

Descriptive Statistics

Variable	Label	N	Mean	Std Dev	Minimum	Maximum
price	Sale Price (USD)	2930	180796.06	79886.69	12789.00	755000.00
LogPrice	Log(Sale Price)	2930	12.0209687	0.4075869	9.4563407	13.5344730
area	Above-Ground Living Area (sq ft)	2930	1499.69	505.5088875	334.0000000	5642.00
Overall.Qual	Overall Quality (1-10)	2930	6.0948805	1.4110261	1.0000000	10.0000000

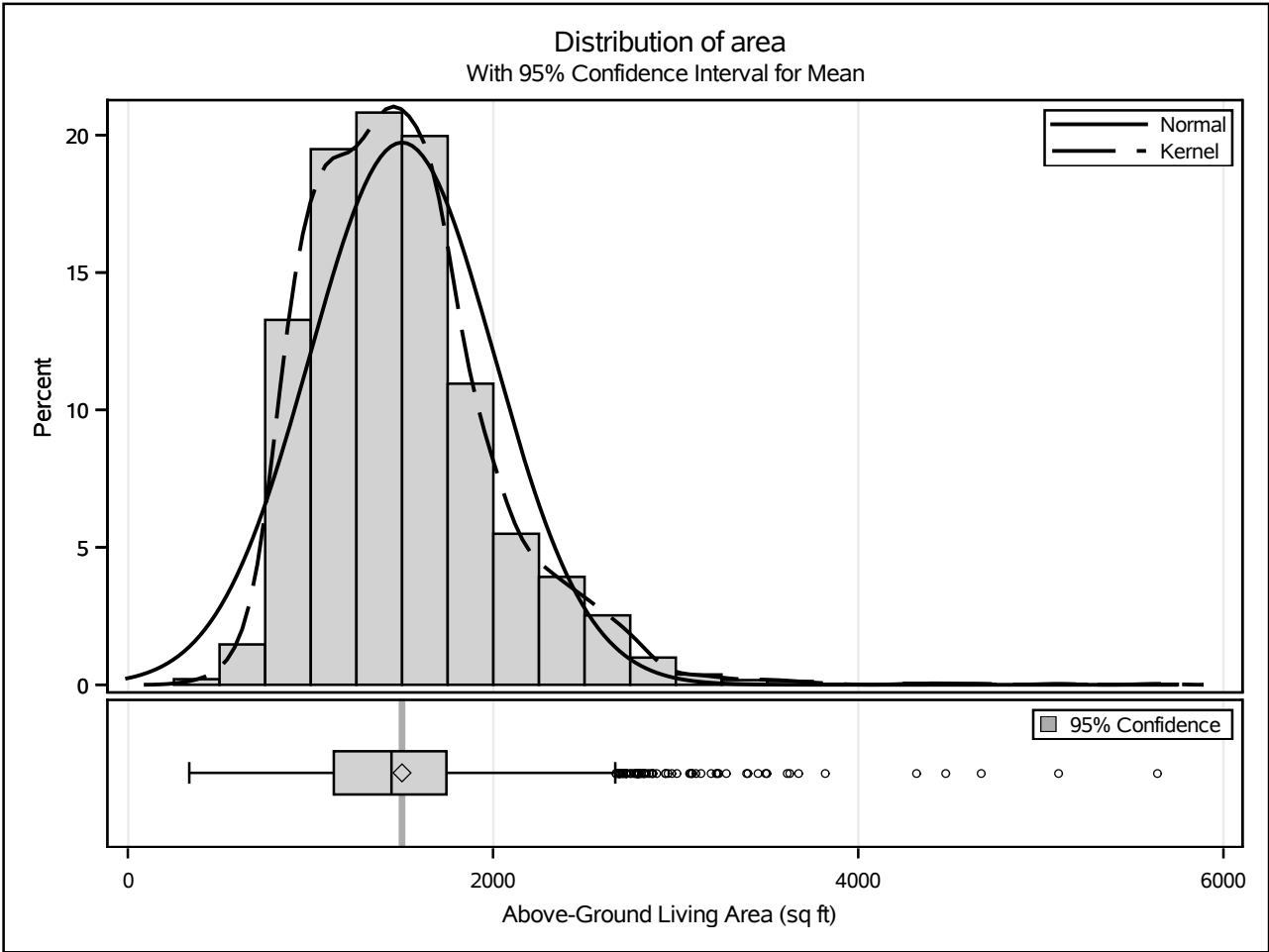
RQ1: One-sample t-test

Variable: area (Above-Ground Living Area (sq ft))

