**Final Project: Predicting House Prices**

Analytics Software Technology

# Overview

You have been hired by the tax authority of the City of Boston to perform a re-assessment of Taxes of residential single-family homes in the greater Boston area. Your task is to create and compare two linear regression models and evaluate a sample of properties in the Boston area, identifying the top and bottom 10 property assessed value that your model predicts.

## What to turn in!

You are going to turn in a 1-page executive summary (more on that below) and the knitted results of your R code.

* **1-2-page executive summary** (final\_your\_name\_here.docx)
* **R code** (final\_your\_name\_here.Rmd)
* **Knitted result** (final\_your\_name\_here.Rmd)

## Executive Summary

Here is a little truth, most executives can’t or won’t read typical analysis! Your challenge is to concisely present your findings and results without writing a book. A good executive summary will leave the reader with a couple key takeaways. Your executive summary should be just that a ***summary***. What problem are you challenged with? What were 3 or 4 key findings (things you found interesting that influenced the model). What was result of your model, and any recommendations that you’d make - maybe 2 or 3.

* State the problem
* Key findings 3-4 bullets – for example does
* Performance
* Recommendations

Helpful hints:

* Draft an executive summary after you’ve done the analysis.
* Follow up findings with numbers. “the difference in average assessed value between zip codes is dramatic, a low of $396K in 02136(Jamaica Plain) vs $793K 02130(Hyde Park) “. Look for adjectives and adverbs and follow them up with a number.

## R Analysis

The notebook provides step by step instructions for you to follow. The number one gotcha is not handling missing values when building a model or making predictions. Here is what I’m looking for.

* Graph titles, x & y axis labels
* Clean code, you should be able to run your code end to end with a knit.
* Feel free to be creative