



-GENDatInc Internal Report Series-

Housing Market King County, WA

Report Series Purpose:

- Seeking to Establish New HQ in King County, WA
- Addressing Challenges related to Final Goal in Manner with Least Negative Impacts
- Implementing Creative Solutions

Current Report Goals:

- Create a Predictive Model for Future Employee Housing
- Provide More Knowledge for Future Big Decisions (HQ Location(s))

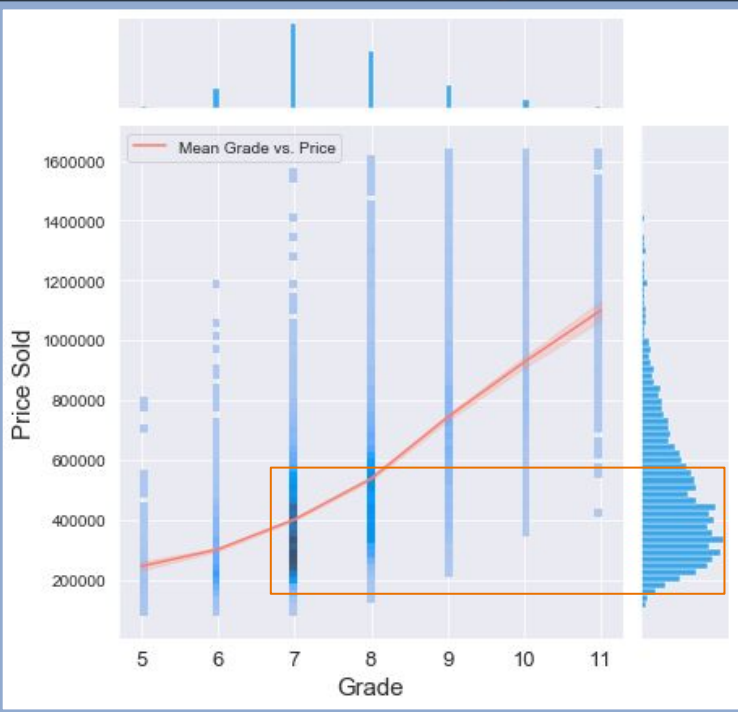


Gustavo Chavez
Project Data Analyst

Purposes of Creating a House Price Predicting Model

- Allows us to identify:
 - Potential neighborhoods and QoL for future employees
 - Areas to avoid for low QoL/Gentrification reasons
 - Potential locations for new HQ
- Allows us to predict:
 - Potential Housing Purchase Cost for future employees
 - Potential Company impact

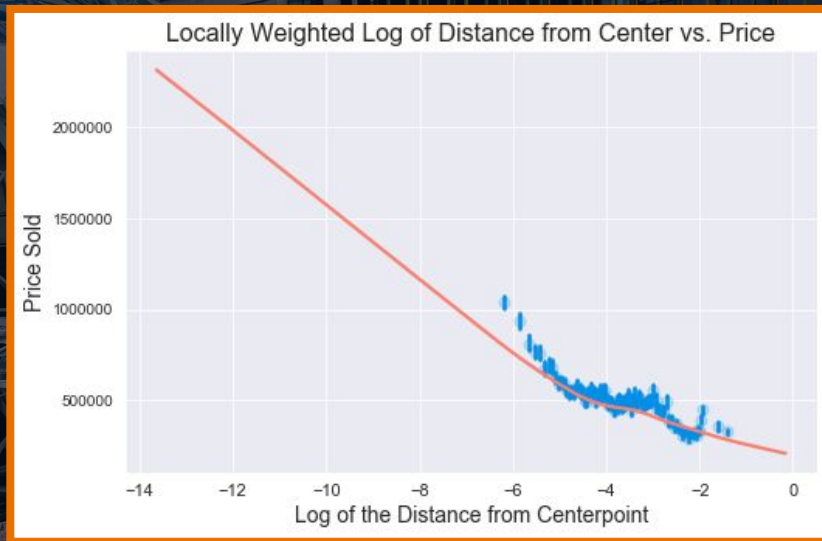
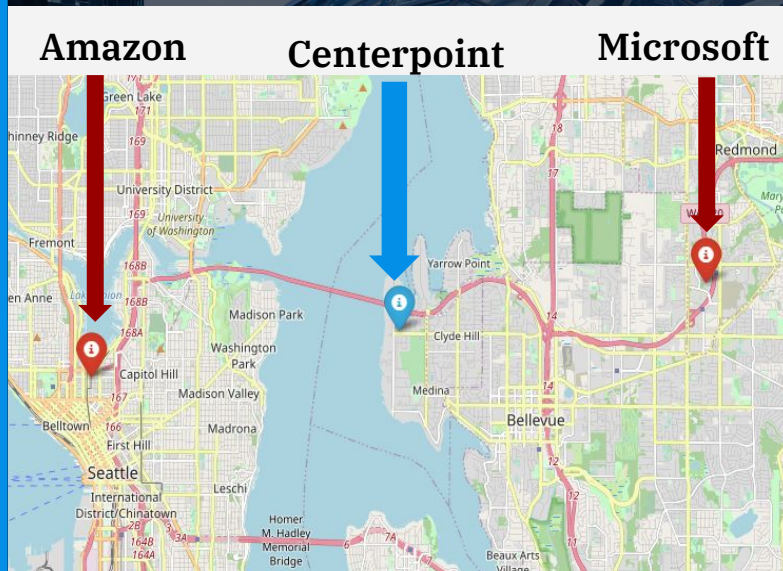
Grade Effect on Housing