<i>N</i>	<i>Mean</i>	<i>Std Dev</i>	<i>Std Err</i>	<i>Minimum</i>	<i>Maximum</i>
2930	1499.7	505.5	9.3389	334.0	5642.0

<i>Mean</i>	<i>95% CL Mean</i>	<i>Std Dev</i>	<i>95% CL Std Dev</i>
1499.7	1481.4 1518.0	505.5	492.9 518.8

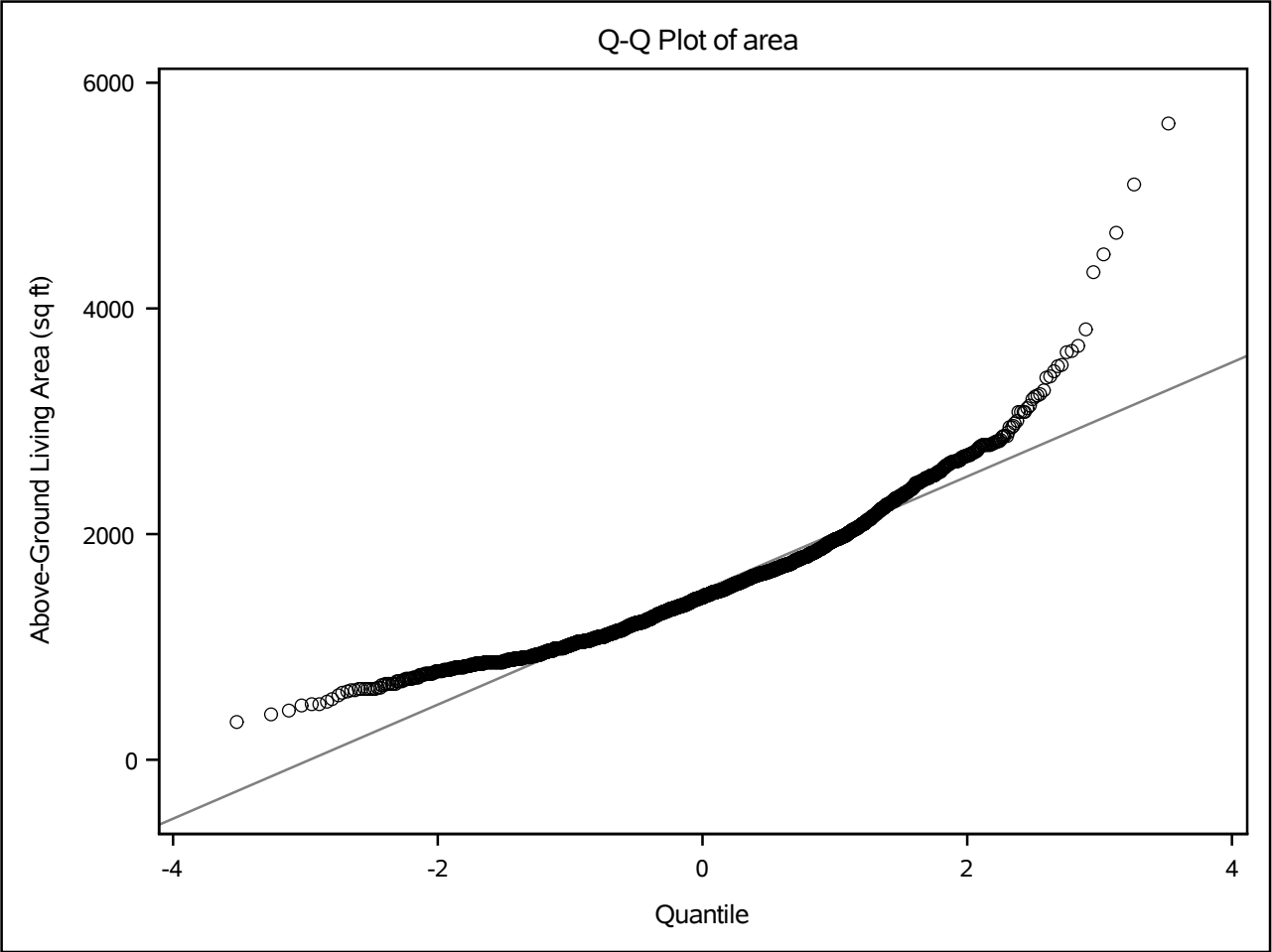
<i>DF</i>	<i>t Value</i>	<i>Pr > t </i>
2929	-0.03	0.9736



