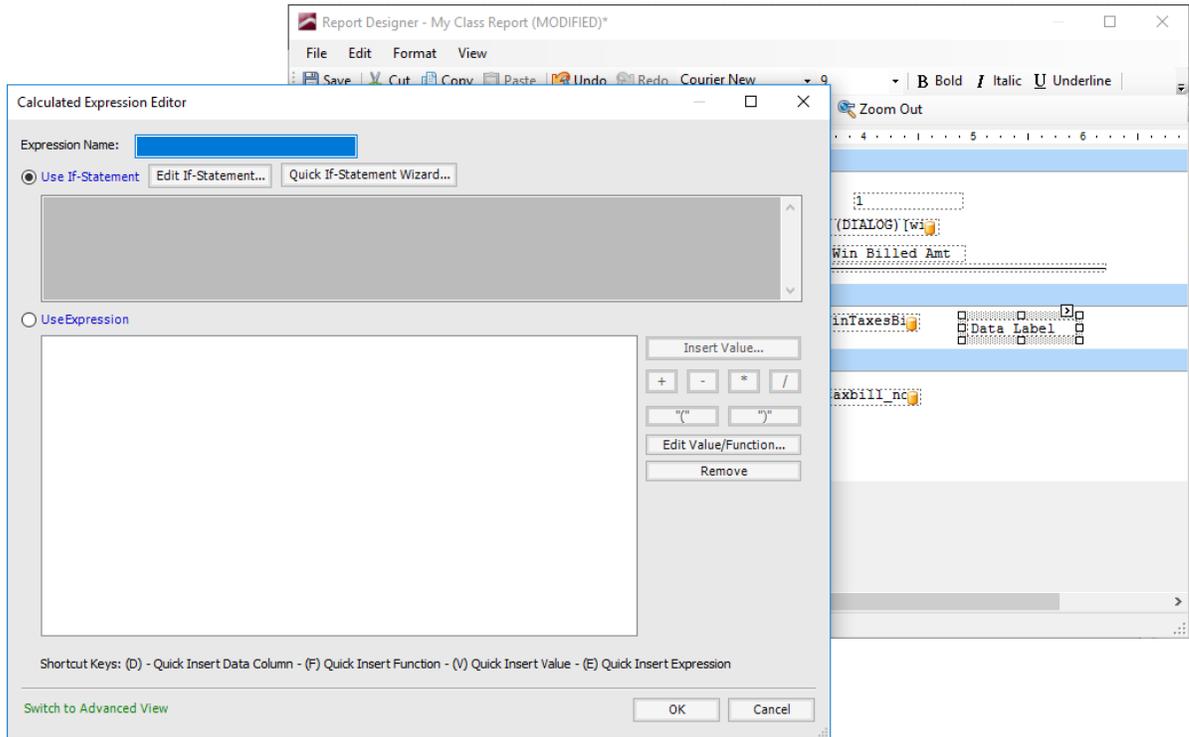
Create a Calculated Field

Calculated fields are custom fields that use mathematical expressions to achieve a specific output. In this lesson, we will add a calculated field to the Detail section that adds the Summer Billed Amount and the Winter Billed Amount. Time-permitting, more complicated examples may be addressed as part of class discussion.

1. If you haven't already, click the Show Toolbox, Field List, and Property Grid button.
2. Click the Toolbox tab, then click/drag Calculated Field to the right of the WinTaxesBilled data field in the Detail section.

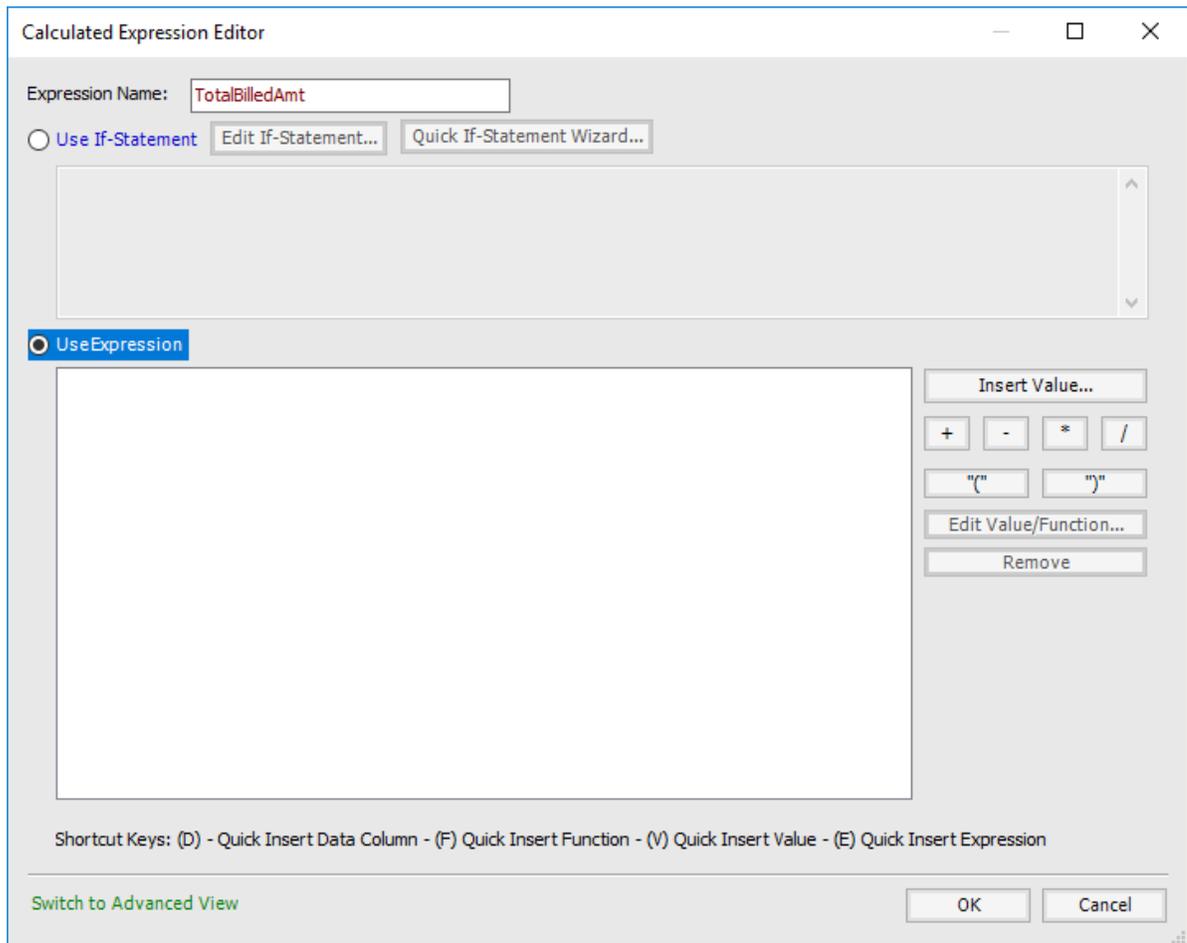


- When you release your mouse button, your screen should resemble the following picture.



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4. Type TotalBilledAmt in the Expression Name field, then click the UseExpression radio button.

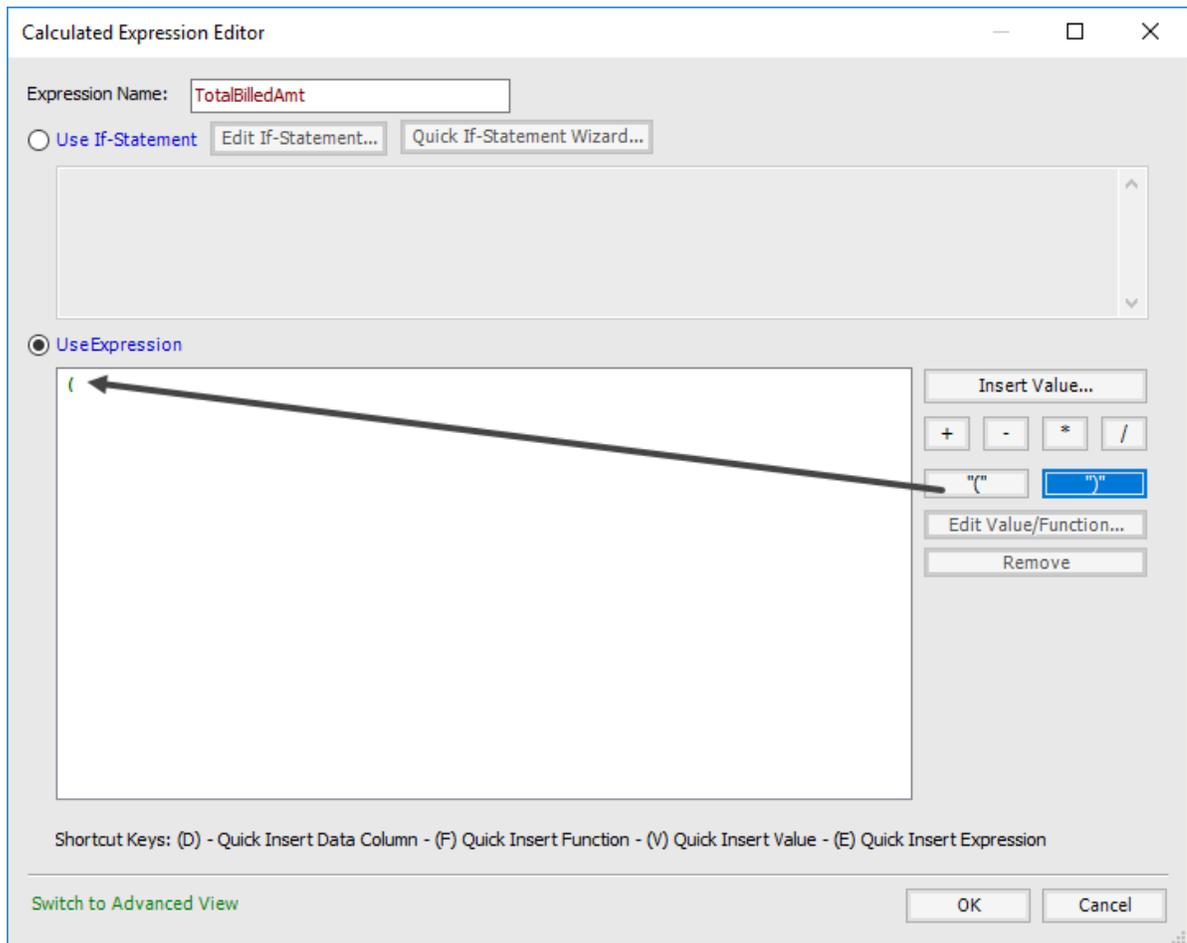


5. The formula we're going to use, if written out longhand, would read as follows:

```
(SumTaxesBilled(taxbill_nointrst_0) +  
WinTaxesBilled(taxbill_nointrst_1))
```

