



REARS - Graphs User's Guide & Tutorial

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GRAPHS USER'S GUIDE

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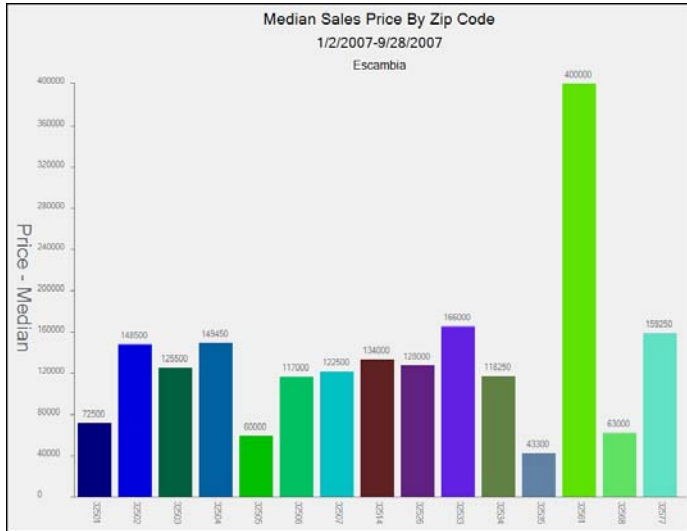
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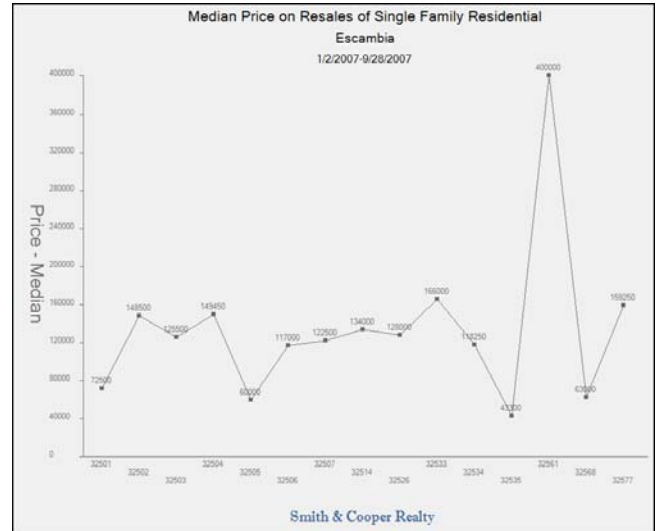
Introduction

Graphs is an exciting way to visually display data results generated using REARS and PIRS. By defining the X and Y Axis you can quickly generate bar, pie and line graphs that can be easily customized including user-defined titles, colors and other options. Once a graph has been defined, you can save the format and use it with new data search results. Additionally, there are several existing graph formats that ship with REARS and PIRS.

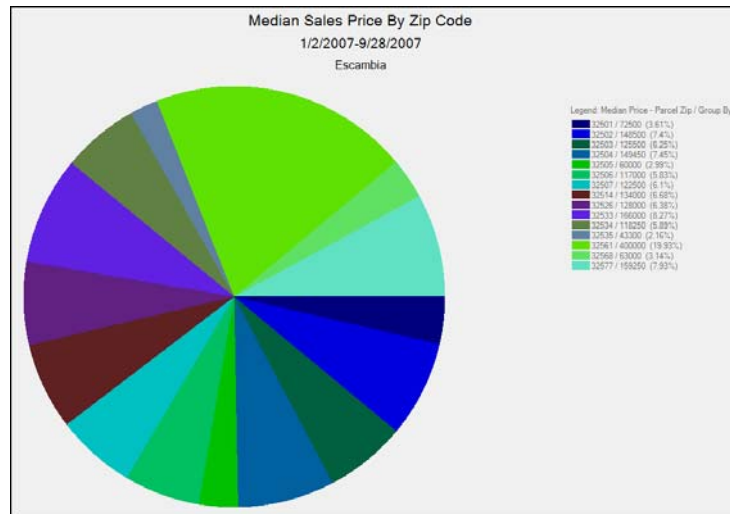
The graph options are:



Bar Graph



Line Graph



Pie Chart

Selecting Graphs from REARS

From REARS enter your search criteria to produce a Table-View Format of the data results. Then from the top menu toolbar select Graphs, and choose to “Graph All Records” or “Graph Selected Records”. The graph screen will then display.

REARS - Table View - Escambia - 09/01/2007 to 09/30/2007

TaxID/ParcelID	Par	Subdivision/Location	Price	Grantor/Seller
080481000	126 MARINE	AERO VISTA	69,000	SECRETARY OF HUD
080624000	202 REED RD	AERO VISTA	112,000	FLYTHE MAXINE R & DOUGLAS ET
021161365		AIRWAY OAKS	159,100	CELEBRITY HOME BUILDERS
021161420		AIRWAY OAKS	25,000	CELEBRITY HOME BUILDERS
021161420	708 MOYE LN	AIRWAY OAKS	152,500	CHB OF NORTHWEST FLORIDA IN
114419694	3236 MASSENA DR	ARBOR RIDGE	200,000	PETTIS ANTHONY W & MARY L
114419730	3419 NATHERLY DR	ARBOR RIDGE	180,000	CHB OF NORTHWEST FLORIDA IN
114419656	3400 NATHERLY DR	ARBOR RIDGE	214,300	CHB OF NORTHWEST FLORIDA IN
110288000	11500 CABOT ST	ASHLAND PARK	119,000	WERNER GWENDOLYN E
022485675	7777 PHENIX PL	ATWOOD	75,000	BOWKER DORIS A
011907000	2992 SWAN LN	AUDUBON PLACE	215,000	LE HO V & QUACH LIEN T
092115000	4650 CERNY RD	AVONDALE	18,500	ORRIS JASON D
092105000	5655 AVONDALE RD	AVONDALE	86,000	GASTINEAU JAMES C SR

Figure 1

Graph Screen - File Menu Options

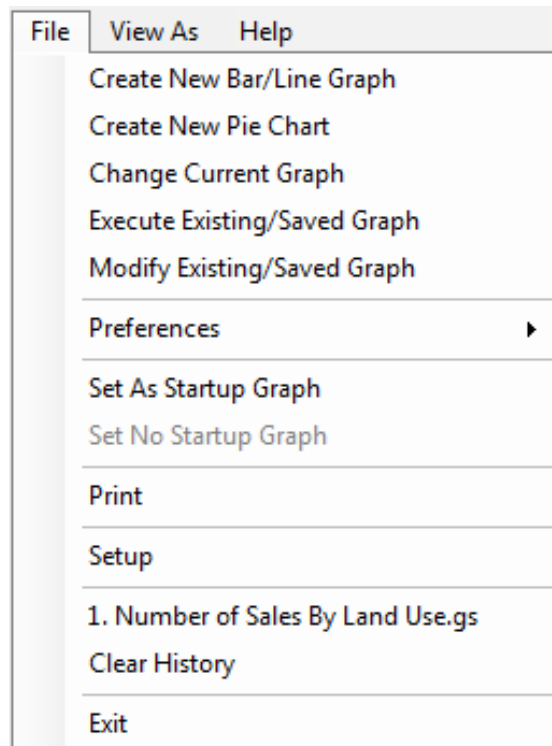


Figure 2

Create New Bar/Line Graph – When selected, the following design screen displays where you can define the Y and X Axis for a new graph. You also have the option to add titles to the graph header and footer, set the Y Axis Scale and the Y Axis High and Low Value. When executed, the graph defaults to a bar graph unless you check “Draw Line Graph” (see item i below).

