

# KING COUNTY DEVELOPMENT PROJECT

*Presented by:*

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REAL ESTATE ANALYST

# SCOPE OF ANALYSIS

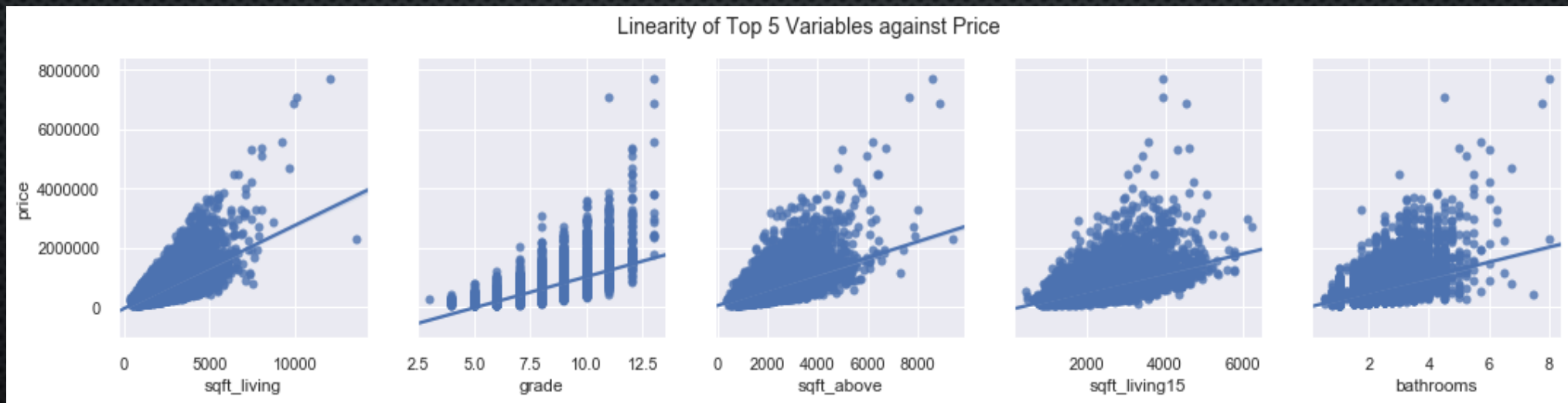
- WHAT ARE THE 5 MOST INFLUENTIAL VARIABLE CONTRIBUTING TO THE PRICE OF A PROPERTY ?
- COST BENEFIT ANALYSIS OF GRADE & PRICE OF A PROPERTY
- WOULD IT BE A BETTER INVESTMENT TO PURCHASE AND RENOVATE OLD PROPERTIES OR DEVELOP A NEW RESIDENTIAL AREA IN KINGS COUNTY ?