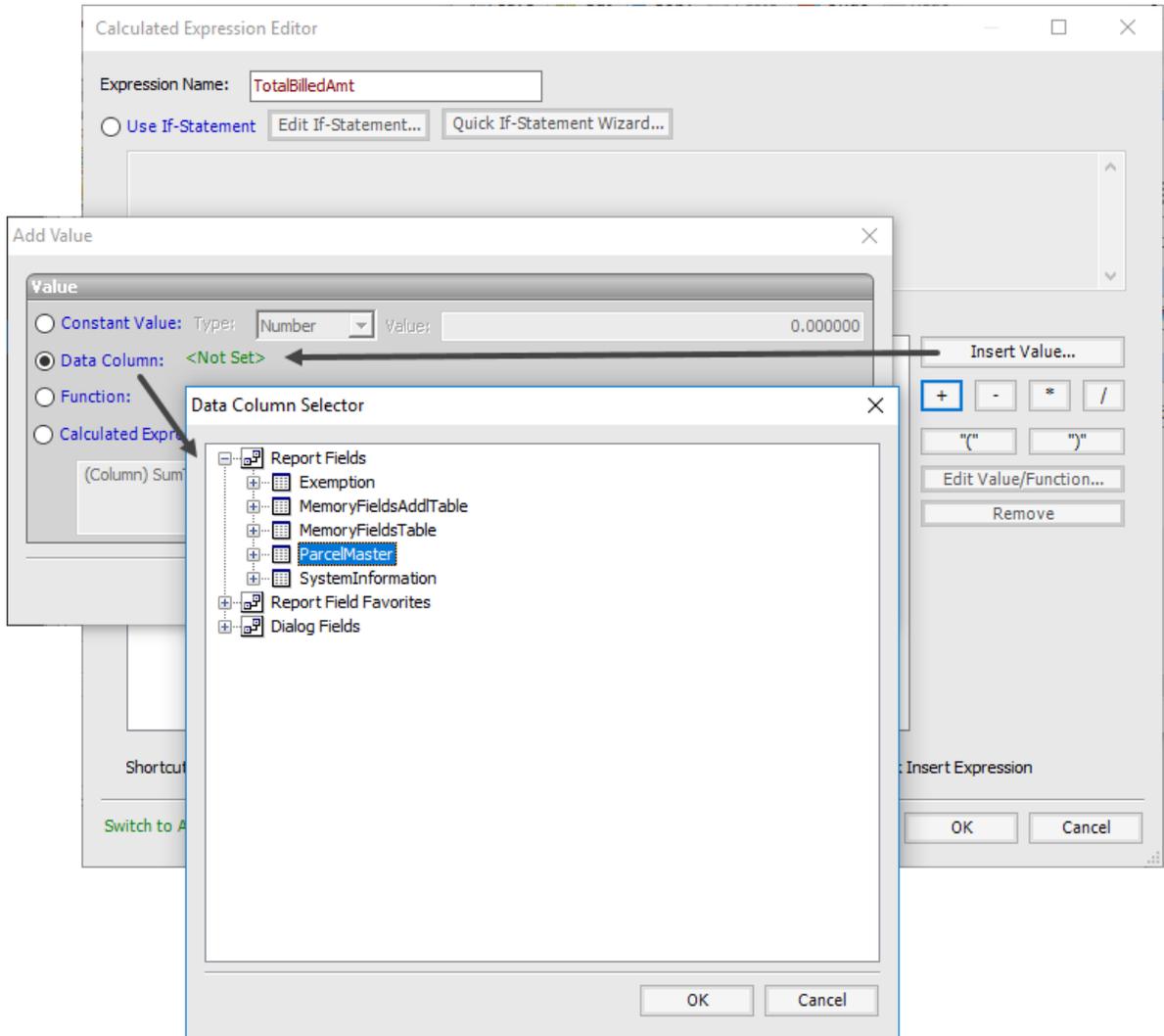
It is important that the field name be exact, so it is oftentimes easier to use the buttons to the right of the expression entry box and select the field name, rather than attempt to type it out.

6. Click the open parenthesis button. It is placed at the top of the entry box.

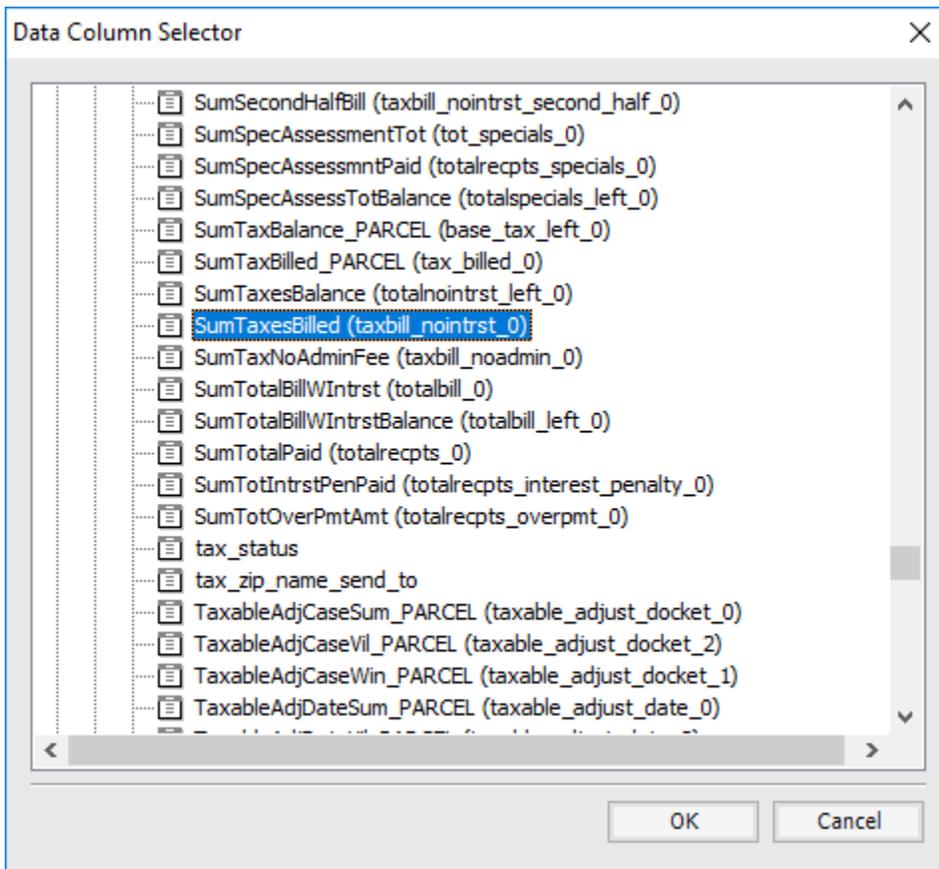


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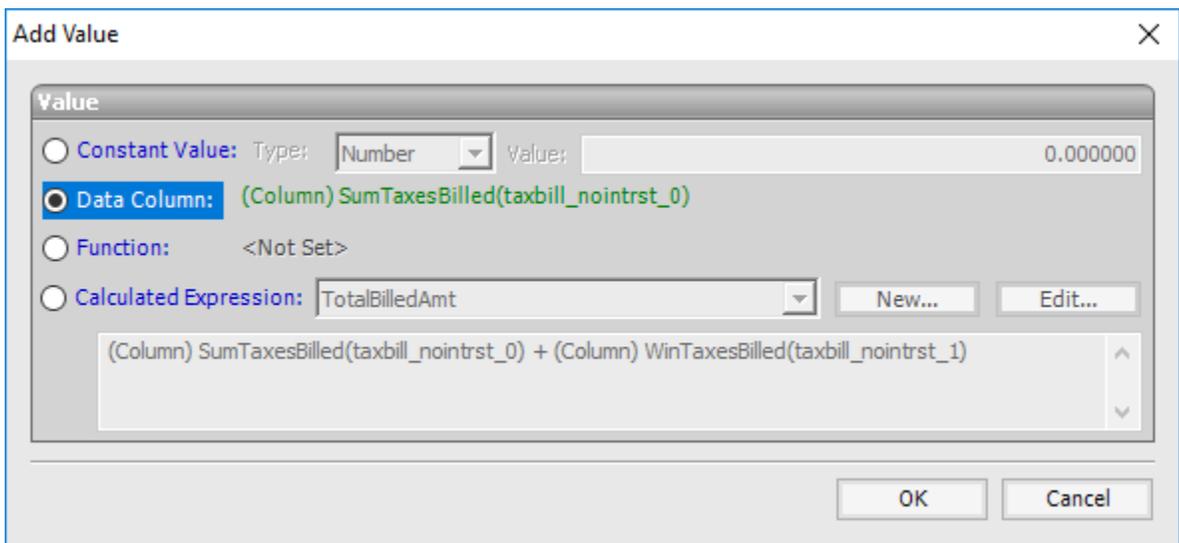
7. Click the Insert Value button, then click the Data Column radio button.



- Open the ParcelMaster category and locate **SumTaxesBilled(taxbill_nointrst_0)**.