RQ1: One-sample t-test

Variable: area (Above-Ground Living Area (sq ft))

Variable: area (Above-Ground Living Area (sq ft))



RQ2: Northridge vs Other Neighborhoods

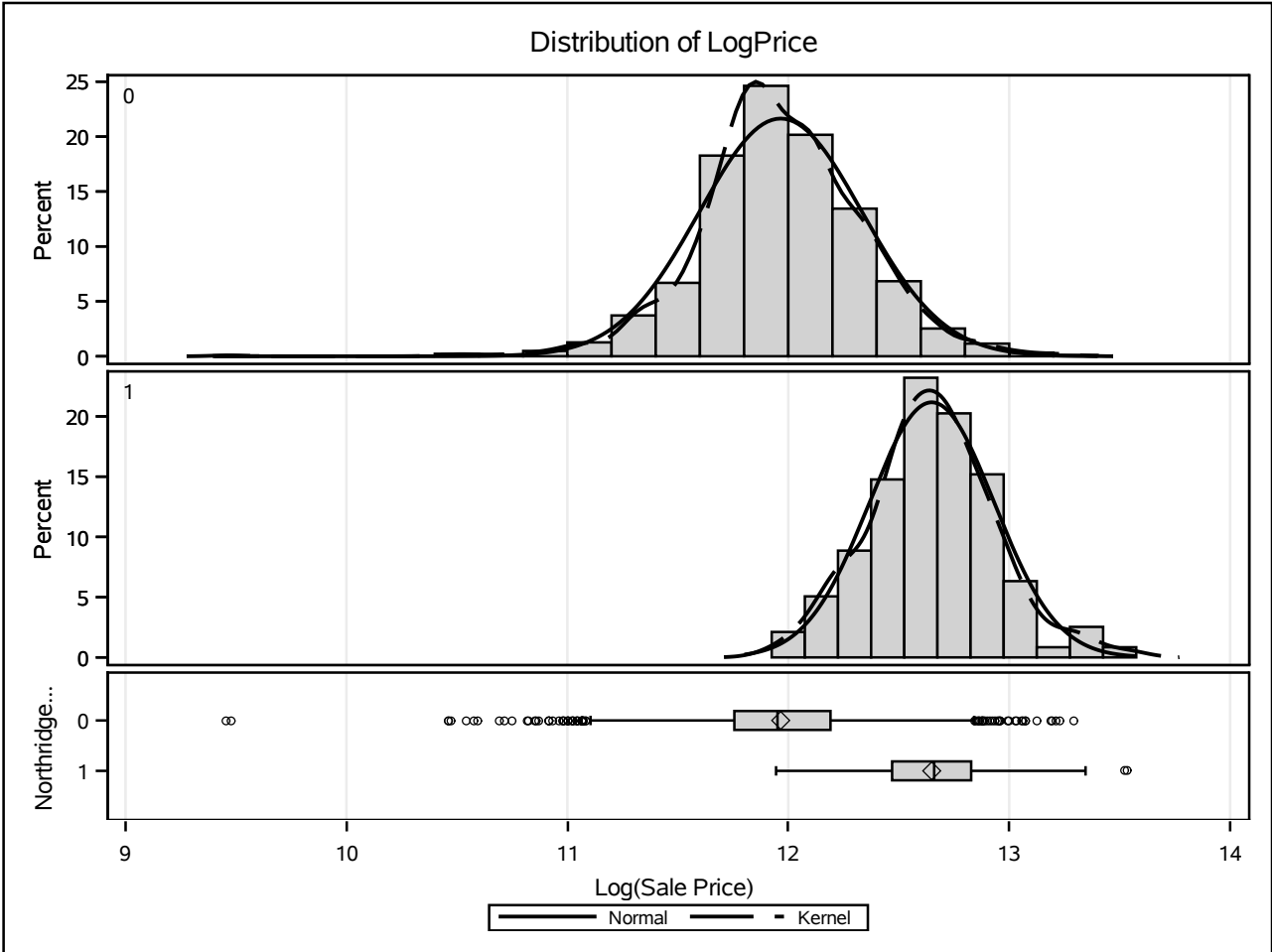
Variable: LogPrice (Log(Sale Price))

