

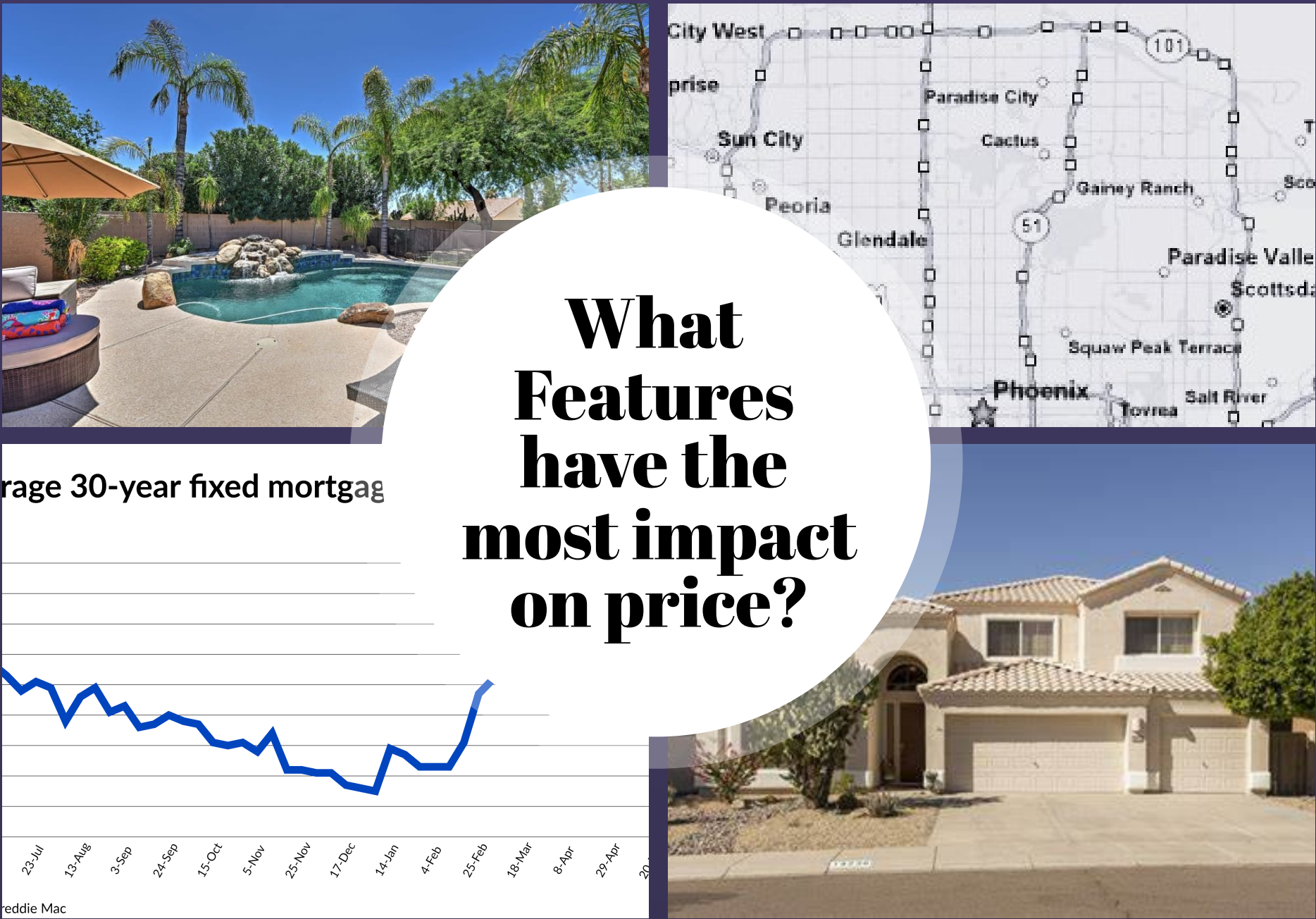


Phoenix Market Price Predictor

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Project Background: Casual real estate investors often wonder what a property is worth and what features contribute to its value.

Project Objectives: Based on a set of quantitative inputs provide the user with the ability to predict the value of a property.



What Features have the most impact on price?

Model Selection: Random Forest Regression

Selection Criteria: Highest R² value and lowest MAE value of tested models

Input Features for Model: Zip code, number of bedrooms, number of bathrooms, square footage of house, lot size, year built, pool, HOA, and mortgage rate.

Output: Using the calculator to predict the value given specific inputs, or look at trend, correlation and median statistics of the underlying data.