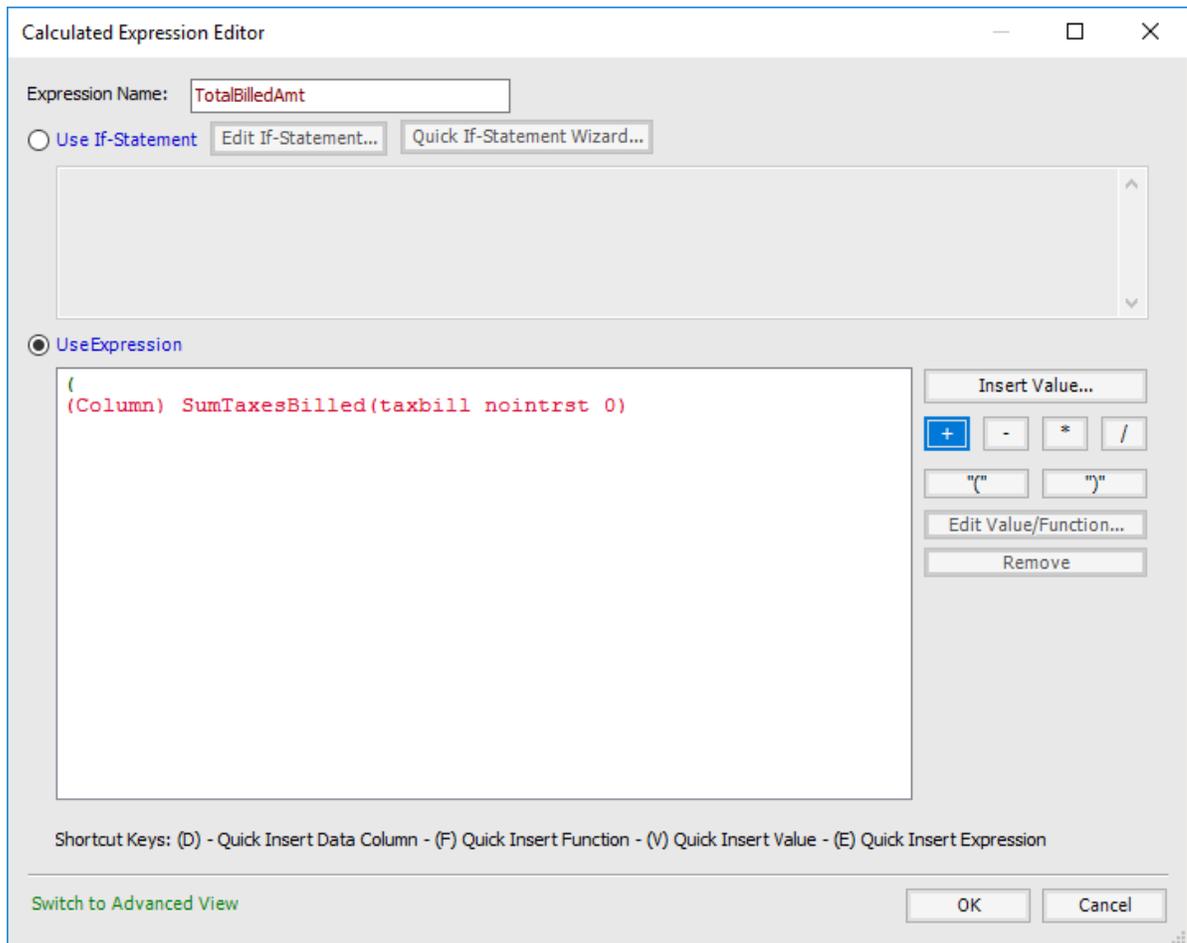


- Click Ok to return to the Add Value dialog.

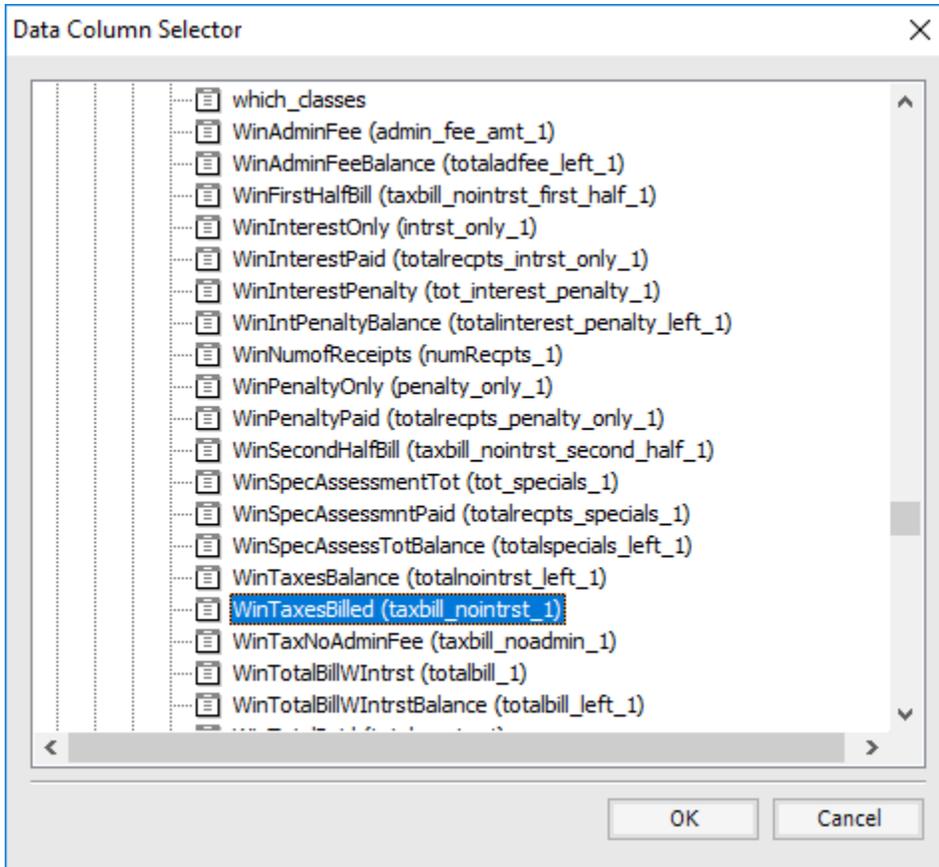


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10. Click Ok to return to the Calculated Expression Editor dialog.

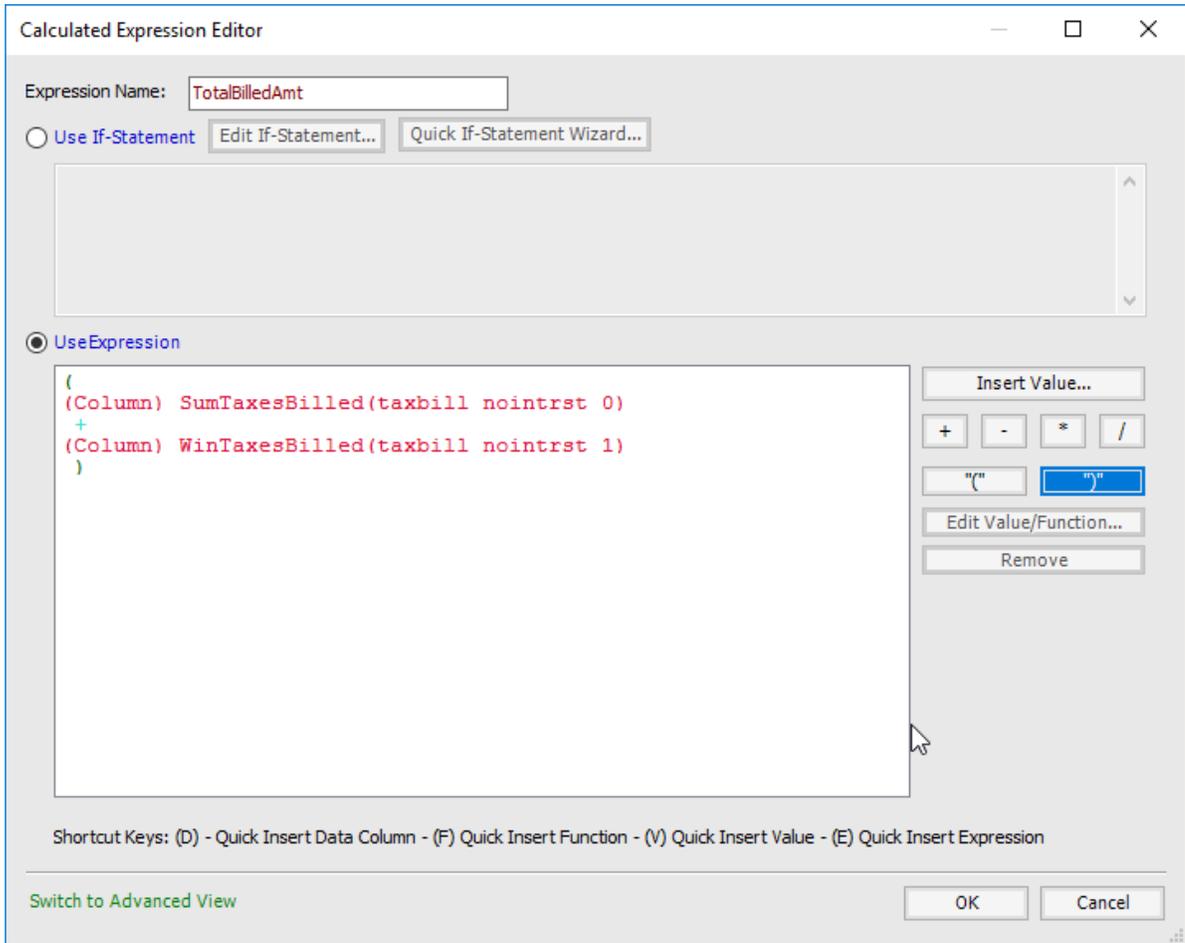


- Click the plus sign button. Click the Insert Value button, then click the Data Column Radio button. The Data Column Selector has retained the set of fields you searched through when trying to locate the summer billed field. Locate **WinTaxesBilled(taxbill_nointrst_1)**.