NorthridgeGroup	Method	N	Mean	Std Dev	Std Err	Minimum	Maximum
0		2693	11.9657	0.3687	0.00710	9.4563	13.2906
1		237	12.6493	0.2827	0.0184	11.9447	13.5345
Diff (1-2)	Pooled		-0.6837	0.3625	0.0246		
Diff (1-2)	Satterthwaite		-0.6837		0.0197		

NorthridgeGroup	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
0		11.9657	11.9517 11.9796	0.3687	0.3591 0.3788
1		12.6493	12.6131 12.6855	0.2827	0.2593 0.3107
Diff (1-2)	Pooled	-0.6837	-0.7318 -0.6355	0.3625	0.3535 0.3720
Diff (1-2)	Satterthwaite	-0.6837	-0.7224 -0.6449		

Method	Variances	DF	t Value	Pr > t
Pooled	Equal	2928	-27.83	<.0001
Satterthwaite	Unequal	311.33	-34.72	<.0001

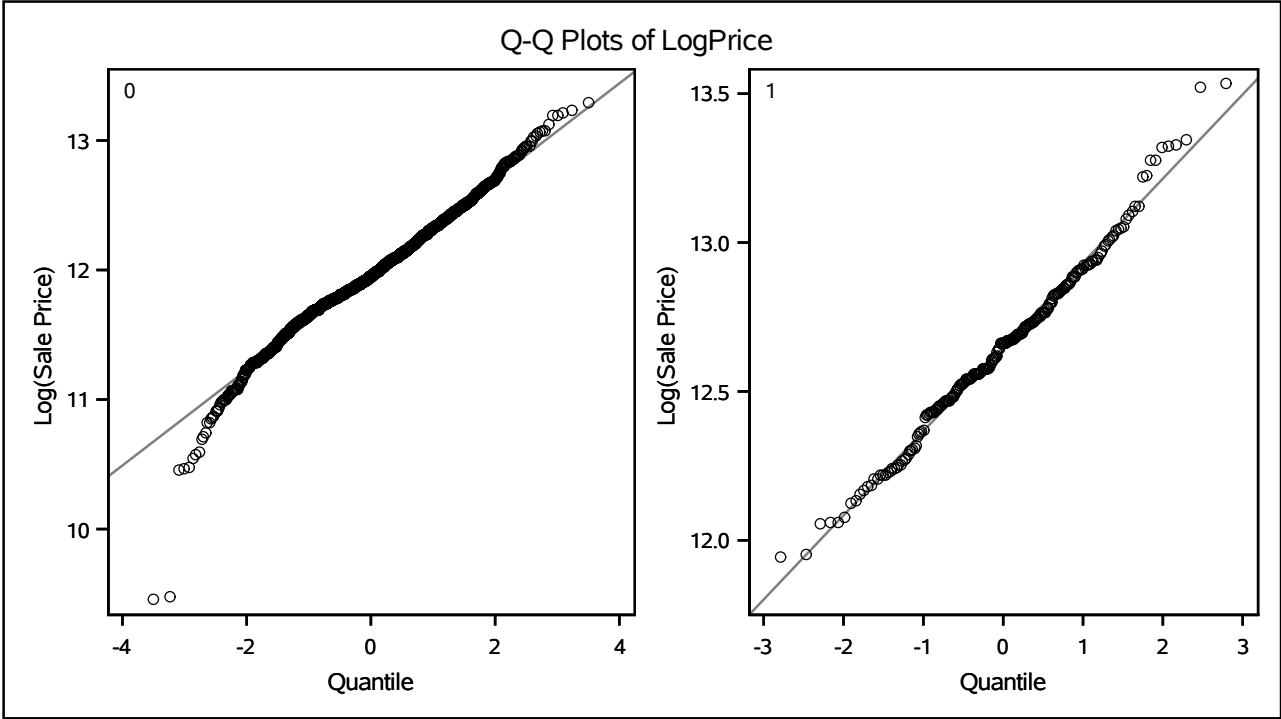
Equality of Variances				
Method	Num DF	Den DF	F Value	Pr > F
Folded F	2692	236	1.70	<.0001



RQ2: Northridge vs Other Neighborhoods

Variable: LogPrice (Log(Sale Price))

Variable: LogPrice (Log(Sale Price))



RQ3: ANOVA by Overall Quality

<i>Class Level Information</i>											
<i>Class</i>	<i>Levels</i>	<i>Values</i>									
<i>Overall.Qual</i>	10	1	2	3	4	5	6	7	8	9	10