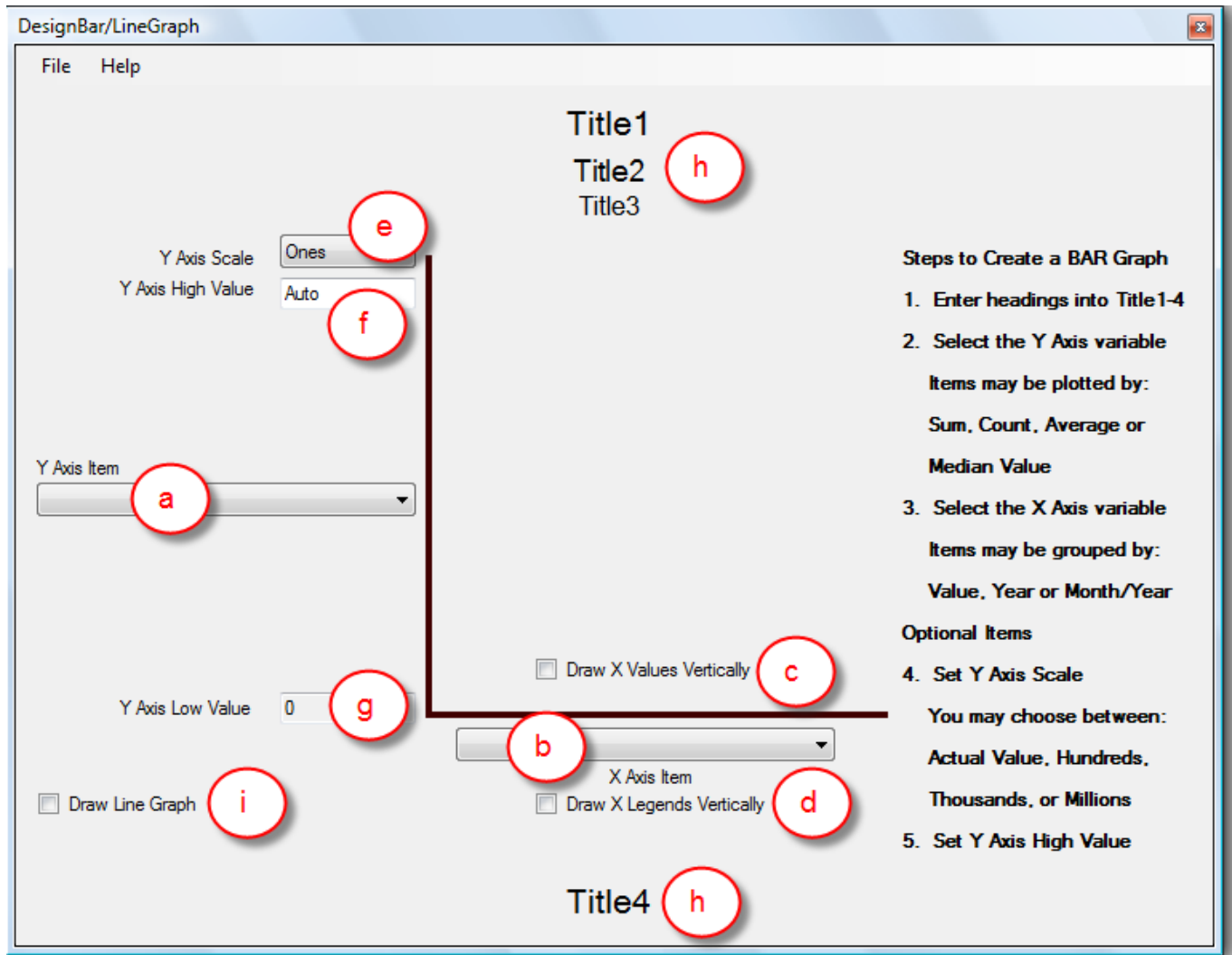


Figure 3

1. Bar Graph Design Screen

a) **Y Axis Item** – Choose a variable item to be plotted as either a Sum, Count, Average or Median Value.

The Y Axis Item choices include:

Y Axis Item
of Transactions - Count
of Transactions - Count
IndLandPrice - Average
IndLandPrice - Median
IndLandPrice - Sum
IndPPSFEff - Average
IndPPSFEff - Median
IndPPSFEff - Sum
IndPPSFHC - Average
IndPPSFHC - Median
IndPPSFHC - Sum
IndStrucPrice - Average
IndStrucPrice - Median
IndStrucPrice - Sum
Land Value - Average
Land Value - Median
Land Value - Sum
Parcel Value - Average
Parcel Value - Median
Parcel Value - Sum
Price - Average
Price - Median
Price - Sum
Price - Average
Price - Median
Price - Sum
SqFt Eff Adj - Average
SqFt Eff Adj - Median
SqFt Eff Adj - Sum
SqFt HC - Average
SqFt HC - Median
SqFt HC - Sum
Tot \$ Per Sqft Eff - Average
Tot \$ Per Sqft Eff - Median
Tot \$ Per Sqft Eff - Sum
Tot \$ Per Sqft HC - Average
Tot \$ Per Sqft HC - Median

Figure 4

- b) **X Axis Item** - Choose a variable item to be grouped by Value, Year or Month/Year. The X Axis Item choices include:

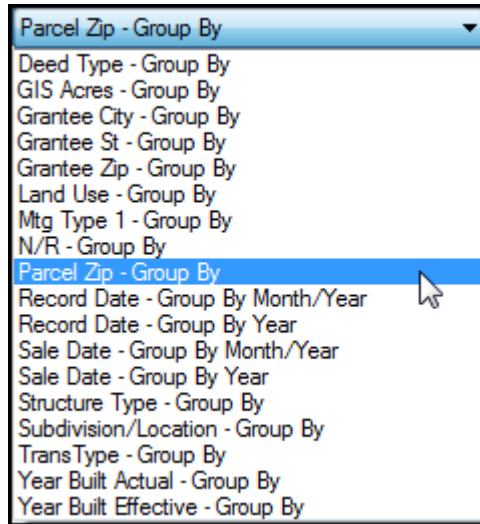


Figure 5

- c) **Draw X Values Vertically** – When this selection is checked, the X values that appear on the top of the bars will display vertically rather than horizontally (the default).
- d) **Draw X Legends Vertically** – When this selection is checked, the X legends that appear on the bottom grid will display vertically rather than horizontally (the default). This option is beneficial when long legends, such as landuse or city has been chosen.
- e) **Y Axis Scale** – When selected, you have the choice to set the Y Axis Scale to Ones, Hundreds, Thousands or Millions.

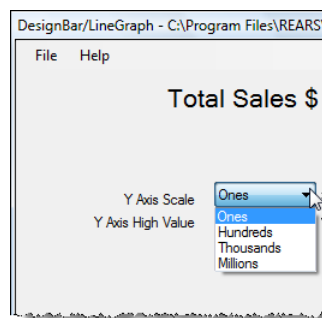


Figure 6

- f) **Y Axis High Value** – The default for the Y Axis High Value is “Auto” which means the system will automatically set this value based on the data used in the REARS search criteria. You have the ability to override this field and insert a specific value.

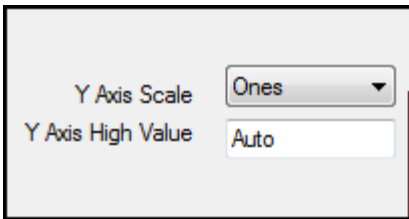


Figure 7

- g) **Y Axis Low Value** - The default for the Y Axis Low Value is “Zero”.
- h) **Titles** – The title options let you further customize your graph to include user-defined or system-generated titles, such as report name, county name, date range and your firm name. To create a title, “right-click” on the word “Title 1, Title 2, Title 3 or Title 4.



Figure 8

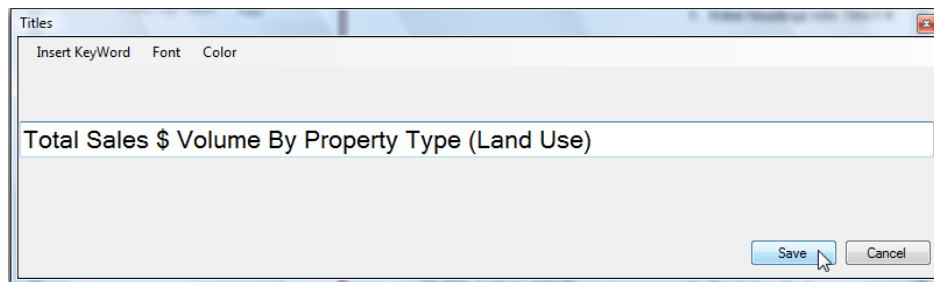


Figure 9

Keywords in Titles – system-generated keywords can be used in titles. In the example below, **%RecordingDateRange%** is selected for Title 2. When the graph is executed, the system will automatically use the start and ending date range from the data search results generated in REARS. Keyword choices include:

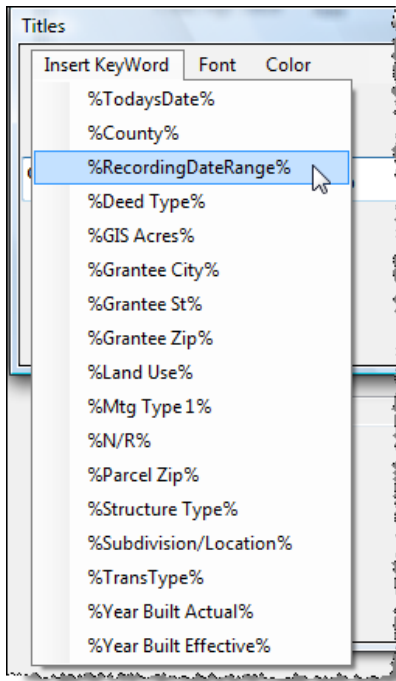


Figure 10

Font & Color – You have the ability to change the font and color of any title by simply highlighting the existing title or keyword and selecting a new font or color choice.

- i) **Draw Line Graph** – To create a line graph, simply select “Draw Line Graph” from the Design Screen. All other options on this screen function identically whether you are creating a bar or line graph.

