Real Estate Investor (REI) Analysis

# About Me

* Experience
  + Retired Army Signal Officer (23 Years)
  + Former Microsoft ITSM Consultant (3 Years)
* Education
  + MSCS (Security Concentration), Colorado Technical University
  + BA Sociology, University of New Mexico
  + Korean Linguist, Defense Language Institute
* Certifications
  + ITIL v3 Expert
  + Certified Knowledge Manager

# Hypothesis

When the housing market shifts from a seller’s market to a buyer’s market, there is a higher probability that sellers will drop their prices the longer the homes are on the market, particularly if their home has distinct negative attributes such as swimming pools, mandatory HOA fees, and older homes.

# Data Science Framework

* Obtain (MLS Export in .cvs file format)
* Scrub (Power Query)
* Explore (Power Query/DAX)
* Model (Power Query)
* Interpret (DAX Measures/Power BI Visuals)

# Obtain

That dataset was provided by my project partner, Lauren Anderson, who is a real estate agent with access to the Multiple Listing Service (MLS). She ran a query of the listings from MLS and provided a .cvs export file of various listings in Texas. The dataset initially contained 4976 rows and 31 columns.

# Scrub

Utilized Power Query (M Language) to set data types, filter out unnecessary rows, identify potential dimension tables based on cardinality (i.e., the number of distinct values in a table column relative to the number of rows).

# Explore

Utilized {Power Query editor’s data view options to explore and profile the raw data; then developed DAX columns and measures to further examine the dataset.

# Model

Utilized Power Query to develop the data model and query dependencies; then used the Power BI model tab to establish appropriate relationships.

# Interpret

Utilized DAX measures in combination with Power BI visualizations to establish a cogent story that can illustrate and potentially explain the insights within the dataset.

# Q&A