Phoenix home price calculator

Enter the following criteria to calculate predicted price

Select the ZipCode

85027

Select the Number of Bedrooms

3

Select the Number of Bathrooms

2

Enter the Square Footage of House

1455

Select Lot Size

7000

Enter the year the house was built

1975

☒ Pool

☐ HOA

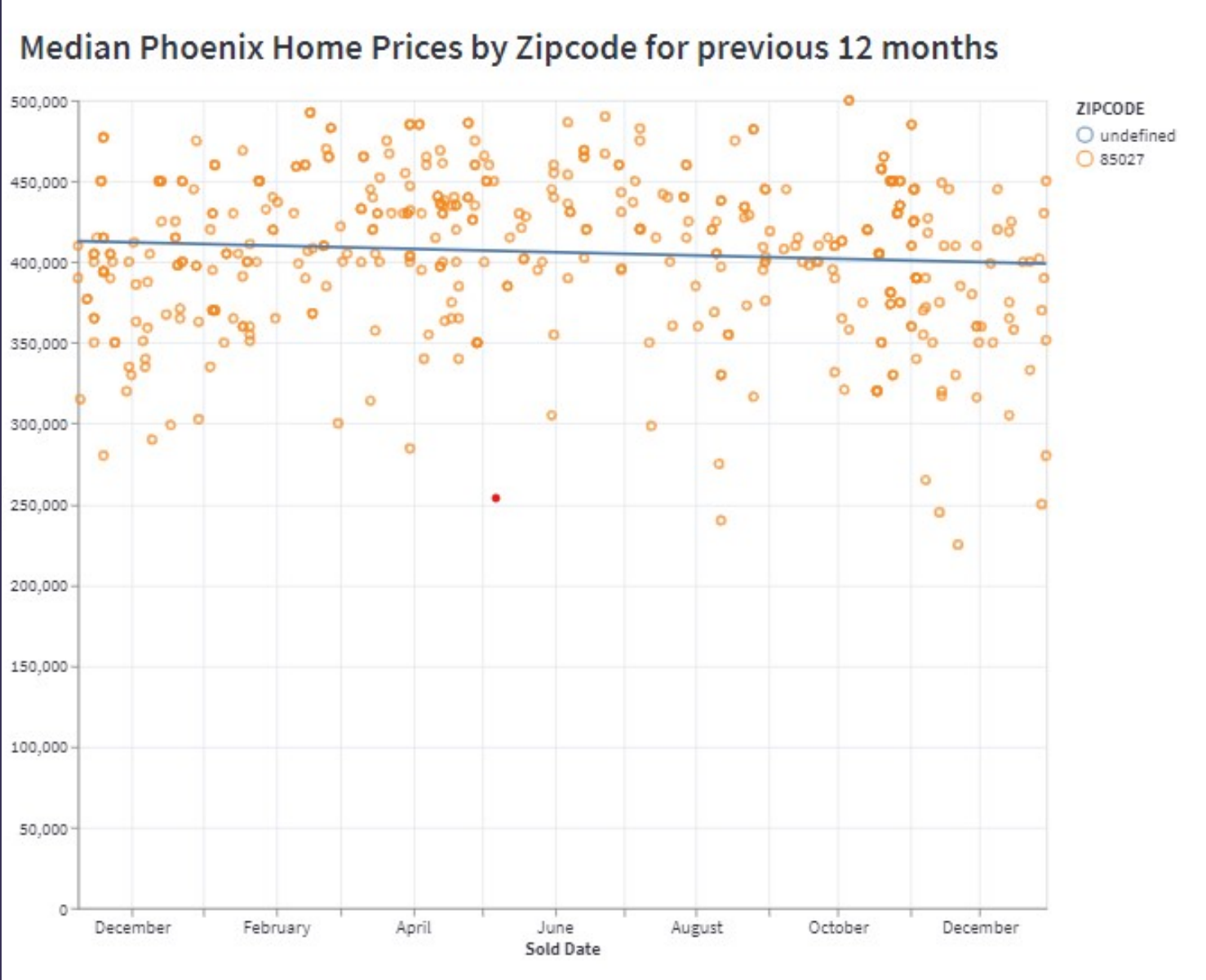
Enter the expected 30 Yr Mortgage Rate

6.50

Calculate Predicted Price

The MAE or average absolute error between the predicted values and the actual values is \$15,932. The predicted value for the house is: \$387,936 .

Trend by Zip Code



Median statistics

Median statistics based on Zip Code, Pool and HOA								
			PRICE	BEDS	BATHS	SQFT	LOTSIZE	YEARBUILT
85003	N	N	360,000.0000	3.0000	1.0000	1,148.0000	6,500.0000	1,926.0000
85004	N	N	363,300.0000	3.0000	2.0000	1,139.0000	6,333.0000	2,021.0000
85004	Y	N	363,300.0000	3.0000	2.0000	1,139.0000	6,218.0000	2,021.0000
85006	N	N	400,000.0000	3.0000	1.8750	1,165.0000	6,706.0000	1,940.0000
85006	Y	N	381,500.0000	2.0000	1.5000	1,227.5000	7,146.5000	1,940.0000
85007	N	N	350,000.0000	3.0000	2.0000	1,181.0000	6,416.0000	1,946.0000
85007	Y	N	347,500.0000	3.5000	2.0000	995.5000	6,326.0000	1,928.5000
85008	N	N	382,000.0000	3.0000	2.0000	1,312.0000	7,375.0000	1,952.0000
85008	N	Y	310,000.0000	3.0000	2.0000	1,453.0000	5,815.0000	1,954.0000
85008	Y	N	455,000.0000	3.0000	2.0000	1,423.0000	7,627.0000	1,953.0000

Overall Correlation of Home Features