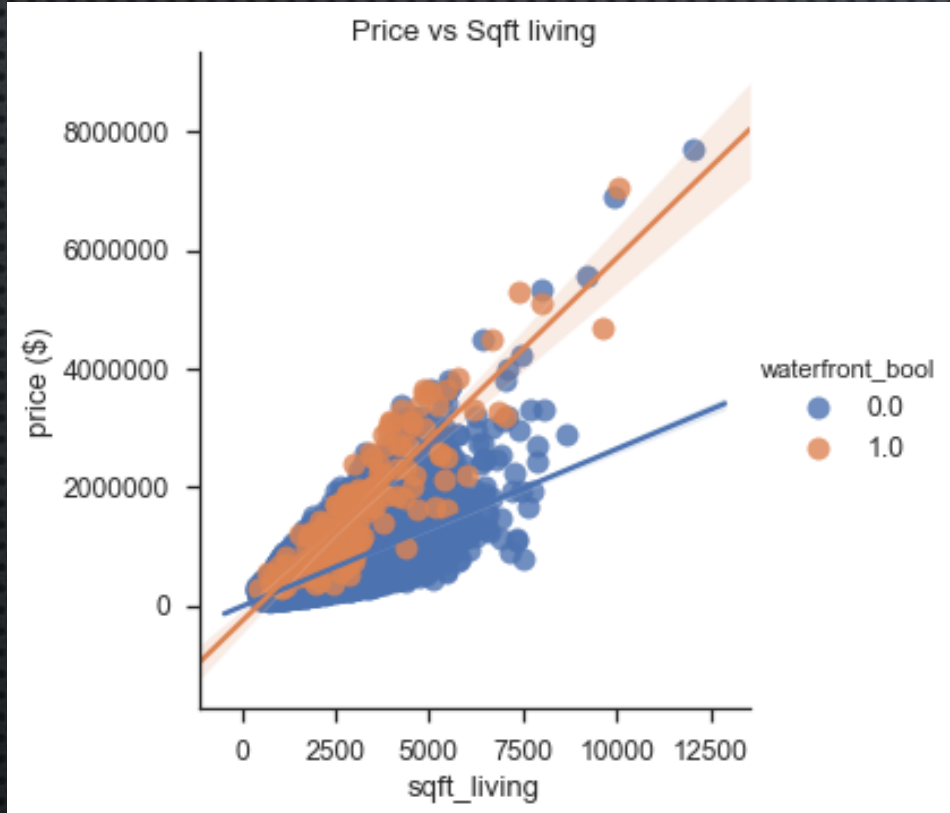
# 5 MOST INFLUENTIAL FEATURES

HOW DID WE PICK THE 5 MOST INFLUENTIAL FEATURES ?

- BASED ON THE DATA, A CORRELATION MATRIX WAS USED TO COMPARE CORRELATION BETWEEN EACH FEATURE.
- THE FOLLOWING ARE THE 5 MOST INFLUENTIAL FEATURES:
  - **SQFT LIVING [0.7]** – A COMBINATION OF SQFT BASEMENT AND SQFT ABOVE
  - **GRADE [0.67]** – MEASURES THE QUALITY OF THE HOUSE, RANKING FROM 1 TO 13
  - **SQFT ABOVE [0.61]** – SQFT OF HOUSE EXCLUDING THE BASEMENT
  - **SQFT LIVING 15 [0.59]** – SQFT LIVING OF THE 15 NEAREST NEIGHBORS
  - **BATHROOMS [0.53]** – NUMBER OF BATHROOMS



# INTERPRETING THE REGRESSION MODEL



## KEY FINDINGS

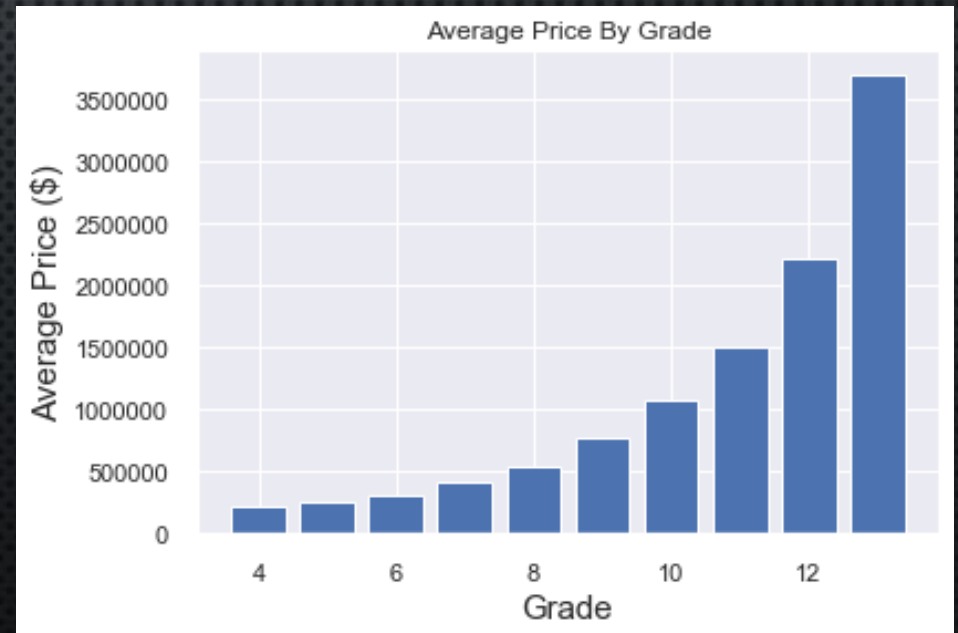
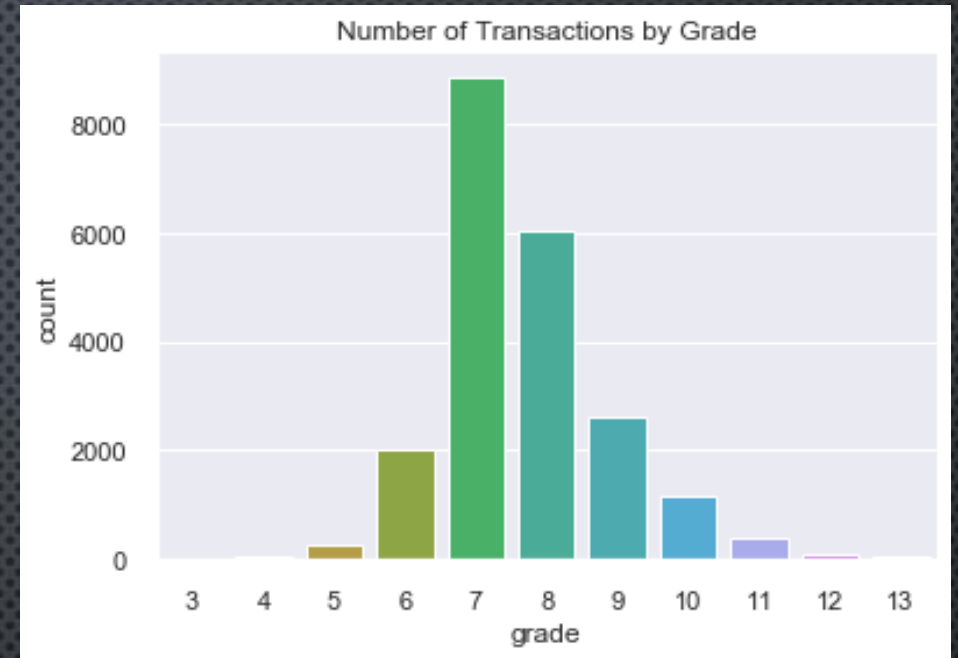
- THE MODEL HAS A *R-SQUARED* VALUE OF 0.6
- THE MODEL USES 10 VARIABLE FOR PREDICTION
  - WATERFRONT IS THE FEATURE WITH HIGHEST COEFFICIENT AT 571,900
  - ON AVERAGE, HAVING A WATERFRONT VIEW INSTANTLY ADDS A \$571,900 PREMIUM ON THE PROPERTY