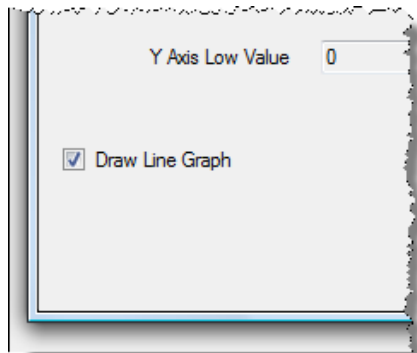


Figure 11

2. **Execute a New Bar/Line Graph** – Once a graph has been designed, select “**File → Execute**” to generate the graph using the REARS data results.

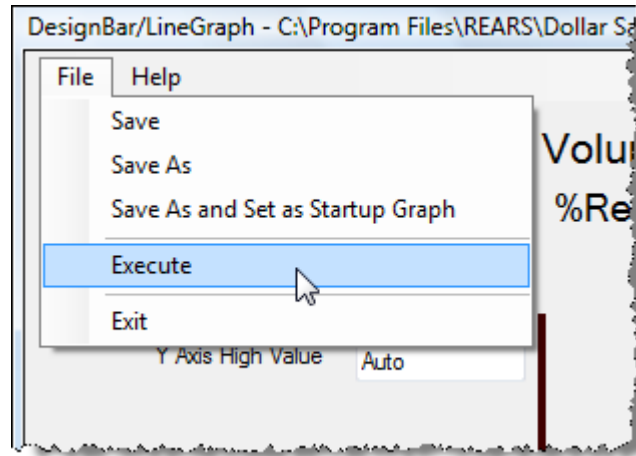


Figure 12

3. **Save As** – Once a graph has been designed, you can save the format if you would like to use it again. Once the format has been saved with a filename (.gs file extension), you can access the file from the main Graphs menu by selecting “**Execute Existing/Saved Graph**” or “**Modify Existing Saved Graph**”.
4. **Save As and Set as Startup** – Once a graph has been designed, you can save the format and set it to automatically execute on startup. After you save the graph format as the startup file, from the Graph main menu, go to “**File → Preferences**” to choose the startup options.

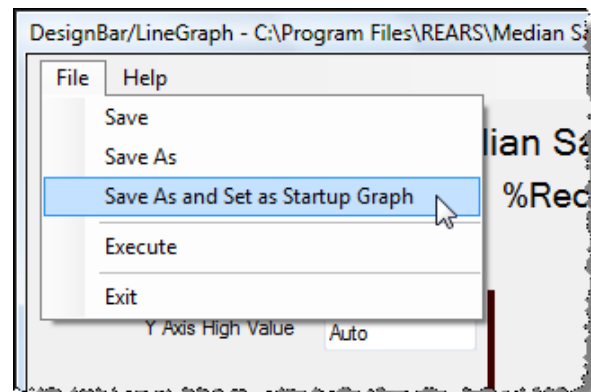


Figure 13

Create New Pie Chart – When selected, the following design screen displays where you can define the “Value Item” and “Group by Item” for a new pie chart.

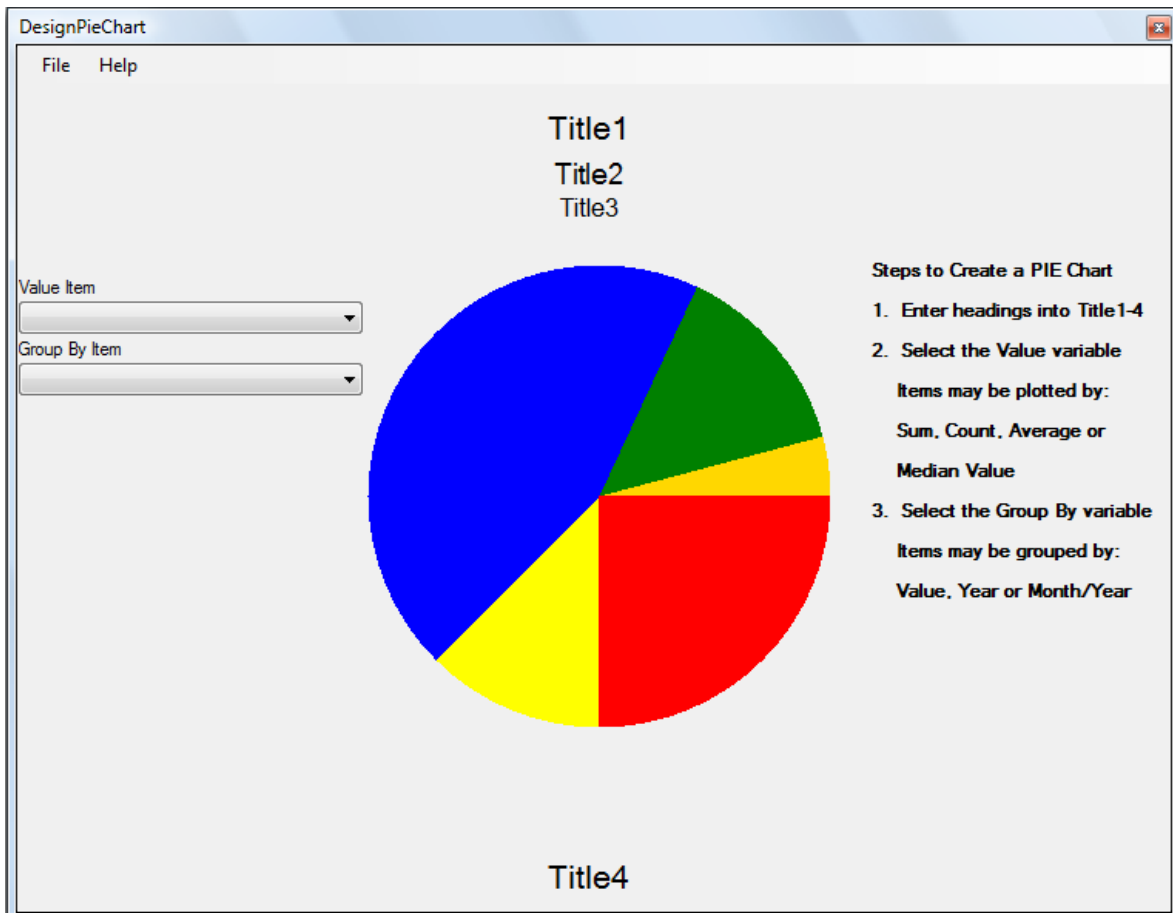


Figure 14

- a) **Value Item** – Choose a variable item to be plotted as either a Sum, Count, Average, Median Value or Actual Value. See *Figure 4* for a list of all value item options.
- b) **Group By Item** – Choose a variable item to be grouped by Value, Year or Month/Year. See *Figure 5* for a list of all Group By Item options.
- c) **Titles** – The title options let you further customize your pie chart to include user-defined or system-generated titles, such as report name, county name, date range and your firm name. To create a title, “right-click” on the word “Title 1, Title 2, Title 3 or Title 4. See *Figures 8 - 10* for more title information.

Change Current Graph – after a graph or chart has been executed, select this option to return to the design screen if you need to make modifications.

Execute Existing/Saved Graph – if you already have a pre-defined graph or chart you wish to use, simply choose this option and browse to find the existing design name (with a .gs file extension). The graph will automatically execute without displaying the design screen.

Modify Existing/Saved Graph – use this option to browse and open the design screen of an existing graph or chart.

Preferences – when selected the following options allow you to customize the Graph startup screen.

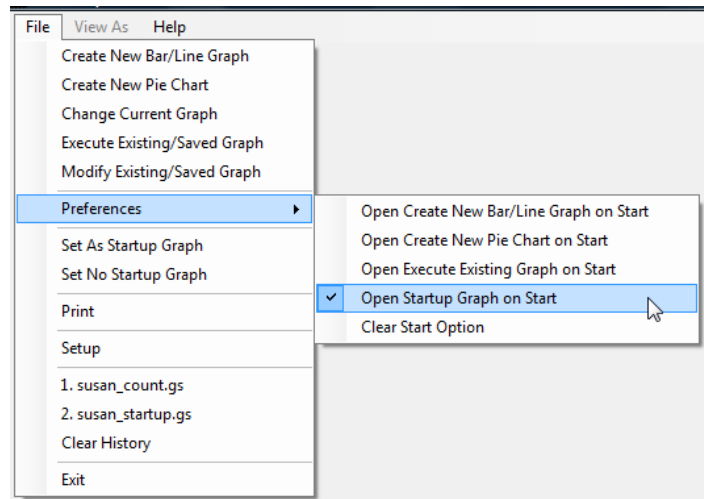


Figure 15

- a) **Open Create New Bar/Line Graph on Start** –startup will be a new design screen for creating a bar or line graph.
- b) **Open Create New Pie Chart on Start** –startup will be a new design screen for creating a pie chart.
- c) **Open Execute Existing Graph on Start** – startup will be an “Open Graph” dialog box, where each time you start to program you can choose any previously saved graph file (.gs file extension).
- d) **Open Startup Graph on Start** – startup will be an executed graph that was previously saved as the “Startup Graph” from the Design Screen, or “Set as Startup Graph” was chosen from the main screen File menu.
- e) **Clear Start Option** – removes any previously defined startup preference, and the system will open to a blank Graph screen.