<i>Number of Observations Read</i>	2930
<i>Number of Observations Used</i>	2930

RQ3: ANOVA by Overall Quality

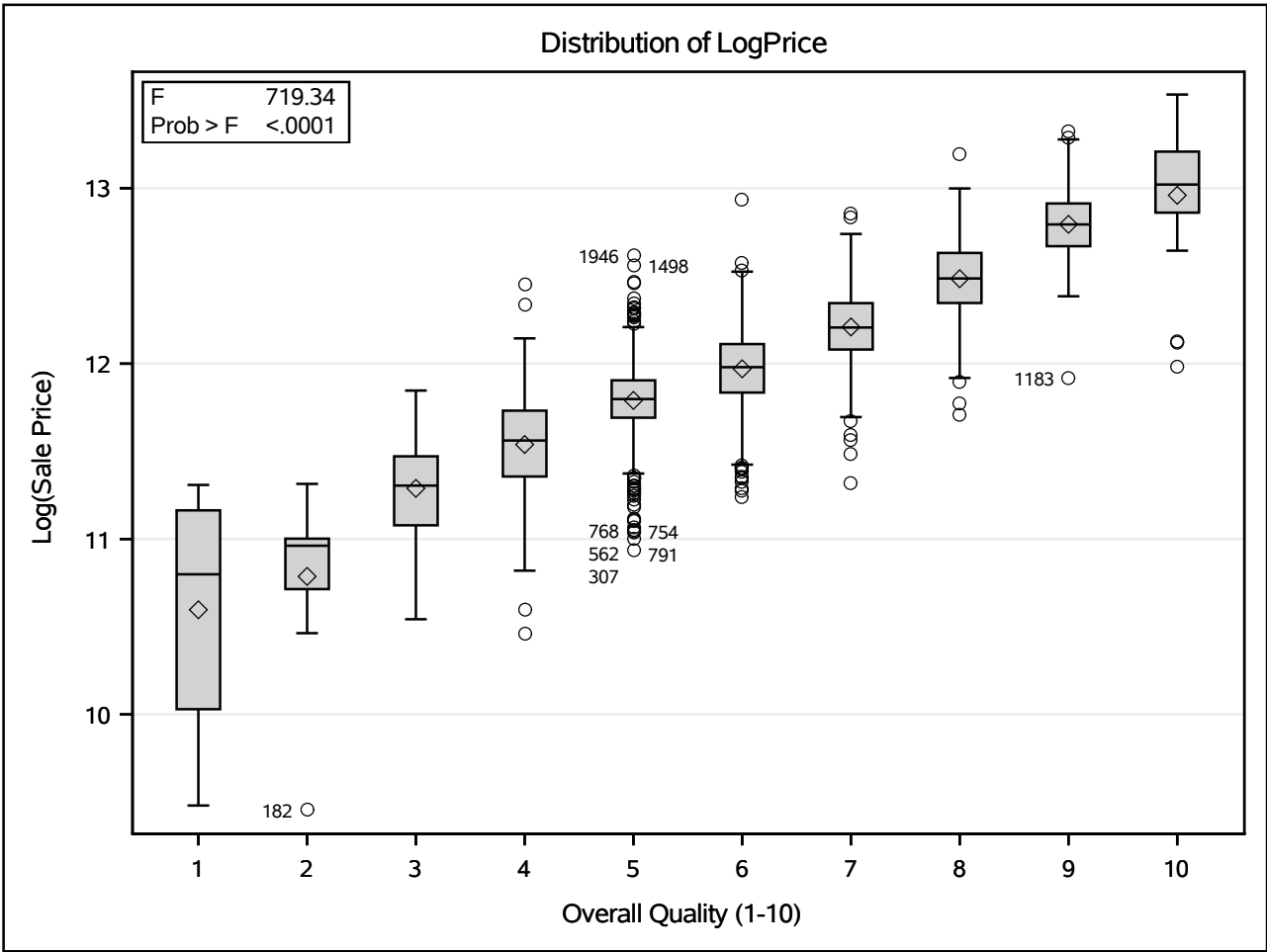
Dependent Variable: LogPrice Log(Sale Price)

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	9	335.3383616	37.2598180	719.34	<.0001
Error	2920	151.2478944	0.0517972		
Corrected Total	2929	486.5862561			

