

Housing Market Analysis



Area Analysis

County Descriptions and Landmarks

King County

- Population: 2.25 million (most populous county in Washington)
- National Parks/Areas:
 - Klondike Gold Rush National Historical Park
 - Snoqualmie National Forest
- Geographic Features:
 - Cascade Range
 - Lake Washington

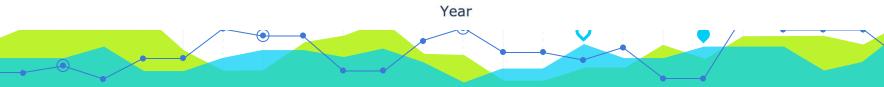




King County Total Assessed Value 1996 - 2015



1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015





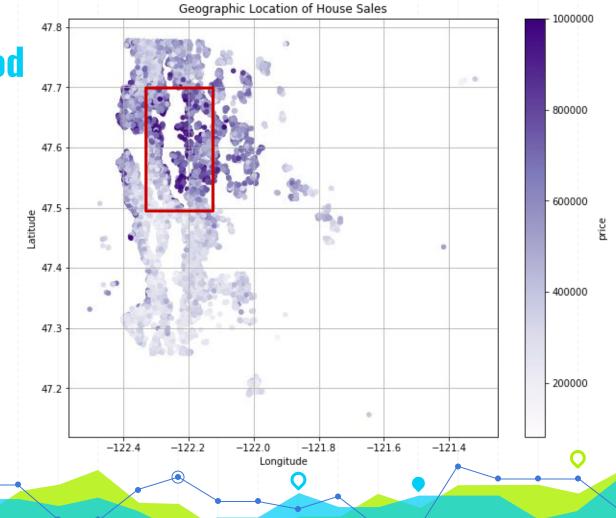
Increasing the Market Value of Your Home

Price Determining Features of a House

2

Zipcode/Neighborhood

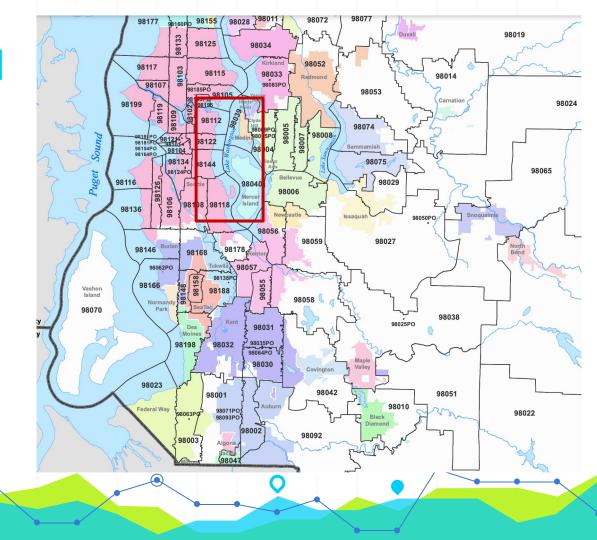
Location of house CAN affect average selling price



Zipcode/Neighborhood

Location of house CAN affect average selling price

More expensive homes centered around Seattle

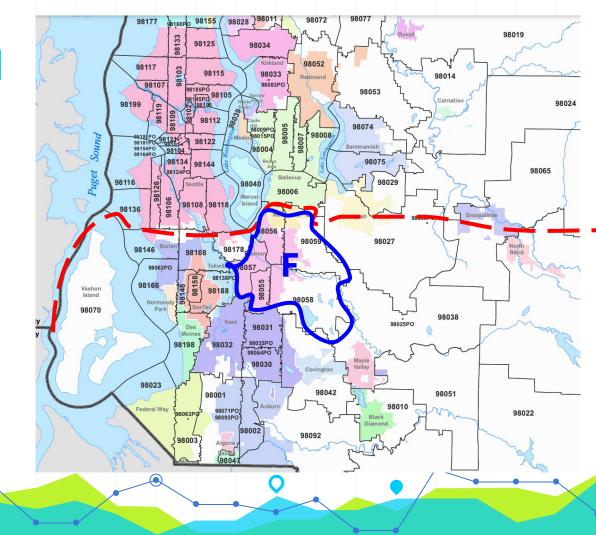


Zipcode/Neighborhood

Neighborhoods below red line:

Decrease in overall value of house

	coef	% change
grade	0.233077	26
waterside	0.626420	87
zip_F	-0.338585	-29
zip_G	-0.412482	-34
zip_H	-0.540317	-42
zip_l	-0.608151	-46
zipJ	-0.446343	-36



May 2014 - May 2015 Housing Data

Technical Jargon

Coef (coefficient) -

describe the relationship between independent variables and our target variable (price)

		coef	% change
grade	0.2	233077	26
waterside	0.6	26420	87
zipF	-0.3	38585	-29
zip_G	-0.4	12482	-34
zip_H	-0.5	40317	-42
zipl	-0.6	08151	-46
zipJ	-0.4	46343	-36

May 2014 - May 2015 Housing Data

Technical Jargon

Independent variables -

features of a house that affect its market price

	coef	% change
grade	0.233077	26
waterside	0.626420	87
zipF	-0.338585	-29
zipG	-0.412482	-34
zip_H	-0.540317	-42
zip_l	-0.608151	-46
zipJ	-0.446343	-36

WATERFRONT PROPERTY

Home with a view of the waterfront?

	coef	% change
grade	0.233077	26
waterside	0.626420	87
zipF	-0.338585	-29
zipG	-0.412482	-34
zip_H	-0.540317	-42
zip_l	-0.608151	-46
zip_J	-0.446343	-36



INCREASES market value by

87%

RESIDENTIAL BUILDING GRADES

13-point scale used in King County to determine the quality of a home

	coef	% change
grade	0.233077	26
waterside	0.626420	87
zipF	-0.338585	-29
zip_G	-0.412482	-34
zip_H	-0.540317	-42
zip_l	-0.608151	-46
zipJ	-0.446343	-36

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.

MODEL INTERPRETATION

Zipcode/Neighborhood

 Neighborhoods south of Seattle decrease value

Waterfront

View of a waterfront increases value by 87%

Building Grades

Improving building quality increases value by 26%

FUTURE WORK

- Expand dataset to include more sales data in King County
 - More years, sales agent/agency info, income of seller/buyer
- Investigate the duration each house has been on the market to identify possible correlation with price



THANK YOU!

- Presentation by Scott Okamura (scott.okamura@gmail.com)
- Presentation template by <u>SlidesCarnival</u>

APPENDIX 1: TABLE OF ZIPCODE GROUPS

zipA	Seattle, Shoreline, Lake Forest Park
zipB	Kenmore, Bothell, Woodinville, Redmond, Kirkland
zipC	Bellevue, Mercer Island, Medina
zipD	Duvall, Carnation, Snoqualmie, Northbend
zipE	Sammamish, Issaquah
zipF	Newcastle, Renton
zipG	Burien, Normandy Park, SeaTac, Tukwila, Vashon Island, Des Moines
zipH	Kent, Covington
zipl	Federal Way, Algona, Auburn, Pacific, Milton
zipJ	Maple Valley, Black Diamond, Enumclaw