Set As Startup Graph – anytime you choose to “Execute Existing/Saved Graph” you have the opportunity to save this graph as the Startup Graph.

Set No Startup Graph – removes any previously defined startup graph.

Print – allows you to print any executed graph.

Setup - when selected the following options allow you to customize features of the Graph including the graph background color, grid line color and text color. It also allows you to define the bars as a single color or multi-color. You can also set the maximum number of bars to draw on the screen and print on a printer.

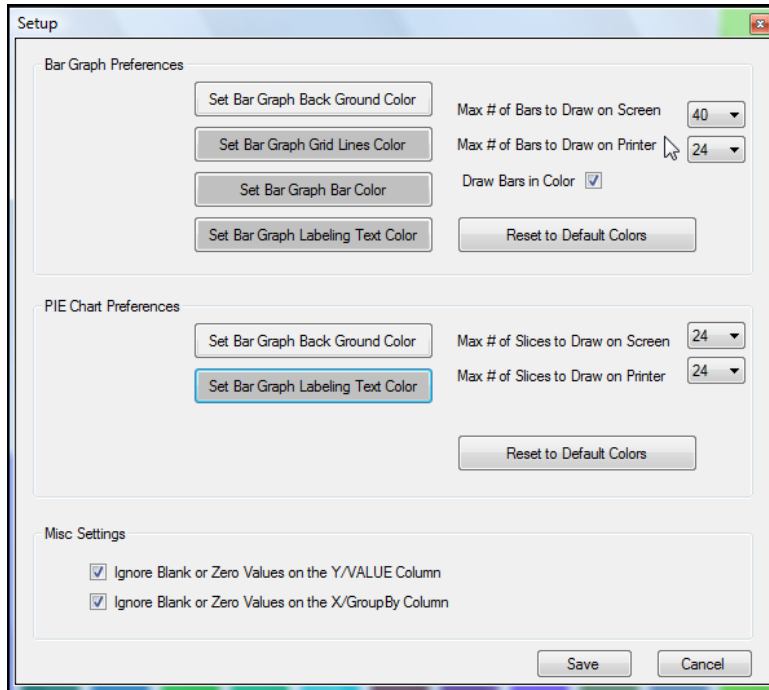


Figure 16

The following example shows the graph setup screen with the background color changed to yellow:

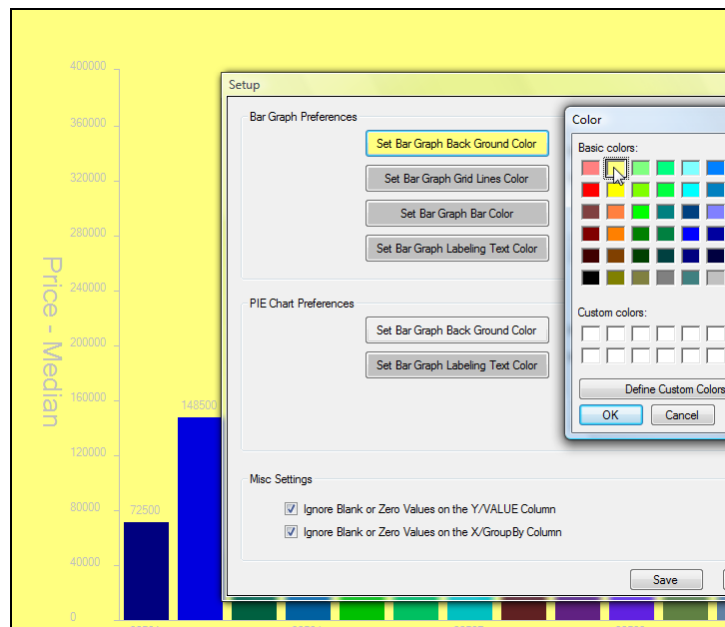


Figure 17

Max. Number of Bars to Draw on Screen – On a bar graph, this field sets the number of bars that will display on screen regardless of the amount of data in the X Axis Value. The graph displays one page of information only, so if the X Axis Values exceed the number of bars set in this field, the remaining data is truncated.

If the X Axis Values exceed the number of bars set in this field, you will see the following message when you executed a graph:

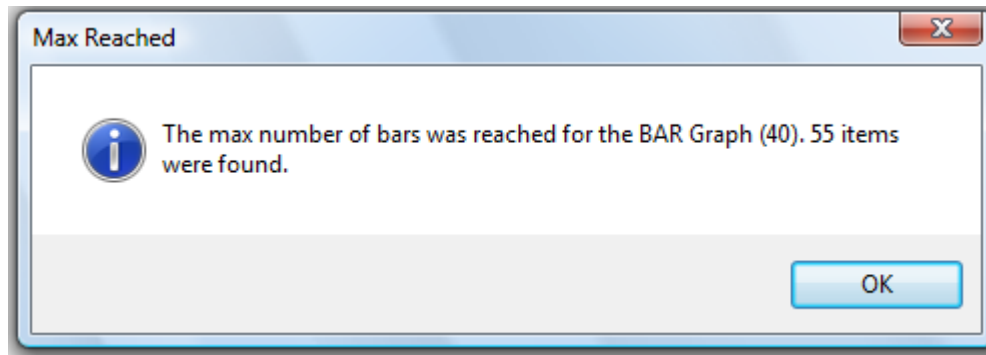


Figure 18

Max. Number of Bars to Draw on Printer – On a bar graph, this field sets the number of bars that will print on a printer regardless of the amount of data in the X Axis Value. Since many printers have different resolution capabilities than a screen monitor, this number may be different than the number entered in the field above (max number of bars to draw on screen).

Max. Number of Slices to Draw on Screen – On a pie chart this field sets the number of slices that will display on screen regardless of the amount of data in the X Axis Value. The pie chart displays one page of information only, so if the X Axis Values exceed the number of slices set in this field, the remaining data is truncated.

If the X Axis Values exceed the number of slices set in this field, you will see a message similar to *Figure 18* you executed a graph.

Max. Number of Slices to Draw on Printer – On a pie chart, this field sets the number of slices that will print on a printer regardless of the amount of data in the X Axis Value. Since many printers have different resolution capabilities than a screen monitor, this number may be different than the number entered in the field above (max number of slices to draw on screen).

View As

The “View As” option from the toolbar menu, lets you quickly switch the currently executed graph from one format into another graph format.



Figure 19

Pre-Defined Graphs

The REARS program already has several pre-defined graph format which you can use to quickly generate a graph using your specific search criteria. The pre-defined formats include:

1. Total Sales Dollar Volume By Property Type
2. Indicated Median Price Per Heated/Cooled Square Foot By Property Type (Landuse)
3. Median Price By Zip Code
4. Total Number of Sales By Property Type (Landuse)
5. Total Number of Sales by Month

To generate a graph using a pre-defined or an existing format, from the Graph File Menu, select **File → Execute Existing/Saved Graph**, then browse for the specific file.