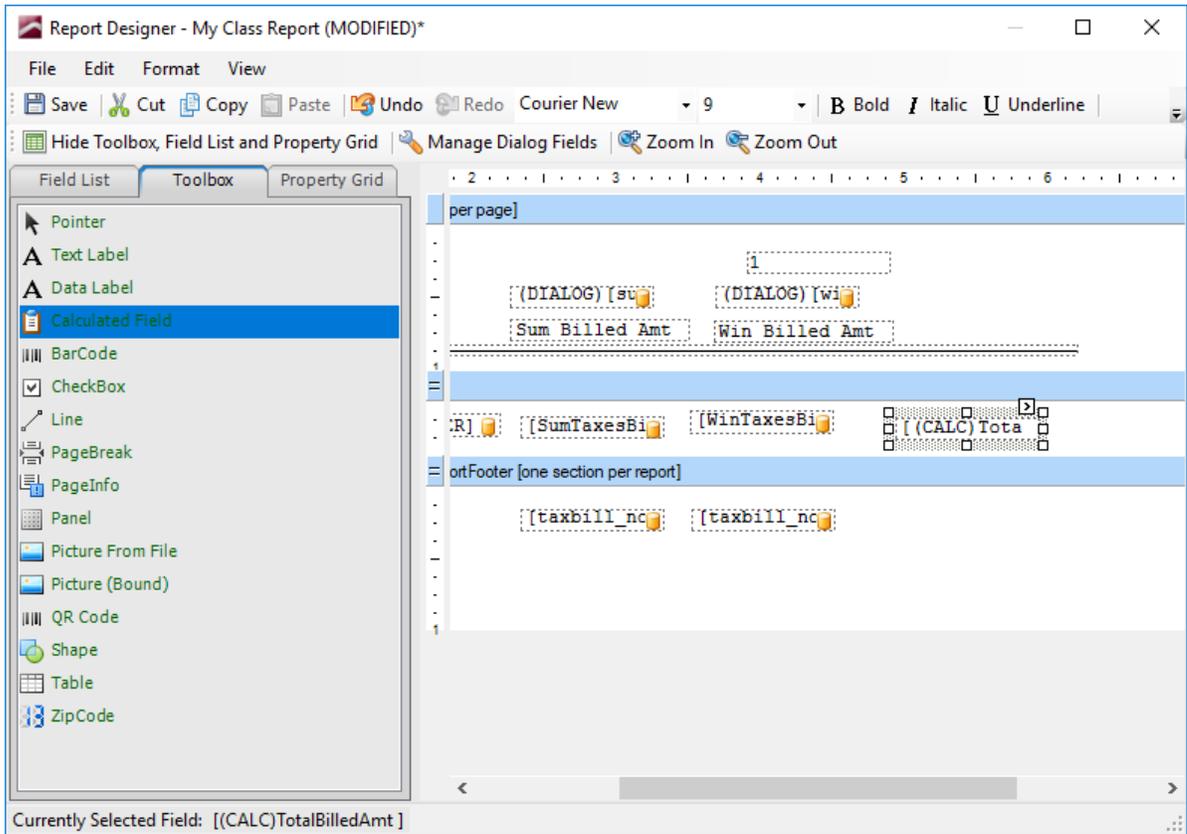


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- Click Ok to return to the Add Value dialog, then click Ok again to return to the Calculated Expression Editor dialog. Click the close parenthesis button. Your screen should resemble the following picture.



- Click Ok to return to the Report Designer. The calculated field is saved.

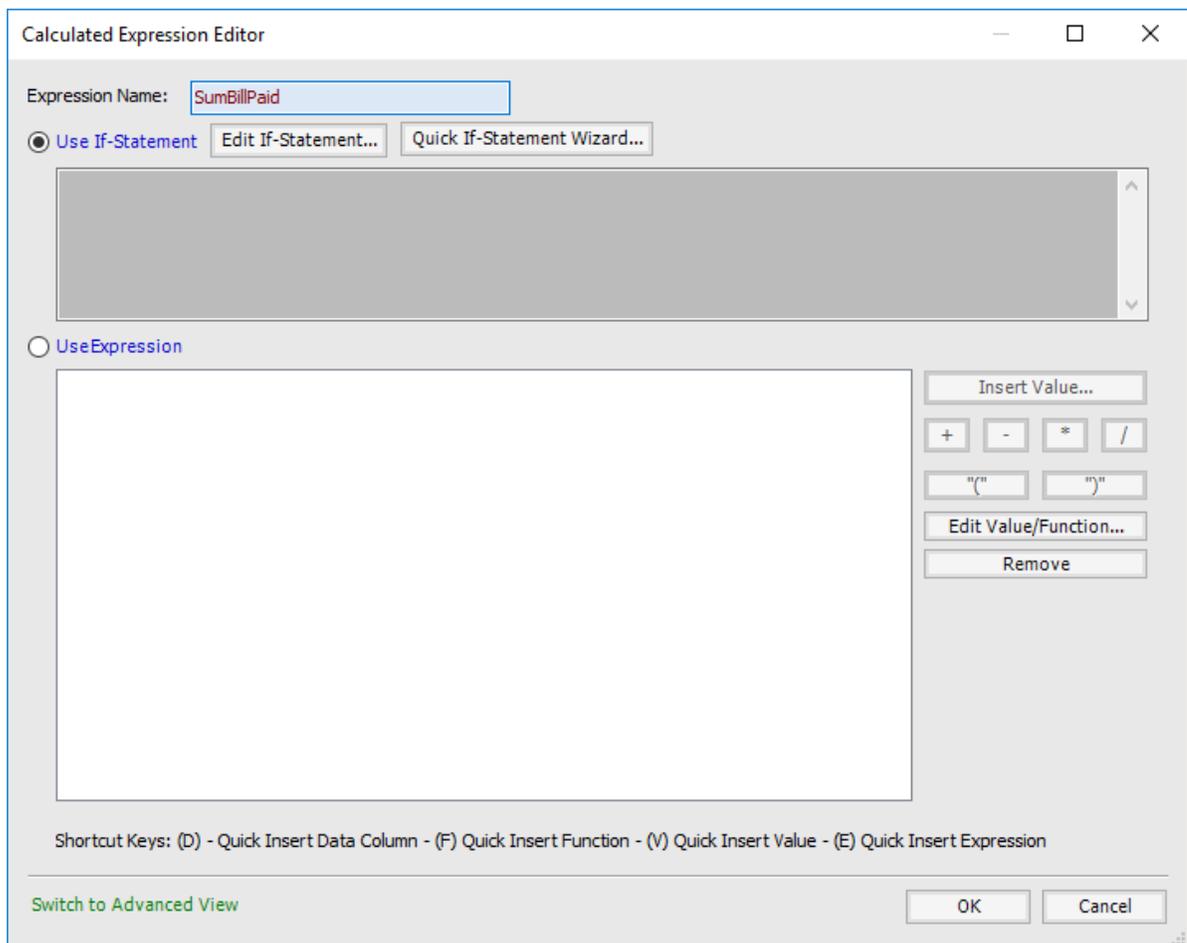


- Save and exit the report. Run the report to see the results.
- Close the report to return to the Run Reports dialog, then click the Edit button to return to the Report Designer. Delete the calculated field. We're going to replace it with an If-Statement in the next lesson.

Create an If-Statement

If-Statements are calculated fields that use conditional, **if-true-then-[this]; if-false-then-[that]** expressions. In this lesson, we will add an If-Statement to the Detail section that returns the words "SUM TAX PAID" if true, and the summer balance due if false. Time-permitting, more complicated examples may be addressed as part of class discussion.

1. If you haven't already, click the Show Toolbox, Field List, and Property Grid button.
2. Click the Toolbox tab, then click/drag Calculated Field to the right of the WinTaxesBilled data field in the Detail section. When you release your mouse button, the Calculated Expression Editor appears just like in the previous lesson. Type SumBillPaid in the Expression name field. Use If-Statement is selected by default.



3. Click the Quick If-Statement Wizard button. The first part of the wizard appears.

Quick If-Statement Wizard

Create Condition For If-Statement

This is the logic that will be tested when the calculated expression is evaluated. For example, if your if-statement is "IF Amount > 500 THEN Amount ELSE 0", the condition is the "Amount > 500" part.

Left Hand Side

Constant Value: Type: Number Value: 0.000000

Data Column: <Not Set>

Function: <Not Set>

Calculated Expression: <No Existing Calculated Expressions> New... Edit...

Operator

Operator: == (Equal To)

Right Hand Side

Constant Value: Type: Number Value: 0.000000

Data Column: <Not Set>

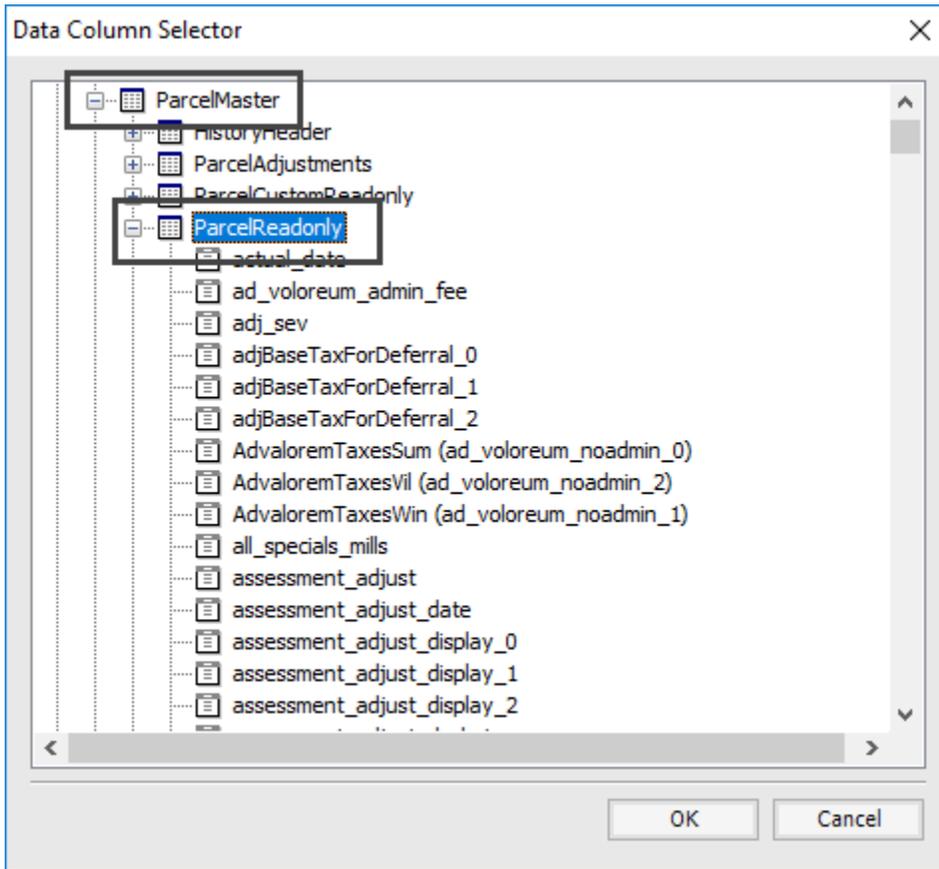
Function: <Not Set>

Calculated Expression: <No Existing Calculated Expressions> New... Edit...