# COST BENEFIT ANALYSIS: GRADE VS PRICE

## KEY FACTS

- PROPERTIES WITH GRADE OF 7 IS THE BEST SELLING PROPERTY GRADE WITH 8888 SALES
- AVERAGE PRICE OF GRADE 7 PROPERTIES: \$ 402,020
- REAL ESTATE PRICES GAIN AN AVERAGE OF 29.88% PER GRADE FROM GRADE 4 – 7
- REAL ESTATE PRICES GAIN AN AVERAGE OF 137.17% PER GRADE FROM GRADE 7-13



# UNDERSTANDING THE TARGET MARKET

## KEY INSIGHTS



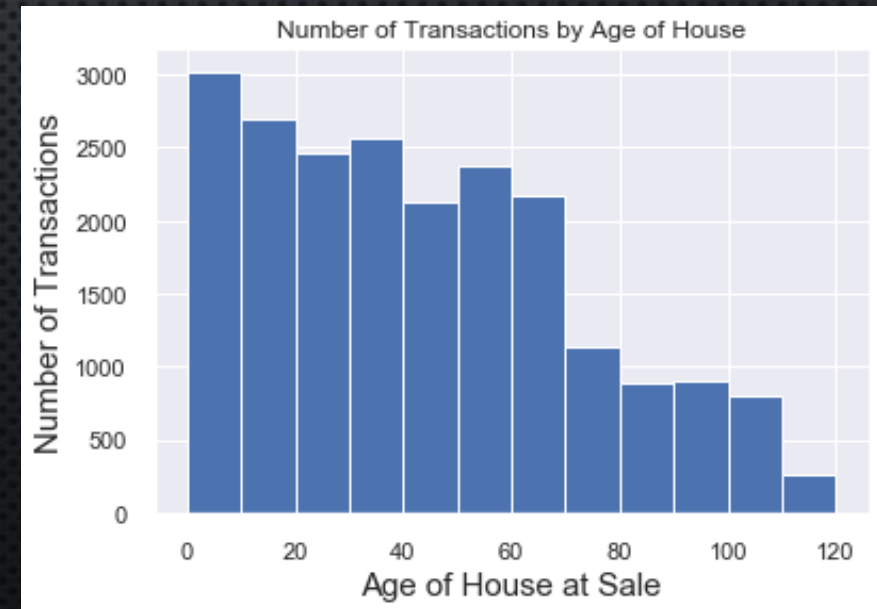
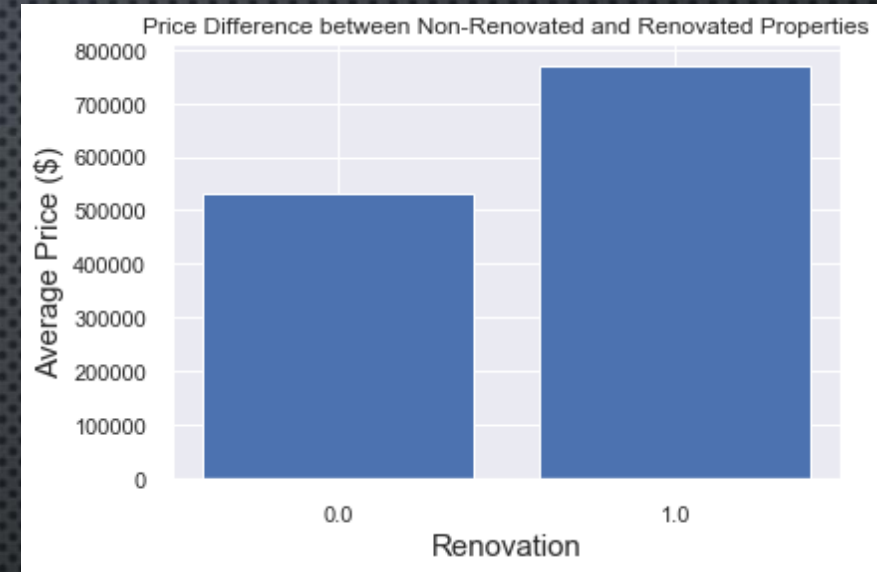
- THE MOST POPULAR PRICE RANGE IN KINGS COUNTY IS AN AFFORDABLE \$ 250,000 - \$450,000
- REPRESENTS 45.21 % OF THE DATA SAMPLE
- CONSISTS MAINLY OF:
  - HIGH-END GRADE 6
  - GRADE 7
  - VERY LOW-END GRADE 8