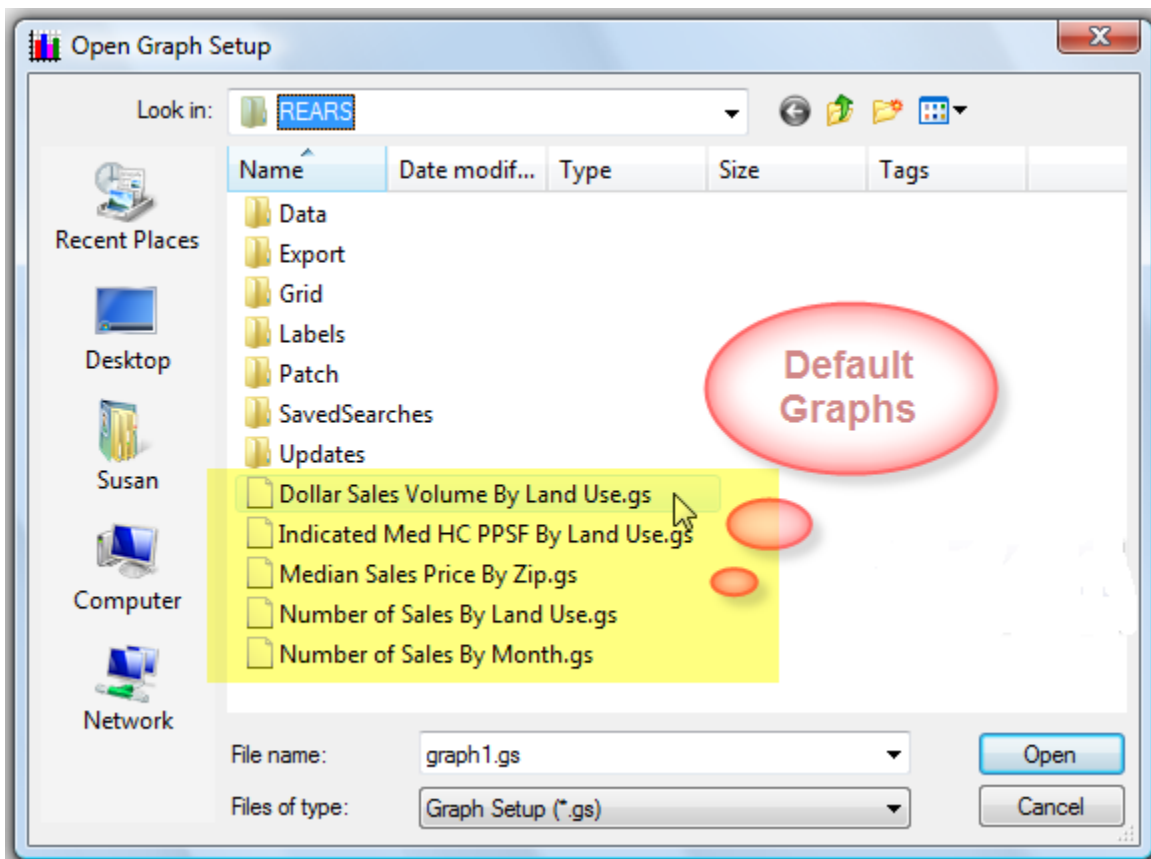


Figure 20

Tutorial

EXAMPLE: Median Price on Resales of Single Family Residential

For this tutorial we'll produce a bar graph of Escambia County transactions of single family residential (Landuse selection criteria), resales only (box checked) recorded between January 1, 2007 and September 30, 2007. The graph will display the median price of sales by zip code.

Start the search by selecting "Search Sales Data" from the REARS main menu, and then entering the selection criteria – landuse, recording date range and resales only.



Figure 21

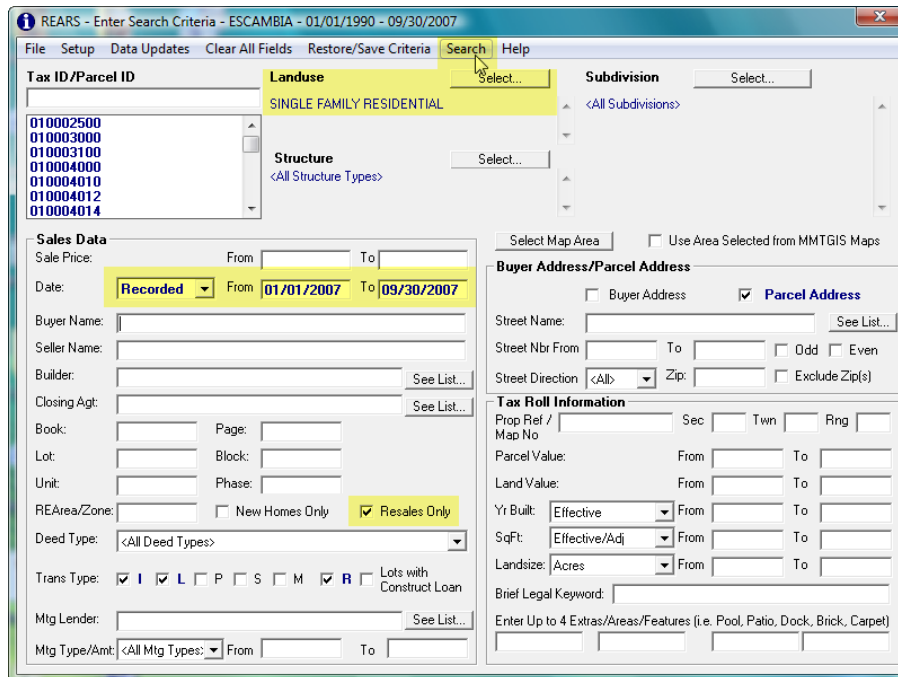


Figure 22

From the Table-View screen that displays of all transactions meeting the search criteria, select “**Graphs**” from the menu toolbar, then “**Graph All Records**”.

REARS - Table View - Escambia - 01/01/2007 to 09/30/2007

TaxID/ParcelID	Par	Address	Subdivision/Location	Price	Grantor
032829610	1920 JOHN C		ABB	100,000	BUTLER CHARLES M & V
011849000	2857 HELEN L		ABB	115,500	GILLSON GARY W
032804000	6318 JACK ST	PT OF B/6//	ABB	151,000	PATTERSON ALLISON P
011830000	2818 HELEN ST	W80' OF 10 & 11/2//RES	ABB	75,000	LARSEN CHRISTOPHER
032642000	2361 LANSING DR	W100' OF N140' OF A/1//	ABB	20,100	DAVIS JOHN H ETAL
080481000	126 MARINE DR	31 & N 1/3 OF 32/19//2	AERO VISTA	69,000	SECRETARY OF HUD
080624000	202 REED RD	26/27//2ND ADD	AERO VISTA	112,000	FLYTHE MAXINE R & DO
080558000	801 RUE MAX ST	8/25//2ND ADD	AERO VISTA	46,000	WELLS FARGO BANK
080508000	116 BRANDYWINE RD	19/20//2ND ADD	AERO VISTA	23,800	VANALST CLIFFORD O
080760000	212 BETTY RD	27/32//2ND ADD	AERO VISTA	85,000	TWO51 LLC
080790000	204 HENRY ST	25/33//2ND ADD	AERO VISTA	20,300	MOORE SHARON T
080753000	226 BETTY RD	20/32//2ND ADD	AERO VISTA	92,000	MOORE HEATHER M
080603000	209 RUE MAX ST	5/27//RESUB	AERO VISTA	80,000	HEAPS FAMILY TRUST

Figure 23

The MMTGraph screen appears with the File Menu options displayed. We'll start by selecting “**Create New Bar Graph**”.

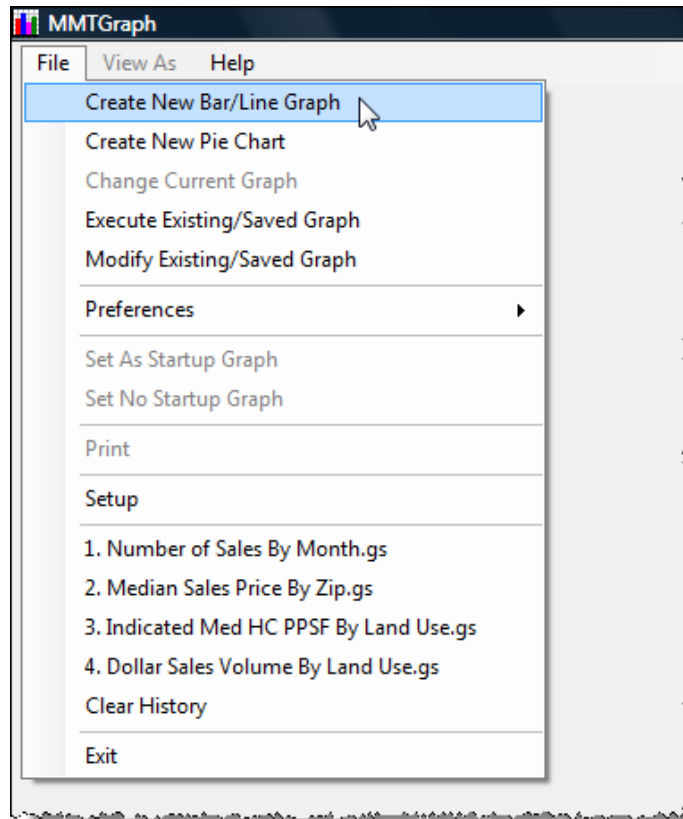


Figure 24

We're now ready to design the graph. First, we'll define the "Y Axis" by clicking on the drop-down list of options and choosing "Price – Median".