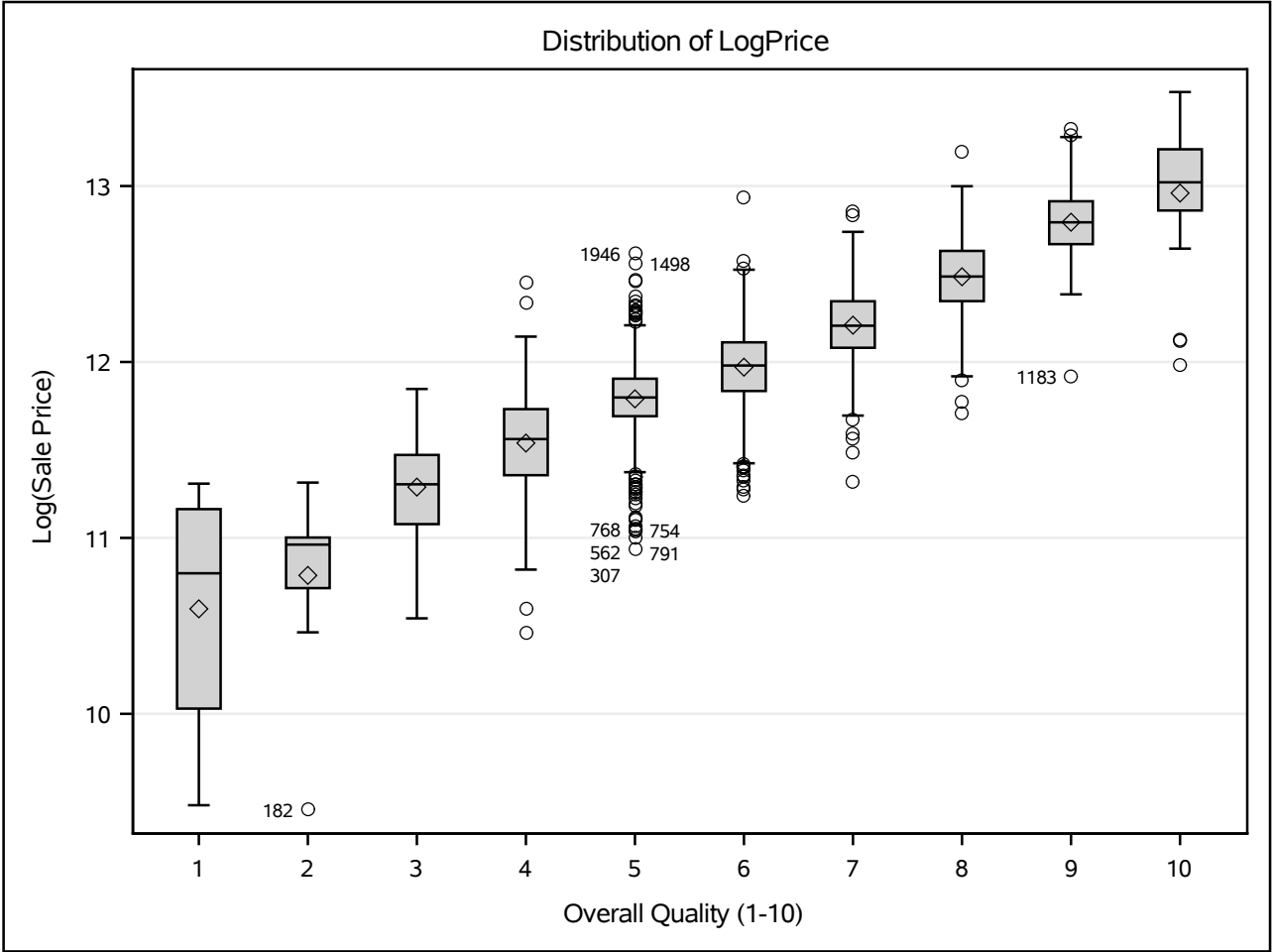
R-Square	Coeff Var	Root MSE	LogPrice Mean
0.689165	1.893275	0.227590	12.02097

Source	DF	Type I SS	Mean Square	F Value	Pr > F
Overall.Qual	9	335.3383616	37.2598180	719.34	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Overall.Qual	9	335.3383616	37.2598180	719.34	<.0001



RQ3: ANOVA by Overall Quality



RQ3: ANOVA by Overall Quality

Tukey's Studentized Range (HSD) Test for LogPrice

Note: This test controls the Type I experimentwise error rate.