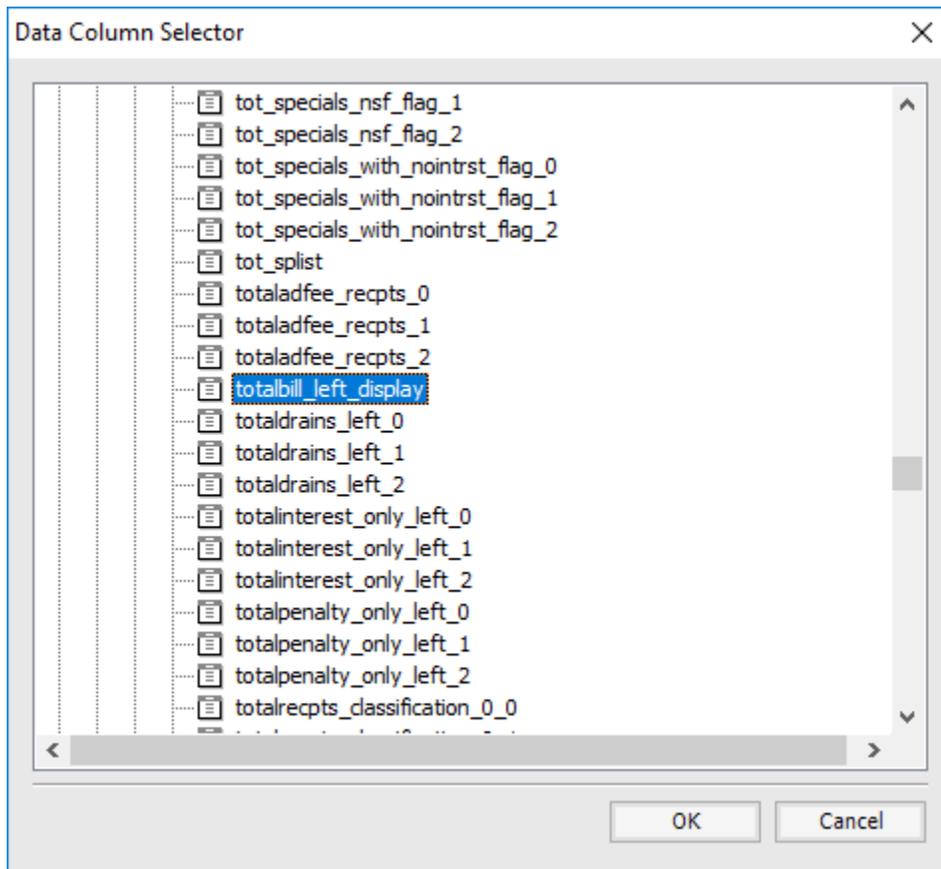
Back Next Cancel

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4. Click the Data Column radio button, expand the ParcelMaster category, then the ParcelReadOnly category.



5. Locate **totalbill_left_display**.



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6. Click Ok to return to the Quick If-Statement Wizard. Operator defaults to Equal To. Right Hand Side defaults to Constant Value/Number/0.000000.

Quick If-Statement Wizard

Create Condition For If-Statement

This is the logic that will be tested when the calculated expression is evaluated. For example, if your if-statement is "IF Amount > 500 THEN Amount ELSE 0", the condition is the "Amount > 500" part.

Left Hand Side

Constant Value: Type: Value:

Data Column:

Function:

Calculated Expression:

Operator

Operator:

Right Hand Side

Constant Value: Type: Value:

Data Column:

Function:

Calculated Expression:

- Click Next. We are now on the "if true" part of the wizard. Constant Value is the default selection. Change Type to String, and type SUM TAX PAID in the Value field.

Quick If-Statement Wizard

If TRUE Value
 Select the value you would like to use if the condition for your If-Statement is TRUE

If TRUE value

Constant Value: Type: String Value: SUM TAX PAID

Data Column: <Not Set>

Function: <Not Set>

Calculated Expression: <No Existing Calculated Expressions > New... Edit...

Back
Next
Cancel

In effect, we just told the program that if it is true that the bill has been paid in full, we want the report to display "SUM TAX PAID." Now we need to tell the program what to display if that is NOT true, i.e., the bill has not been paid at all, or has only been partially paid.

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8. Click Next. We are now on the "if false" part of the wizard. Click the Data Column radio button, locate totalbill_left_display, and click Ok to return to the Quick If-Statement Wizard.

Quick If-Statement Wizard

If FALSE value
Select the value you would like to use if the condition for your If-Statement is FALSE

If FALSE value

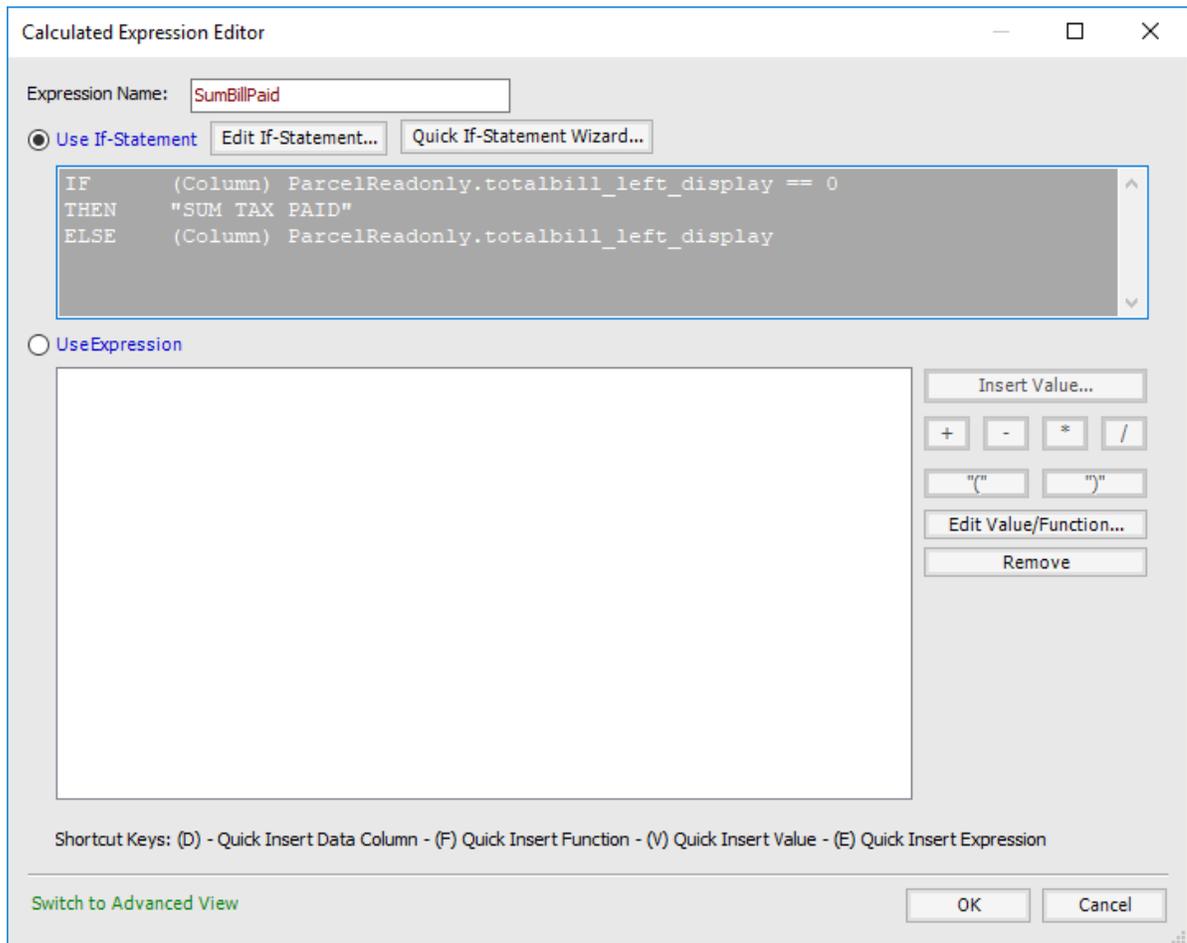
Constant Value: Type: Value:

Data Column:

Function:

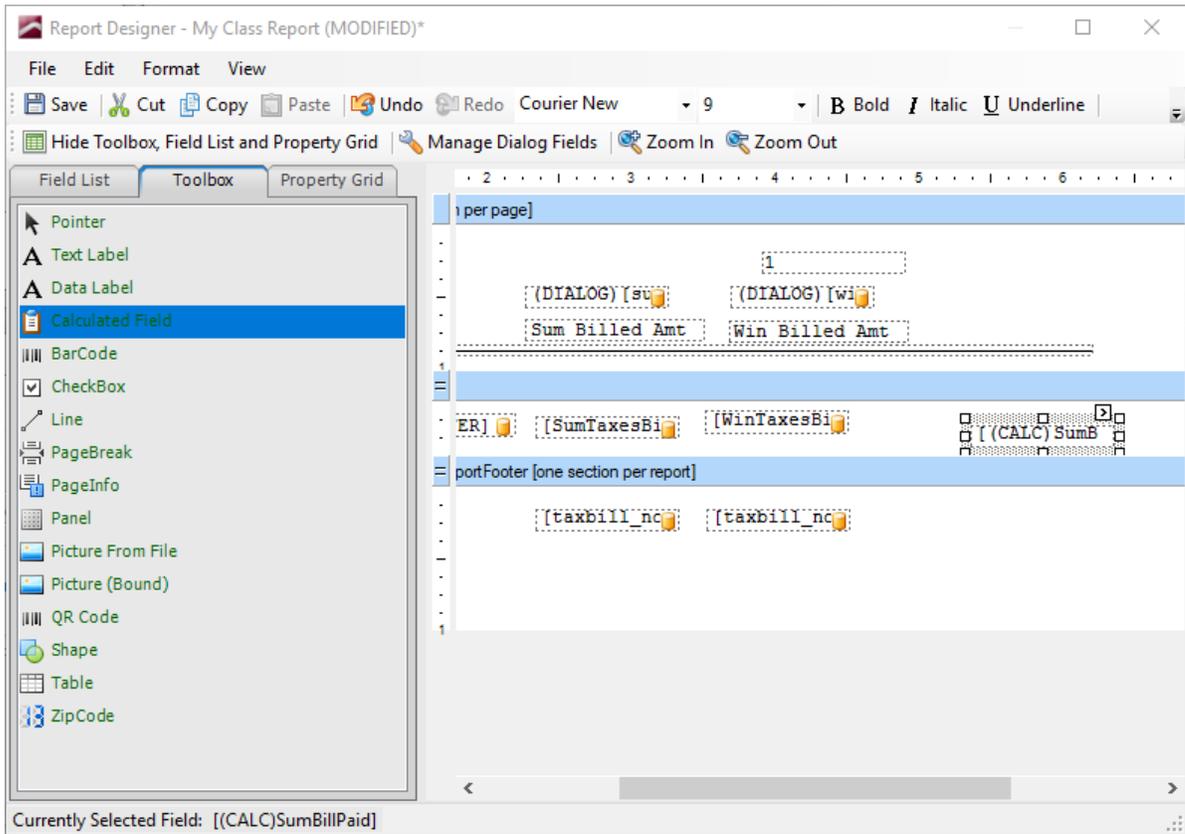
Calculated Expression:

- Click Finish. You return to the Calculated Expression Editor, and your If-Statement appears in full.



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10. Click Ok to return to the Report Designer. The calculated field is saved.



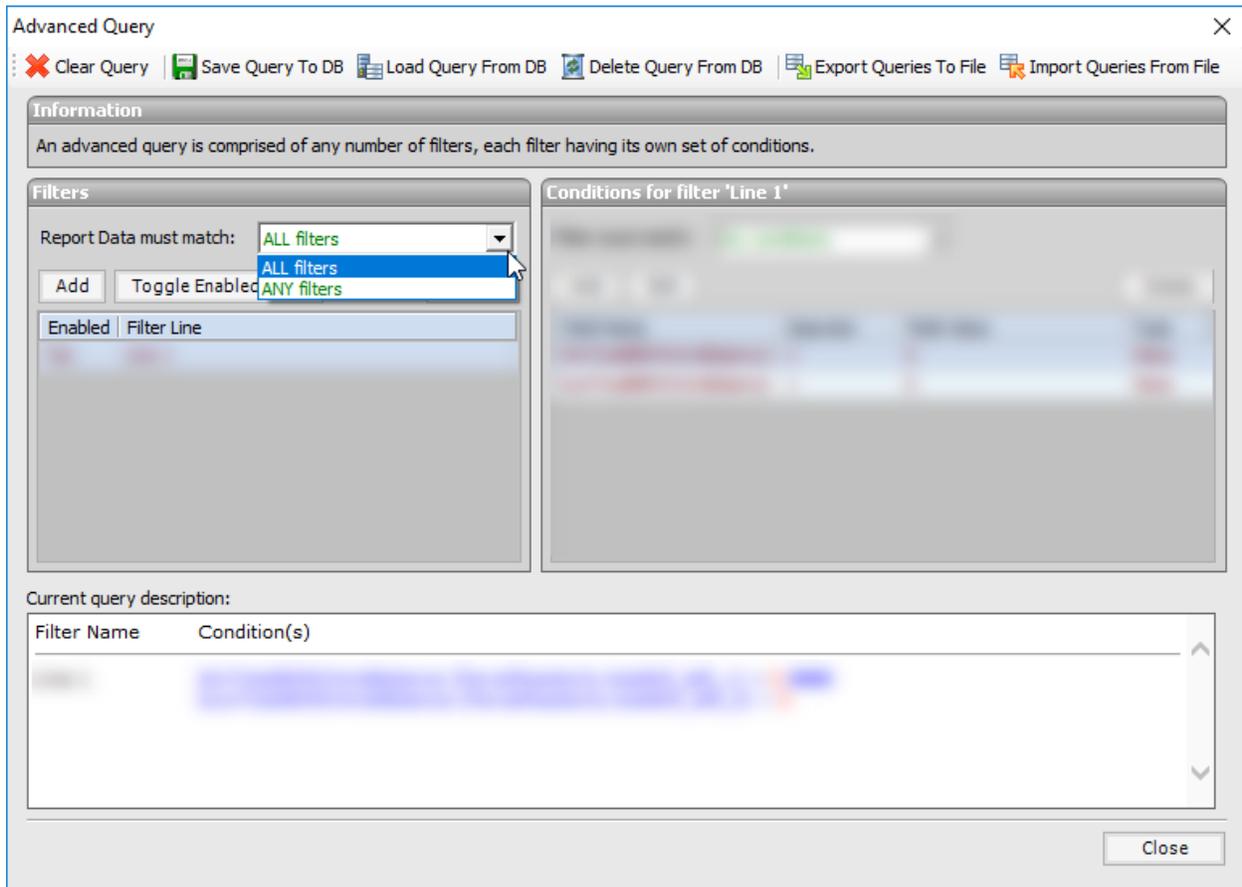
11. Save and exit the report. Run the report to see the results.

Advanced Queries

Filters and Conditions; And/Or

Advanced queries give you the flexibility of setting up simple queries, such as "find records where value equals X," and setting up more complex queries involving multiple filters and conditions on those filters. Filters and conditions depend on AND and OR statements, which are defined by determining "All" (AND) or "Any" (OR).

Filters: Report Data Must Match



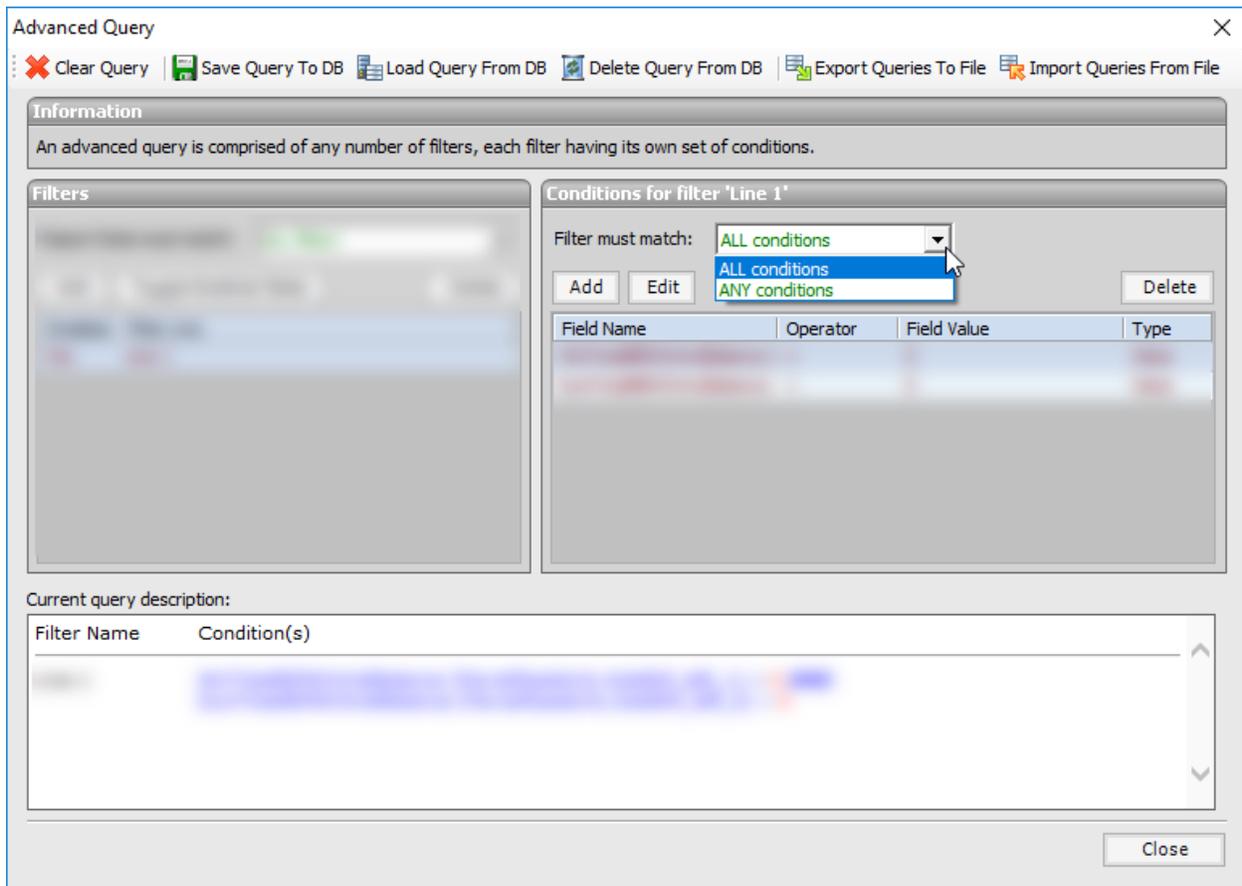
ALL: The report engine will return only those records that match every filter set up in the Filters pane, using that filter's conditions.

For example, you have two filters: one looking for A and one looking for B. Of 200 records, 50 records meet only the criteria for filter A, 30 records meet only the criteria for filter B, 20 records meet the criteria for both, and 100 records meet neither. As a result, 20 records will be returned.

ANY: The report engine will return records matching either filter.

For example, you have two filters: one looking for A and one looking for B. Of 200 records, 50 records meet the criteria for filter A, 30 records meet the criteria for filter B, 20 records meet both, 100 records meet neither. As a result, 100 records (the 50/30/20 records) will be returned.

Conditions: Filter Must Match



ALL: Only those records that match every condition set for the currently-highlighted Filter Line will be included.

For example, you have two conditions: one looking for records that "equals" C and one looking for records that are "less than" D. Of 100 records, 20 records meet only the "equals" condition; 10 records meet only the "less than" condition; 5 records meet both; 65 records meet neither. As a result, 5 records may be included (we say "may," because the number of records included will also be affected by your filter selection).