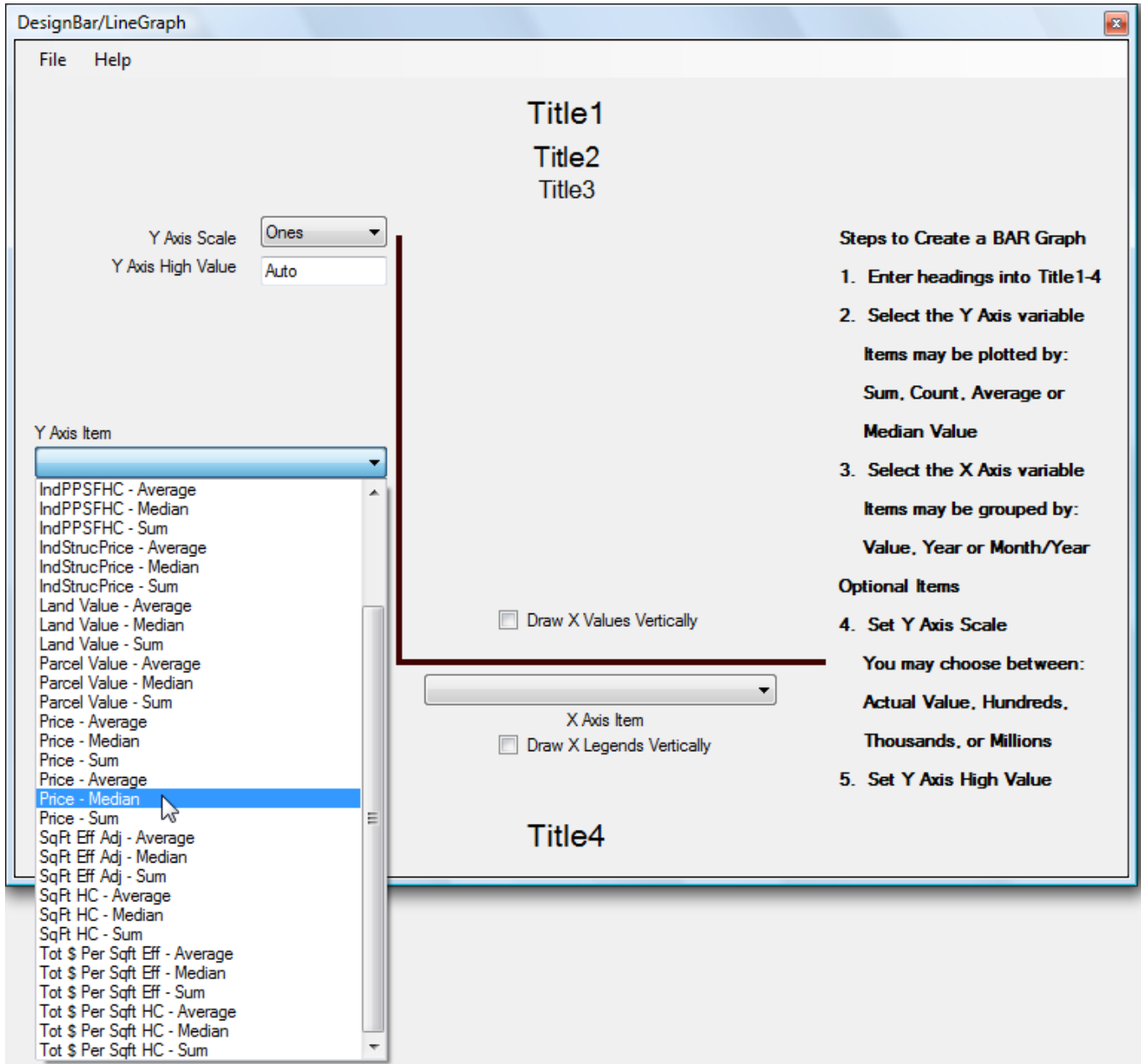


Figure 25

Next, we'll define the "X Axis" by clicking on the drop-down list of options and choosing "Parcel Zip – Group By".

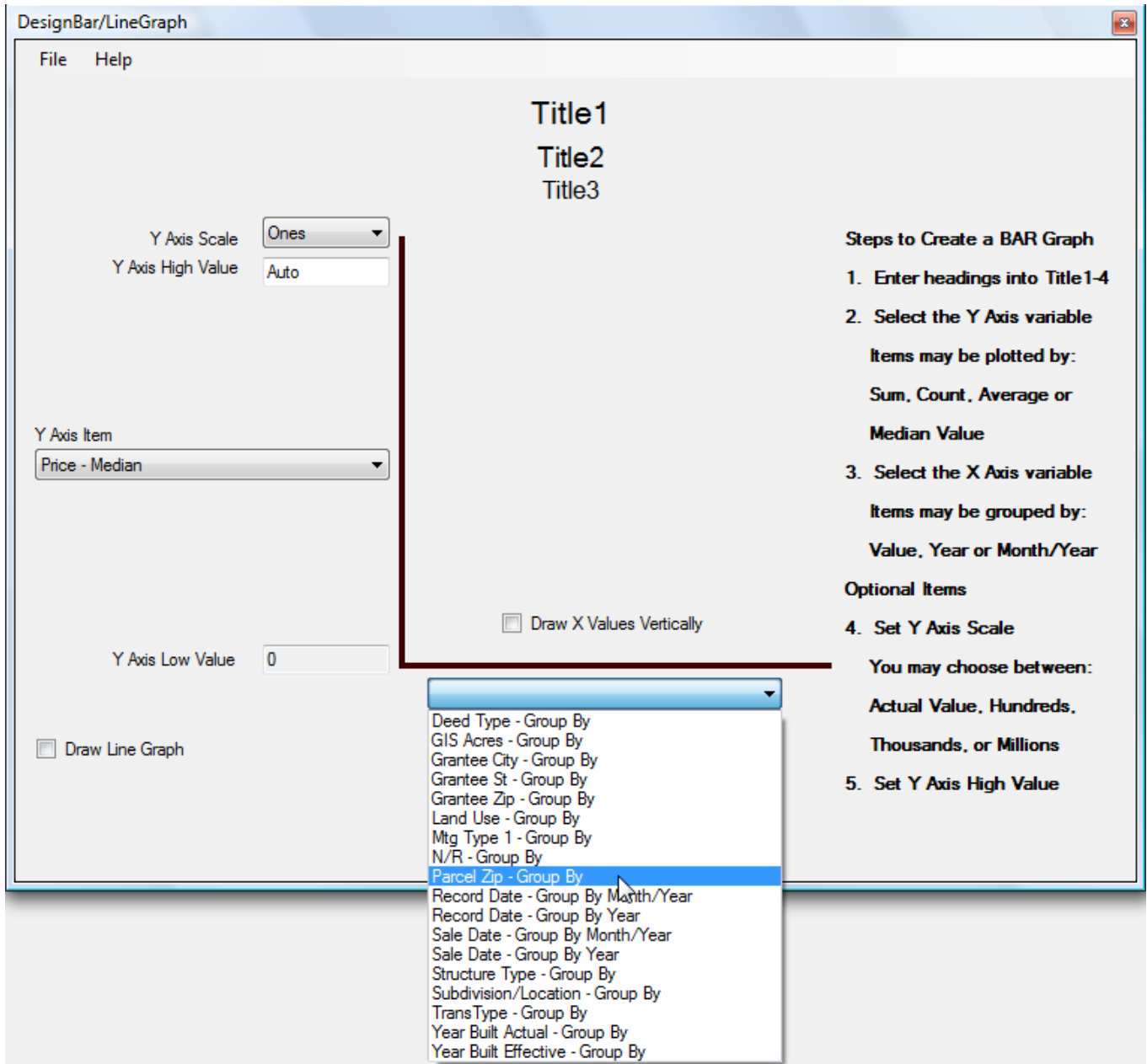


Figure 26

Next, we'll change the "Y Axis Scale" to "Thousands".