Alpha	0.05
Error Degrees of Freedom	2920
Error Mean Square	0.051797
Critical Value of Studentized Range	4.47754

RQ3: ANOVA by Overall Quality**Tukey's Studentized Range (HSD) Test for LogPrice**

*Comparisons significant at the 0.05 level are indicated by ***.*

Overall Qual Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		
10 - 9	0.16557	0.01859	0.31254	***
10 - 8	0.47577	0.34074	0.61080	***
10 - 7	0.75093	0.61822	0.88364	***
10 - 6	0.98953	0.85740	1.12166	***
10 - 5	1.16958	1.03776	1.30141	***
10 - 4	1.42105	1.28304	1.55906	***
10 - 3	1.67105	1.49863	1.84347	***
10 - 2	2.17322	1.93512	2.41131	***
10 - 1	2.36338	1.98055	2.74620	***
9 - 10	-0.16557	-0.31254	-0.01859	***
9 - 8	0.31020	0.23060	0.38980	***
9 - 7	0.58536	0.50976	0.66096	***
9 - 6	0.82396	0.74938	0.89854	***
9 - 5	1.00401	0.92997	1.07805	***
9 - 4	1.25548	1.17092	1.34004	***
9 - 3	1.50548	1.37194	1.63902	***
9 - 2	2.00765	1.79600	2.21929	***
9 - 1	2.19781	1.83085	2.56477	***
8 - 10	-0.47577	-0.61080	-0.34074	***
8 - 9	-0.31020	-0.38980	-0.23060	***
8 - 7	0.27516	0.22672	0.32359	***
8 - 6	0.51376	0.46693	0.56058	***
8 - 5	0.69381	0.64784	0.73978	***
8 - 4	0.94527	0.88378	1.00676	***
8 - 3	1.19528	1.07501	1.31555	***
8 - 2	1.69744	1.49391	1.90097	***
8 - 1	1.88760	1.52526	2.24994	***
7 - 10	-0.75093	-0.88364	-0.61822	***
7 - 9	-0.58536	-0.66096	-0.50976	***
7 - 8	-0.27516	-0.32359	-0.22672	***
7 - 6	0.23860	0.19895	0.27824	***
7 - 5	0.41865	0.38003	0.45728	***
7 - 4	0.67012	0.61390	0.72633	***
7 - 3	0.92012	0.80246	1.03778	***
7 - 2	1.42229	1.22029	1.62428	***
7 - 1	1.61244	1.25096	1.97393	***
6 - 10	-0.98953	-1.12166	-0.85740	***
6 - 9	-0.82396	-0.89854	-0.74938	***
6 - 8	-0.51376	-0.56058	-0.46693	***

RQ3: ANOVA by Overall Quality**Tukey's Studentized Range (HSD) Test for LogPrice**

Comparisons significant at the 0.05 level are indicated by ***.

Overall Qual Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		
6 - 7	-0.23860	-0.27824	-0.19895	***
6 - 5	0.18006	0.14347	0.21664	***
6 - 4	0.43152	0.37668	0.48635	***
6 - 3	0.68152	0.56452	0.79853	***
6 - 2	1.18369	0.98207	1.38531	***
6 - 1	1.37385	1.01258	1.73512	***
5 - 10	-1.16958	-1.30141	-1.03776	***
5 - 9	-1.00401	-1.07805	-0.92997	***
5 - 8	-0.69381	-0.73978	-0.64784	***
5 - 7	-0.41865	-0.45728	-0.38003	***
5 - 6	-0.18006	-0.21664	-0.14347	***
5 - 4	0.25146	0.19736	0.30556	***
5 - 3	0.50147	0.38481	0.61813	***
5 - 2	1.00363	0.80221	1.20505	***
5 - 1	1.19379	0.83263	1.55495	***
4 - 10	-1.42105	-1.55906	-1.28304	***
4 - 9	-1.25548	-1.34004	-1.17092	***
4 - 8	-0.94527	-1.00676	-0.88378	***
4 - 7	-0.67012	-0.72633	-0.61390	***
4 - 6	-0.43152	-0.48635	-0.37668	***
4 - 5	-0.25146	-0.30556	-0.19736	***
4 - 3	0.25000	0.12640	0.37361	***
4 - 2	0.75217	0.54665	0.95769	***
4 - 1	0.94233	0.57887	1.30579	***
3 - 10	-1.67105	-1.84347	-1.49863	***
3 - 9	-1.50548	-1.63902	-1.37194	***
3 - 8	-1.19528	-1.31555	-1.07501	***
3 - 7	-0.92012	-1.03778	-0.80246	***
3 - 6	-0.68152	-0.79853	-0.56452	***
3 - 5	-0.50147	-0.61813	-0.38481	***
3 - 4	-0.25000	-0.37361	-0.12640	***
3 - 2	0.50217	0.27212	0.73221	***
3 - 1	0.69232	0.31445	1.07020	***
2 - 10	-2.17322	-2.41131	-1.93512	***
2 - 9	-2.00765	-2.21929	-1.79600	***
2 - 8	-1.69744	-1.90097	-1.49391	***
2 - 7	-1.42229	-1.62428	-1.22029	***
2 - 6	-1.18369	-1.38531	-0.98207	***
2 - 5	-1.00363	-1.20505	-0.80221	***