# PREMIUM OF RENOVATED HOUSES

## KEY FACTS

- AVERAGE PRICE BEFORE RENOVATION: \$ 532,490
- AVERAGE PRICE AFTER RENOVATION: \$ 770,595
- PREMIUM OF RENOVATION: \$ 238,104
- REGARDLESS OF RENOVATION, DEMAND OF A PROPERTY REDUCES GRADUALLY AS IT AGES, WITH A SHARP DROP AFTER THE HOUSE HAD BEEN BUILT FOR MORE THAN 70 YEARS



# RECOMMENDATIONS TO INVESTORS

- WE **ADVISE AGAINST** PURCHASING AND RENOVATING OLD PROPERTIES FOR PROFIT AS THE LIQUIDITY OF THE ASSET WILL BE LOW DUE TO LOW DEMAND OF AGED PROPERTIES
- WE **ADVISE TO** DEVELOP BRAND NEW (0 YEARS) HIGH VALUE GRADE 7 OR GRADE 8 PROPERTIES IN THE PRICE RANGE OF \$350,000 TO \$450,000 TO ENJOY HIGH CAPITAL GAIN AND GOOD RENT PRICES
- WE **ADVISE TO** ACQUIRE UNDER-VALUED PROPERTIES WITH THE ASSISTANCE OF OUR MULTI VARIABLE LINEAR REGRESSION MODEL, WITH HIGH CONSIDERATION BEING PLACED ON THE FOLLOWING FEATURES:
  - **WATERFRONT VIEW**
  - **SQUARE FOOT OF LIVING SPACE**
  - **GRADE**
  - **SQUARE FOOT OF LIVING SPACE OF 15 NEAREST NEIGHBORS**
- WE **ADVISE TO** EVALUATE VALUE OF PROPERTIES WITH OUR LINEAR REGRESSION MODEL WITH CAUTION AT OWN RISK



# FUTURE WORK & PROBLEMS

- REGRESSION MODEL CAN BE IMPROVED, LOW VALUE OF R-SQUARED AT 0.6
- RENT PRICES & MORTGAGE RATES CAN BE INCLUDED FOR A MORE COMPREHENSIVE ANALYSIS
- SAMPLE DATA REPRESENT A SMALL PERCENTAGE OF KING COUNTY:
  - POPULATION AT > 2.2 MILLION
- DATA CAN BE CATEGORIZED INTO 3 PRICE SEGMENTS TO CONDUCT DETAILED ANALYSIS IN THE FOLLOWING MARKET NICHE:
  - LOW-INCOME BUDGET PROPERTIES
  - MIDDLE-INCOME AVERAGE PROPERTIES
  - HIGH-INCOME LUXURY PROPERTIES