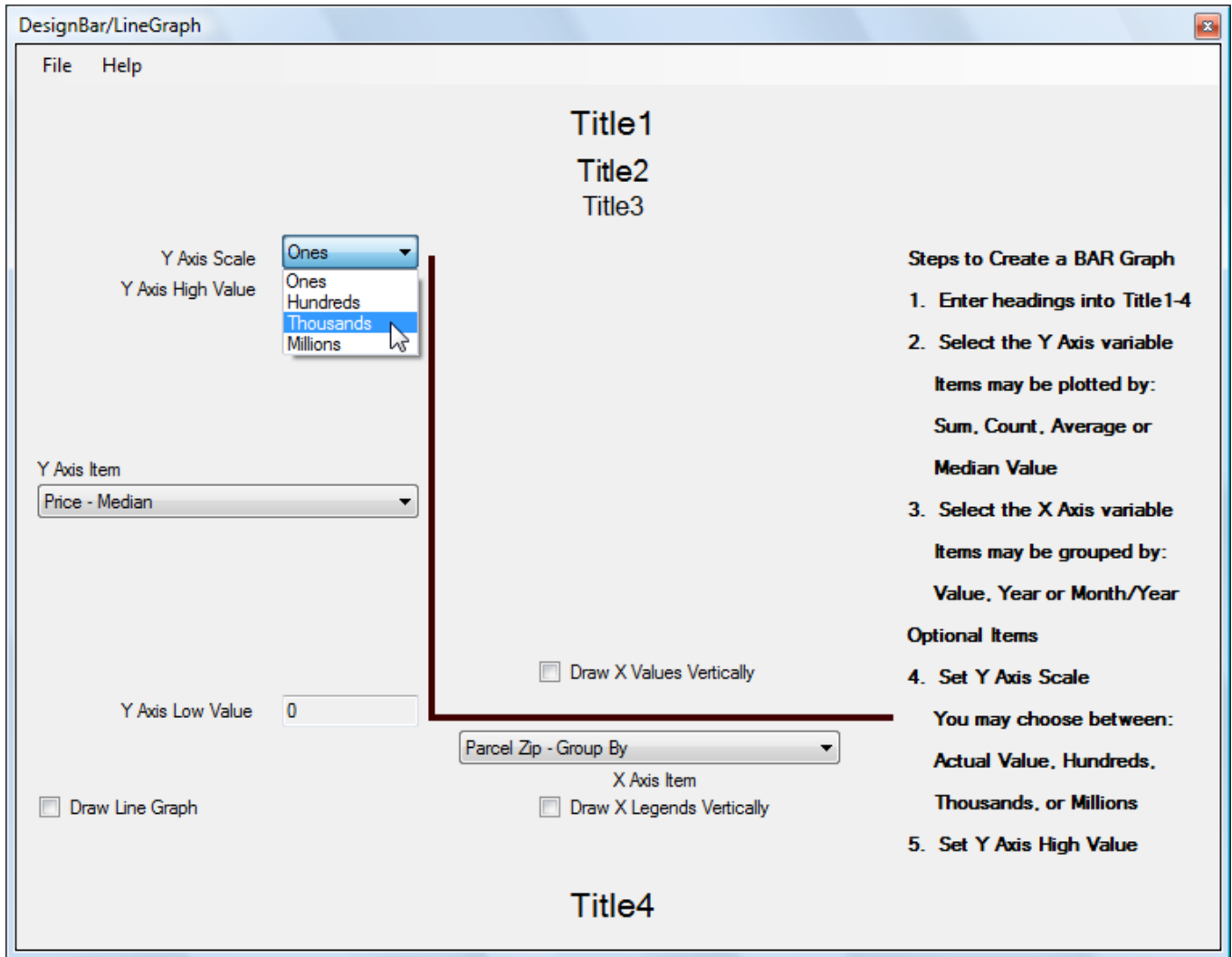


Figure 27

Now we'll define the graph report titles:

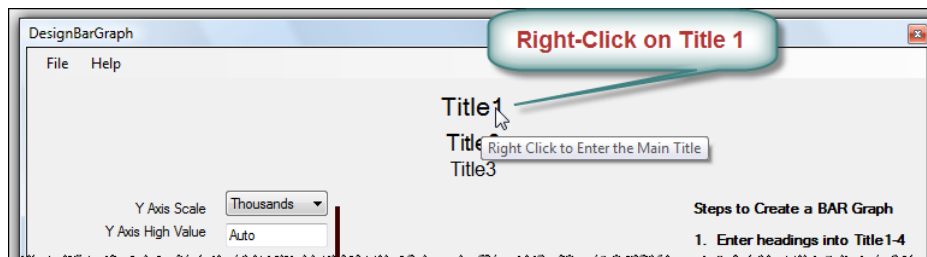


Figure 28

Right-click on the word **“Title 1”** and replace the content with your own title, in this case we’ll enter **“Median Price on Resales of Single Family Residential”**.

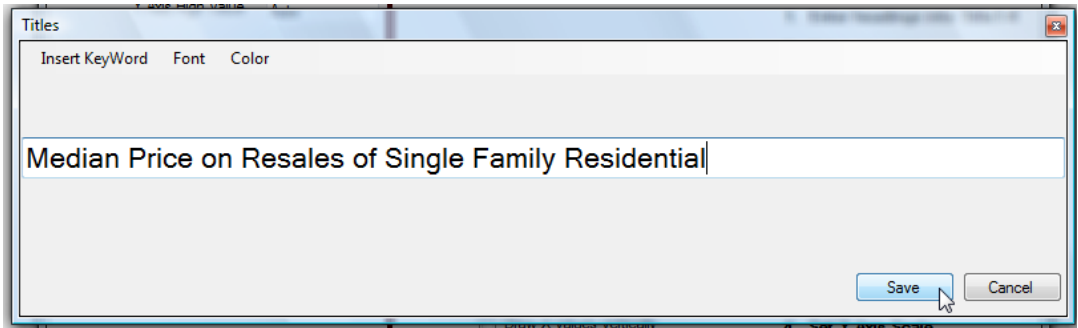


Figure 29

Right-click on the word **“Title 2”** and this time, we’ll use a pre-defined key word. Since we want the graph to print the county name, we’ll insert the key word **%County%**.



Figure 30

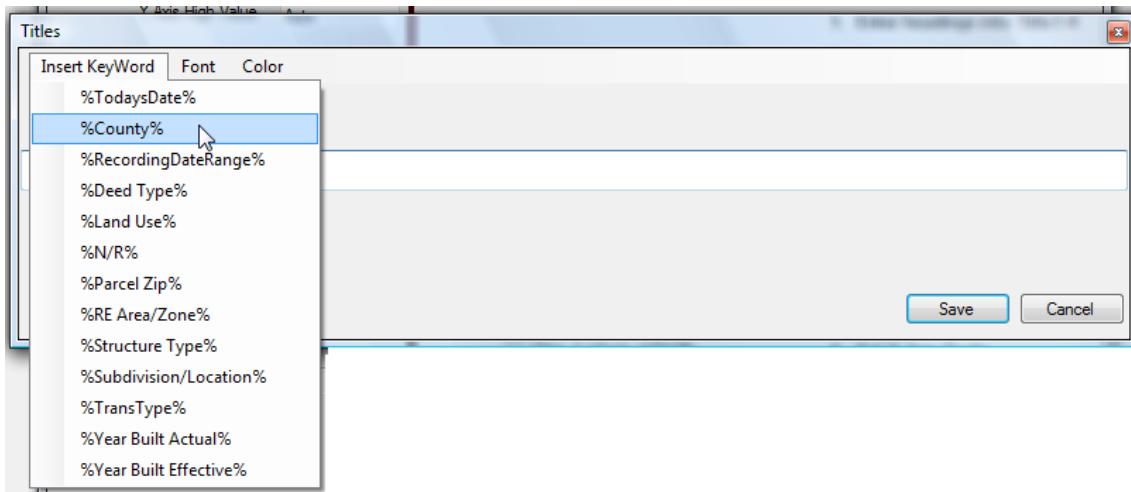


Figure 31

Next, we'll right-click on the word "Title 3" and use a key word that tells the system to insert the recording date range that was used in the REARS search criteria - %RecordingDateRange%.

