

### **Using the First Best-Fit Line Template Spreadsheet**

Your first task will be to forecast what the best short-term rents for Watershed's 244 properties would be. Note that the "example" short-term rental properties from the database - the same type in the same location (unique ID for each city, state and zip code) do not have optimal rents – but they are useful in showing an overall relationship between rent levels and occupancy rates.

In order to determine the best rent level for each property, we need to be able to forecast how the occupancy rate for that particular property varies as we change the rent. We know that the "example rents" from the database have occupancy rates associated with them.

In the *First Best-Fit Line Spreadsheet Template*:

1. Calculate the annual occupancy rate for the comparable properties based on January 1, 2015 to December 31, 2015 data.
2. This will result in 244 ordered pairs ( $x$  = rent,  $y$  = occupancy rate) from which to generate a best-fit line.
3. Calculate the best-fit line using the "raw" rents in dollars.
4. Using Excel > Chart > Scatter > Show Trendline > Trendline Options > Show Equation, find the slope (beta), the Y-intercept (alpha), and the coefficient of determination, R-squared, of the best-fit line of these data.
5. After you have derived your values, proceed to the "First Best-Fit Line Quiz" to ensure you have correctly calculated the best-fit line.