

Mass Appraisal Model Building

Case Study – Market 1

A Quick Summary of the Mass Appraisal Process

- Definition of the Appraisal Problem
- Data Collection
- Data Exploration and Market Analysis
- Specification of the Model
- Calibration of the Model
- Model Testing and Quality Control

Definition of the Appraisal Problem

- Use Multiple Regression Analysis to revalue 4,100 Single Family Residential properties, formerly valued using a Cost Approach.
- Demonstration and results should include:
 - Calculation of a Time Adjusted Sales Price (TASP).
 - An 82% target of the TASP, valuation date of 6/2014.
 - Outlier Trimming Methods
 - Time Trend methodology
 - Depreciation Analysis
 - Model building (specification and calibration)
 - Evaluation of results (including common Sales Ratio Study Stats)

Case Study Assumptions/Caveats

- Case study does not include access to the universe of properties – assumption is that the sales properties represent the unsold properties
- For this demo, we will model the improvement value, making the assumption that the land value has been previously set by market analysis.

Notable Data in Study

- Sales Data
- Location
- Quality
- Square Footage
- Year Built
- Heating and Cooling
- Basements
- “Adds” data
- Land Value and Size