RQ3: ANOVA by Overall Quality**Tukey's Studentized Range (HSD) Test for LogPrice**

*Comparisons significant at the 0.05 level are indicated by ***.*

<i>Overall.Qual Comparison</i>	<i>Difference Between Means</i>	<i>Simultaneous 95% Confidence Limits</i>		
2 - 4	-0.75217	-0.95769	-0.54665	***
2 - 3	-0.50217	-0.73221	-0.27212	***
2 - 1	0.19016	-0.22184	0.60216	
1 - 10	-2.36338	-2.74620	-1.98055	***
1 - 9	-2.19781	-2.56477	-1.83085	***
1 - 8	-1.88760	-2.24994	-1.52526	***
1 - 7	-1.61244	-1.97393	-1.25096	***
1 - 6	-1.37385	-1.73512	-1.01258	***
1 - 5	-1.19379	-1.55495	-0.83263	***
1 - 4	-0.94233	-1.30579	-0.57887	***
1 - 3	-0.69232	-1.07020	-0.31445	***
1 - 2	-0.19016	-0.60216	0.22184	

RQ4: Correlation Matrix

4 Variables: price area Lot.Area Year.Built

Simple Statistics							
Variable	N	Mean	Std Dev	Sum	Minimum	Maximum	Label
price	2930	180796	79887	529732456	12789	755000	Sale Price (USD)
area	2930	1500	505.50889	4394093	334.00000	5642	Above-Ground Living Area (sq ft)
Lot.Area	2930	10148	7880	29733411	1300	215245	Lot Area (sq ft)
Year.Built	2930	1971	30.24536	5776074	1872	2010	Year Built

Pearson Correlation Coefficients, N = 2930 Prob > r under H0: Rho=0				
	price	area	Lot.Area	Year.Built
price	1.00000	0.70678	0.26655	0.55843
Sale Price (USD)		<.0001	<.0001	<.0001
area	0.70678	1.00000	0.28560	0.24173
Above-Ground Living Area (sq ft)	<.0001		<.0001	<.0001
Lot.Area	0.26655	0.28560	1.00000	0.02326
Lot Area (sq ft)	<.0001	<.0001		0.2082
Year.Built	0.55843	0.24173	0.02326	1.00000
Year Built	<.0001	<.0001	0.2082	

RQ5: Final Regression with Interaction

Class Level Information		
Class	Levels	Values
NorthridgeGroup	2	0 1

Number of Observations Read	2930
Number of Observations Used	2928

RQ5: Final Regression with Interaction**Dependent Variable: LogPrice Log(Sale Price)**

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	6	391.2700198	65.2116700	2010.30	<.0001
Error	2921	94.7534886	0.0324387		
Corrected Total	2927	486.0235084			

R-Square	Coeff Var	Root MSE	LogPrice Mean
0.805043	1.498242	0.180108	12.02126

Source	DF	Type I SS	Mean Square	F Value	Pr > F
area	1	235.2972711	235.2972711	7253.59	<.0001
Overall. Qual	1	132.3332442	132.3332442	4079.48	<.0001
TotalBsmtSF_num	1	12.0170555	12.0170555	370.45	<.0001
GarageCars_num	1	10.9260783	10.9260783	336.82	<.0001
NorthridgeGroup	1	0.6712310	0.6712310	20.69	<.0001
area*NorthridgeGroup	1	0.0251396	0.0251396	0.77	0.3788

Source	DF	Type III SS	Mean Square	F Value	Pr > F
area	1	9.61990485	9.61990485	296.56	<.0001
Overall. Qual	1	47.91545493	47.91545493	1477.11	<.0001
TotalBsmtSF_num	1	8.53656554	8.53656554	263.16	<.0001
GarageCars_num	1	10.34112378	10.34112378	318.79	<.0001
NorthridgeGroup	1	0.00524858	0.00524858	0.16	0.6875
area*NorthridgeGroup	1	0.02513955	0.02513955	0.77	0.3788