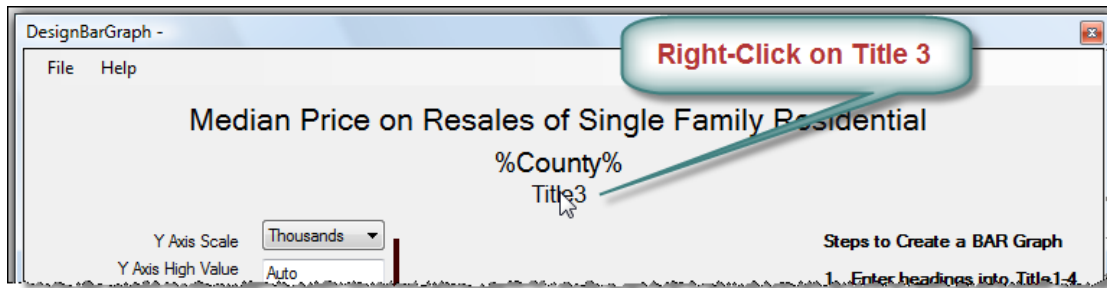


Figure 32

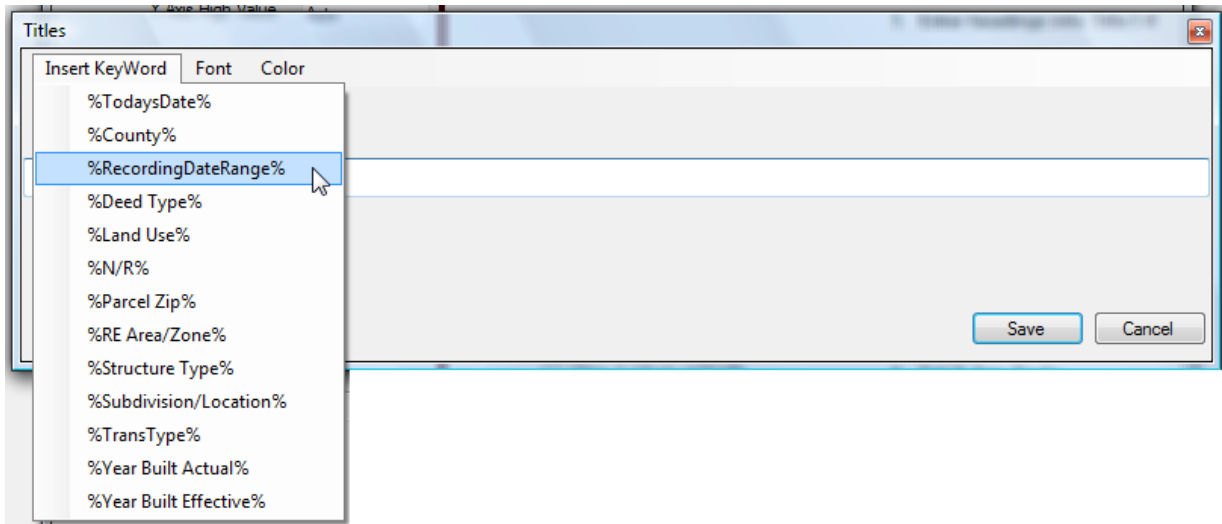


Figure 33

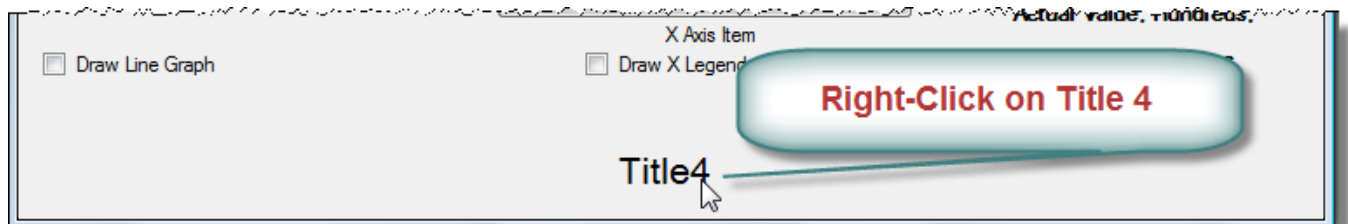


Figure 34

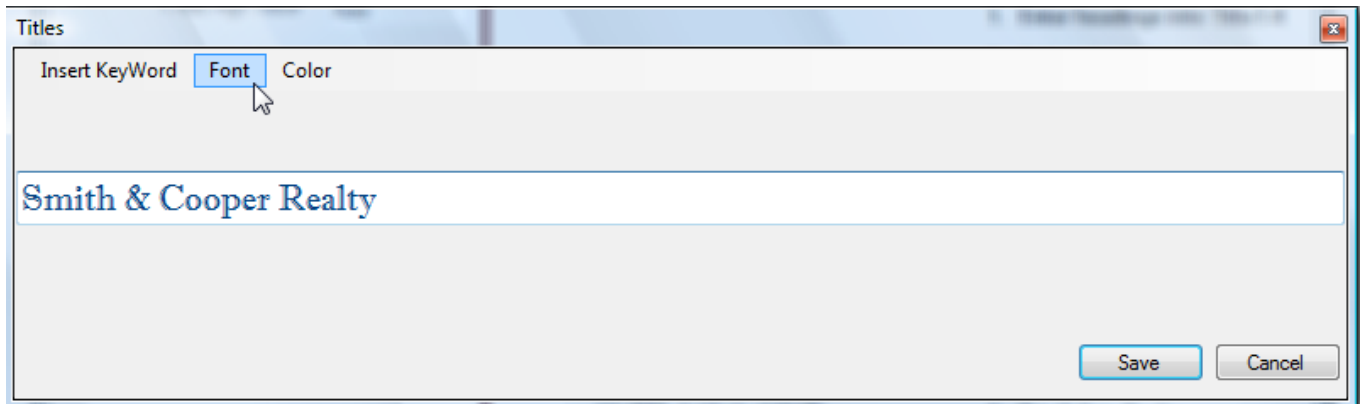


Figure 35

We're now ready to generate the graph. From the File Menu options, choose "Execute".

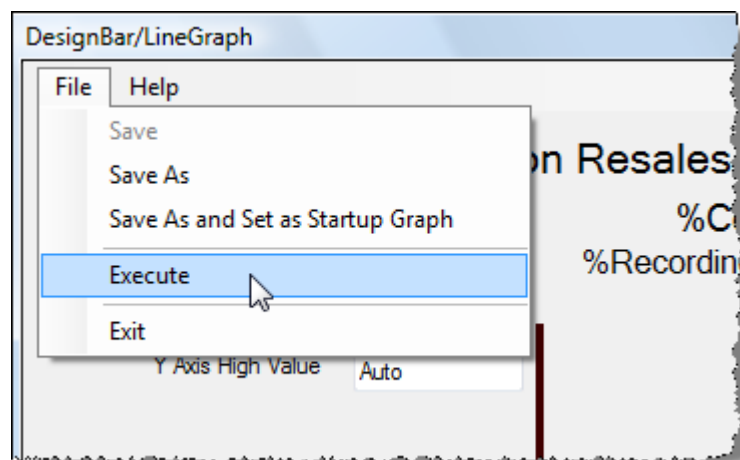


Figure 36

The following bar graph will display:

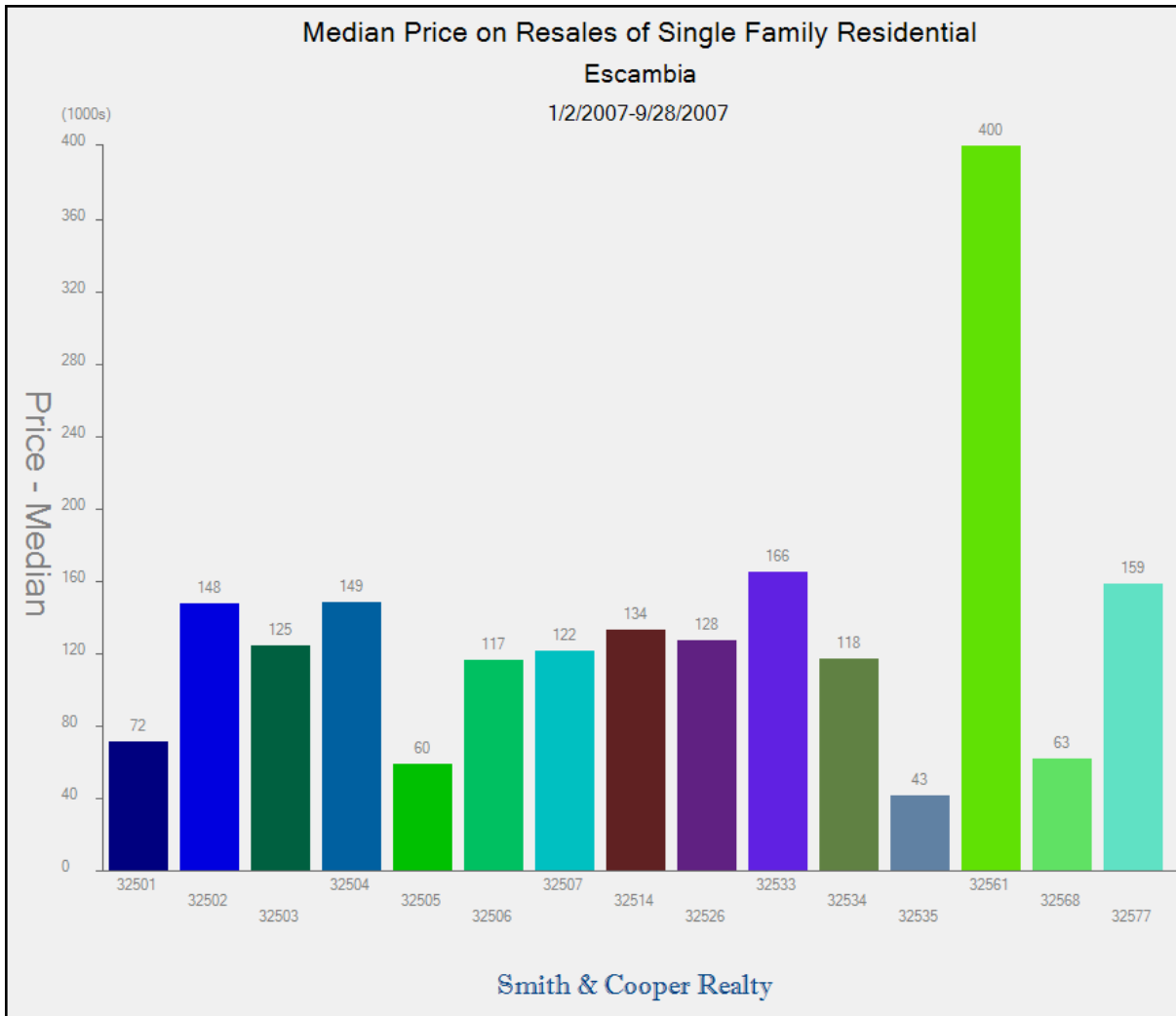


Figure 37

Note that you can quickly convert this bar graph into either a line or pie graph from the “View As” toolbar menu.



Figure 38