ANY: Records matching either condition set for the currently-highlighted Filter Line will be included.

For example, you have two conditions: one looking for records that "equals" C and one looking for records that are "less than" D. Of 100 records, 20 records meet only the "equals" condition; 10 records meet only the "less than" condition; 5 records meet both; 65 records meet neither. As a result, 35 records may be included (we say "may," because the number of records included will also be affected by your filter selection).

Set Up an Advanced Query

This lesson will guide you through setting up a simple query to find parcels that have paid their winter taxes, but not their summer taxes. Time-permitting, complex queries may be addressed as part of class discussion.

1. From the Run Reports dialog, select Parcel Reports as the Category, and Simple List as the Name.

The screenshot shows the 'Run Reports' dialog box with the following configuration:

- Report Section:**
 - Category: Parcel Reports
 - Name: Simple List
 - Report Options... button
- Report Population Section:**
 - Population: All Records
 - Spec. Pop.: Ad Valorem + Special Acts
 - Apply Advanced Query to Population
 - Advanced Query... button
 - Sort Index: Parcel #...
- Destination:** Screen
- Number of Copies:** 1
- Current Printer:** \\ramona\SAVIN131
- Margins/Fonts... button
- Printer Settings... button
- Show Sample Reports
- Run Report button
- Close button

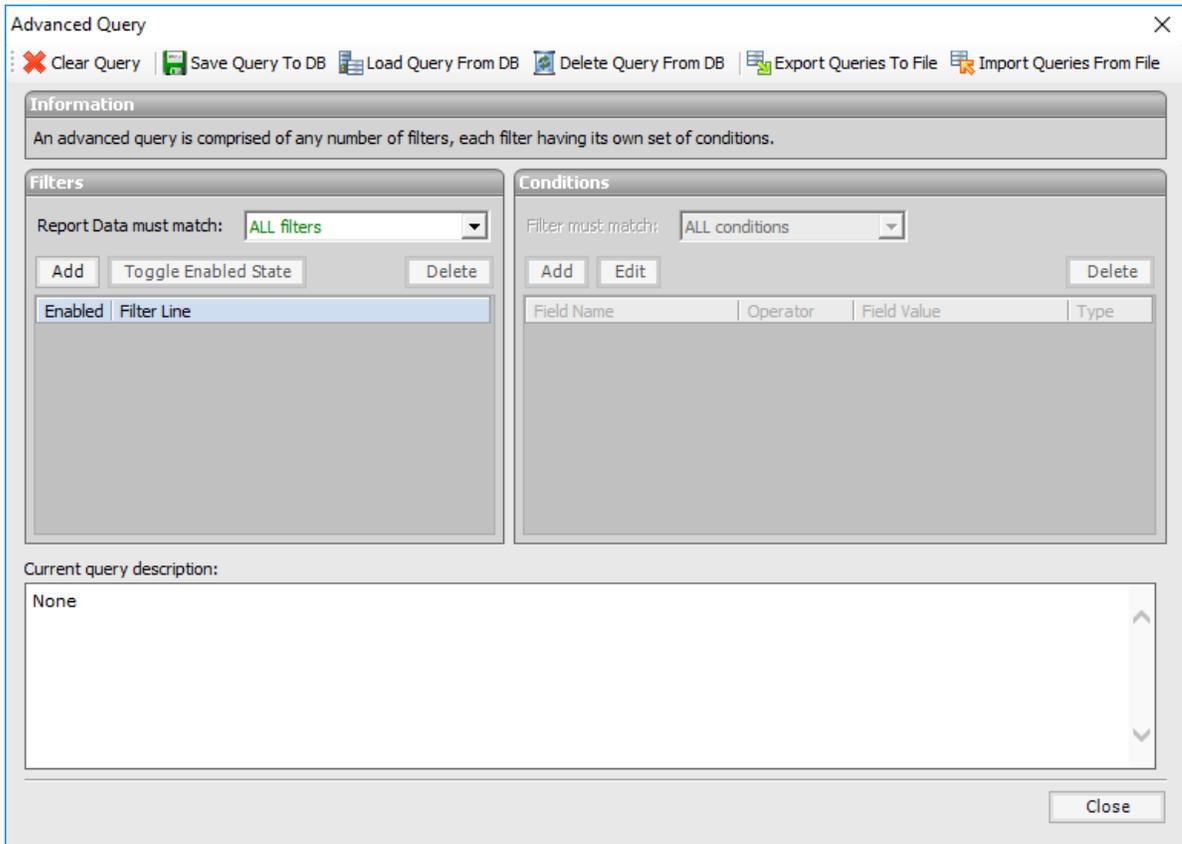
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2. Check the Apply Advanced Query to Population box. The Advanced Query button becomes enabled.

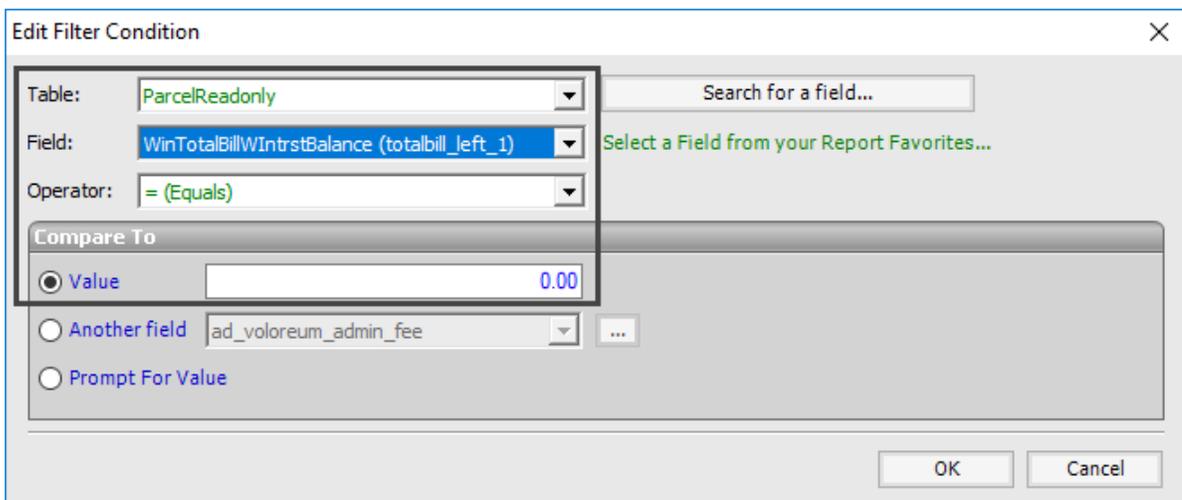
The screenshot shows the 'Run Reports' dialog box with the following settings:

- Report:** Category: Parcel Reports, Name: Simple List, Report Options...
- Report Population:** Population: All Records, Pop. Options..., Spec. Pop.: Ad Valorem+Special Acts, Apply Advanced Query to Population, Advanced Query... (highlighted), Sort Index: Parcel #...
- Destination:** Screen
- Number of Copies:** 1, Margins/Fonts...
- Current Printer:** \\ramona\SAVIN131, Printer Settings...
- Show Sample Reports, Run Report, Close

- Click the Advanced Query button. The Advanced Query dialog appears.

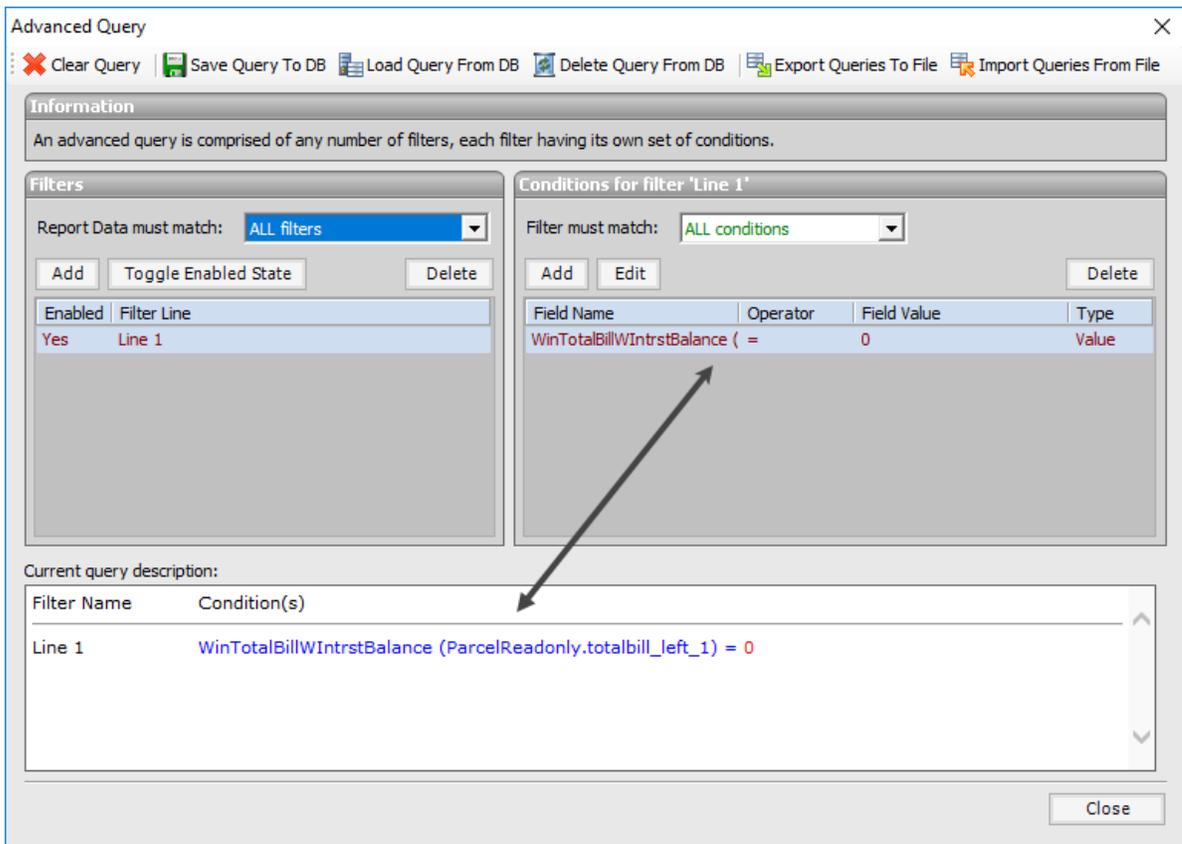


- Report Data Must Match defaults to ALL Filters. We will keep this default. Click the Add button in the Filters pane. Select ParcelReadOnly as the Table; select WinTotalBillWintrstBalance(totalbill_left_1) as the Field, and leave the Operator set to Equals. Leave the Value set to 0.00.