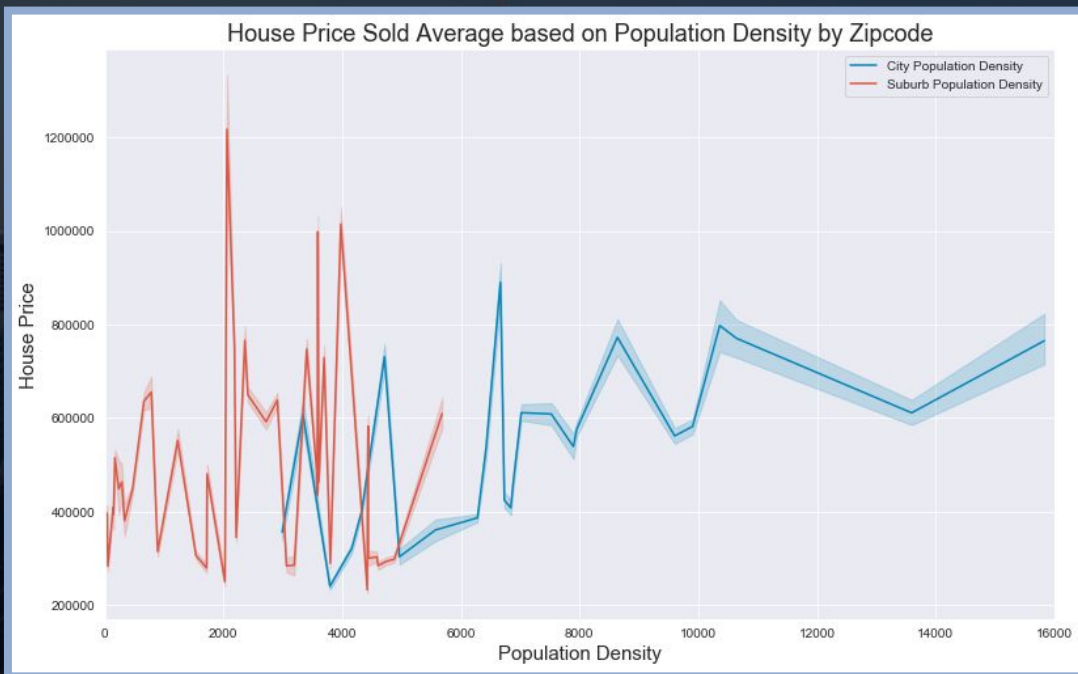
Residential Building Grades

- Grades 1 - 3 Falls short of minimum building standards. Normally cabin or inferior structure.
- Grade 4 Generally older low quality construction. Does not meet code.
- Grade 5 Lower construction costs and workmanship. Small, simple design.
- Grade 6 Lowest grade currently meeting building codes. Low quality materials, simple designs.
- Grade 7 Average grade of construction and design. Commonly seen in plats and older subdivisions.
- Grade 8 Just above average in construction and design. Usually better materials in both the exterior and interior finishes.
- Grade 9 Better architectural design, with extra exterior and interior design and quality.
- Grade 10 Homes of this quality generally have high quality features. Finish work is better, and more design quality is seen in the floor plans and larger square footage.
- Grade 11 Custom design and higher quality finish work, with added amenities of solid woods, bathroom fixtures and more luxurious options.
- Grade 12 Custom design and excellent builders. All materials are of the highest quality and all conveniences are present.
- Grade 13 Generally custom designed and built. Approaching the Mansion level. Large amount of highest quality cabinet work, wood trim and marble; large entries.

Should We Build Singular HQ or have Multiple Offices?



Population Density and Sale Price



Notes:

- City naturally denser than suburbs
- City and suburb serve as two distinct categories
- City will be in one specific spot--suburbs are everywhere else
- Created model for each group

Current Recommendations

For Business:

- Explore more in 'Multiple Offices' direction
- Avoid creating offices near centerpoint

For Future Employees:

- Housing of minimum grade 7
- Housing away from suburbs near centerpoint
- Avoid purchasing in neighborhoods with lots of renovations--will be more expensive

Current Features in Models

- Grade
- Log-distance From Centerpoint
- # of Bathrooms
- Sqft per Floor
- Condition
- View
- If Renovated
- Population Density

Future Work

- Gather house sale time data to model growth of population density in each zipcode
- Identify low-income and minority housing areas to avoid gentrification of said areas
- Include more QoL metrics in prediction model for future employees:
 - Farmer's Markets, Parks, Entertainment center, etc
- Identify undesirable locations so that we may avoid them:
 - Landfills, railyards, waste treatment facilities, etc.

For Next Meeting:

- Identify Ideal Multiple Offices locations by zipcode, and model expected impact on House Sales price for each area.

Thank You

Thank you for coming to this meeting.

Special Thanks:

Fellow Team Members on Data Analyst Team

Analyst Coordinator and Team Lead, Rafael Carrasco

Team Consultant Talia Salzberg-Horowitz

****Names and positions are written in character for presentation.****

Actual Special Thanks:

Follow classmates in Flatiron Data Science Cohort

Cohort Instructor, Rafael Carrasco

Education Coach, Talia Salzberg-Horowitz