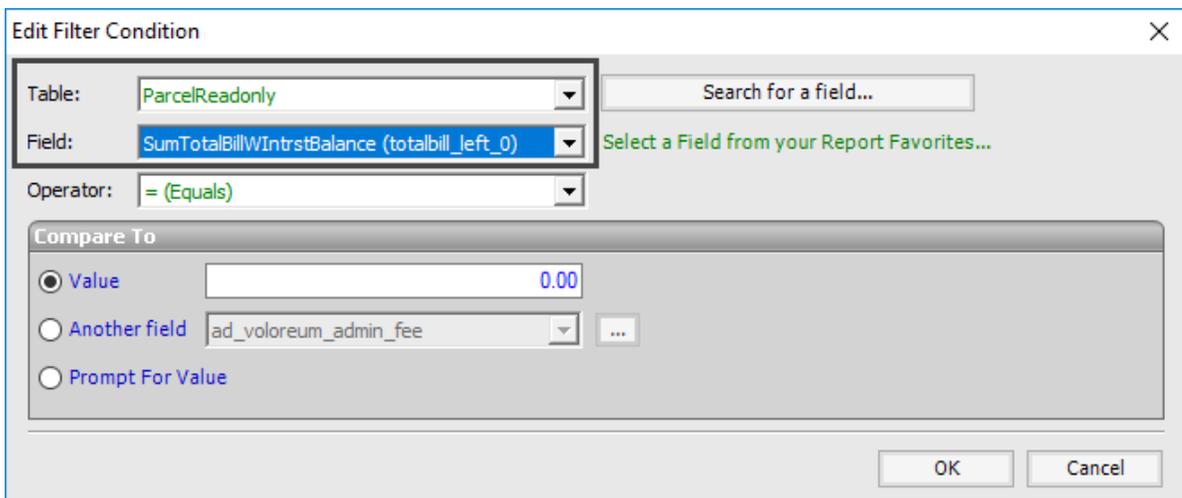


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5. Click Ok. We now have our first condition for this filter.



6. Click the Add button in the Conditions pane. Select ParcelReadonly as the Table and select SumTotalBillWIntrstBalance(totalbill_left_0) as the Field.



- Change the Operator to Greater Than, and leave the Value set to 0.00.

- Click Ok. We have the second (and final) condition for this filter.

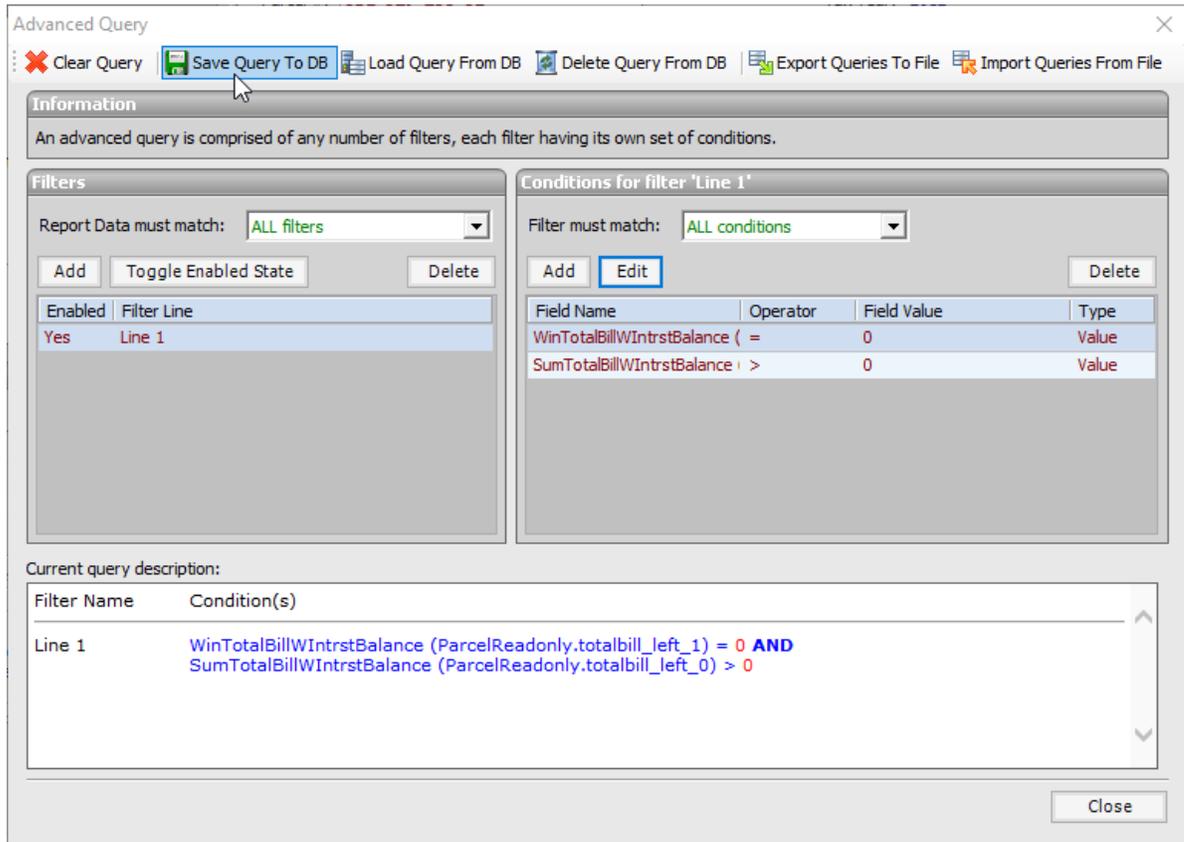
Field Name	Operator	Field Value	Type
WinTotalBillWIntrstBalance (=	0	Value
SumTotalBillWIntrstBalance	>	0	Value

Current query description:

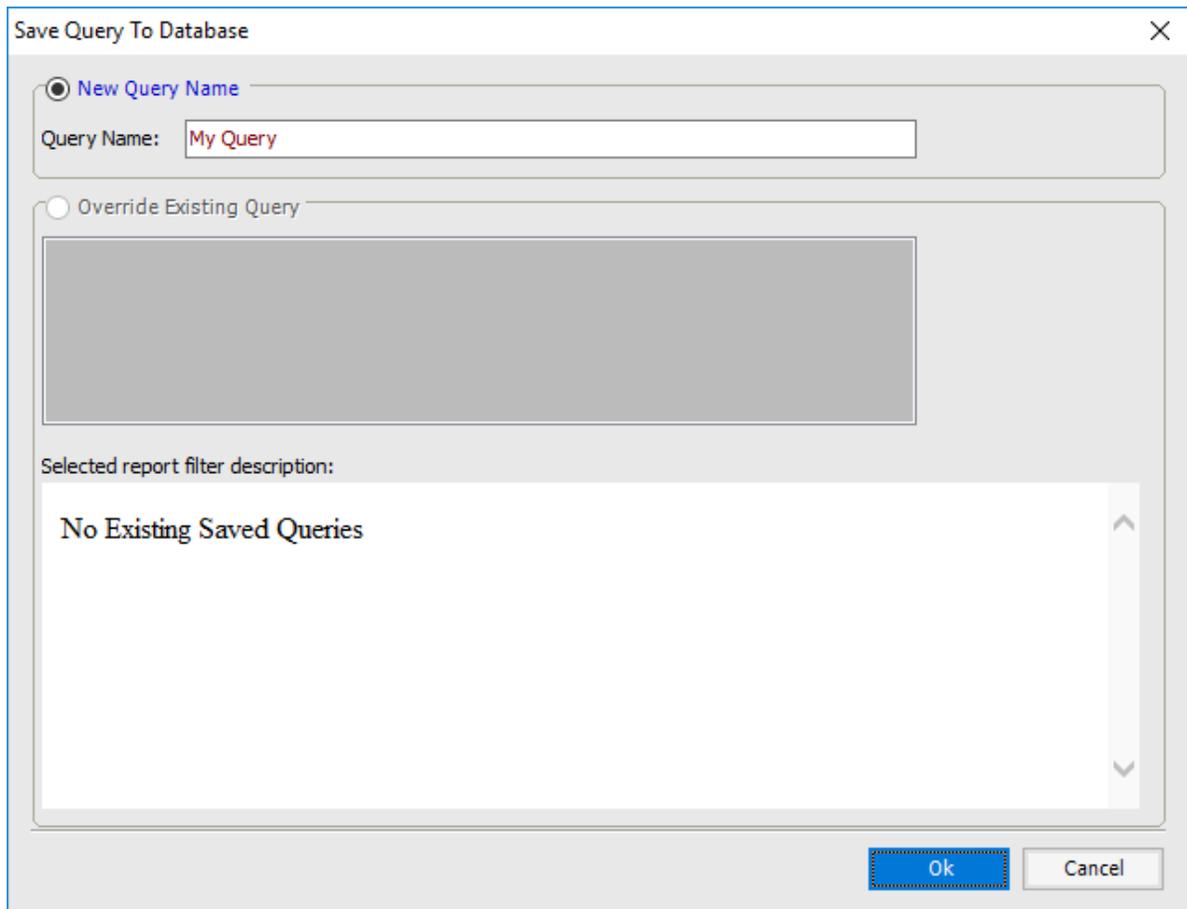
Filter Name	Condition(s)
Line 1	WinTotalBillWIntrstBalance (ParcelReadonly.totalbill_left_1) = 0 AND SumTotalBillWIntrstBalance (ParcelReadonly.totalbill_left_0) > 0

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9. Assuming this is a query we will want to run from time to time, our best option is to save it. Click the Save Query to DB button at the top.



10. New Query Name is the default selection. Enter the Query Name and click Ok.



11. Click Ok to clear the confirmation prompt that appears.
12. Click Close to return to the Run Reports dialog and run the report to see the results.

