

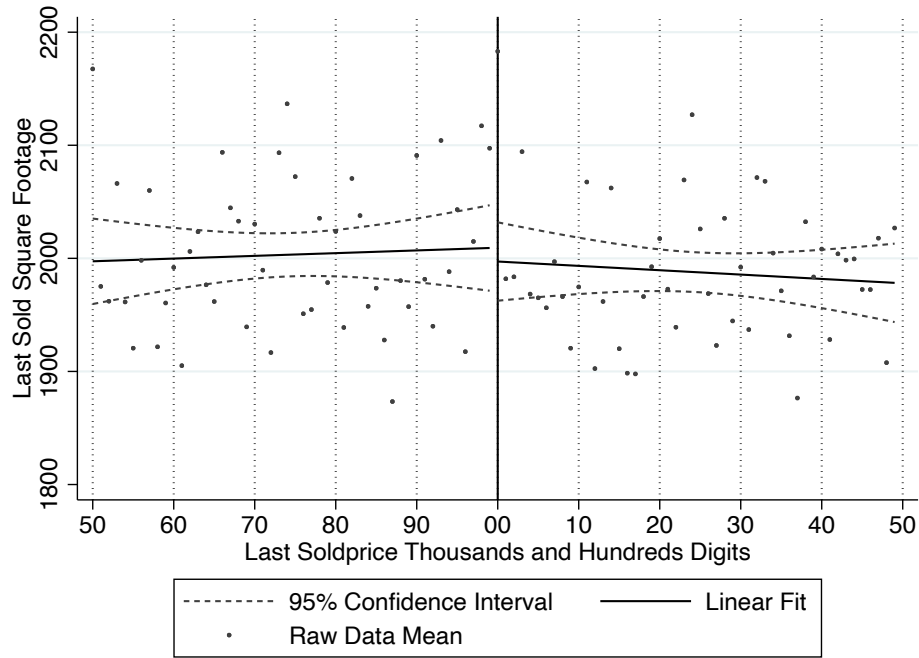
APPENDIX

Appendix 1: Experimental Pretest

The design of the pretest was similar to the design of Study 2 but included only three previous sale price conditions: far-above the round-number reference point, just above it, and just below it. We provided 300 participants recruited from Amazon's Mturk.com website with a host of information and pictures about seven properties to make participants' experiences comparable to what home buyers see when viewing properties on real estate websites. For each house, participants viewed one of three versions of the previous sale price: a price above the reference point (e.g., \$261,000), a price just below the reference point (e.g., \$259,000), or a price significantly below the reference point (e.g., \$257,000). The hypothesis test for this design is that the difference in estimated price between the just-above and just-below conditions would be much larger than the difference between the just-below and far-below conditions.

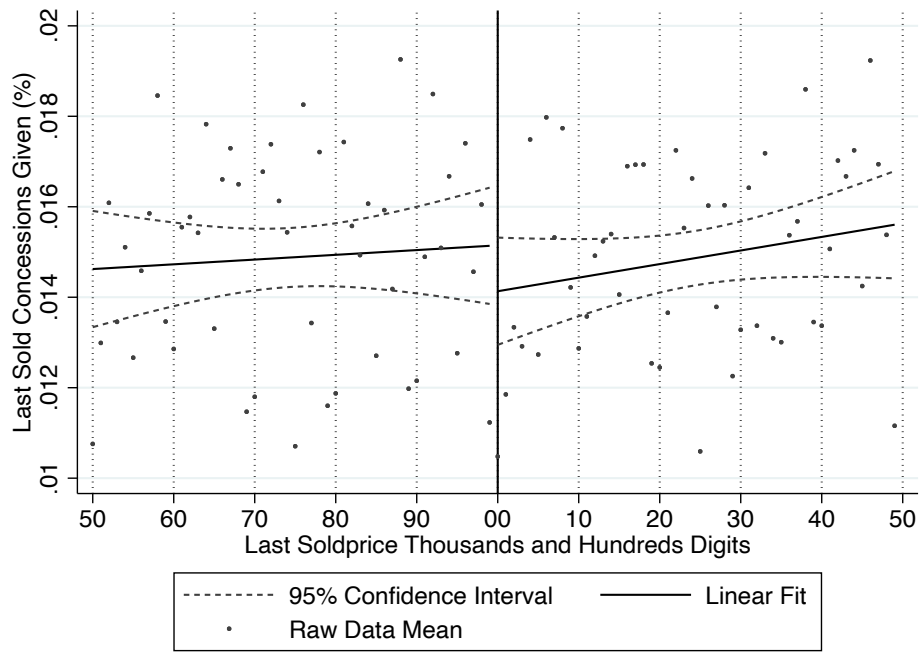
Table A7 shows correlations, Table A8 shows the mean estimated listing price by condition by house, and Table A9 shows the results of the mixed-model analyses. When we used standardized values of the housing estimate as the dependent variable, we found that the average difference ($M = \$6,258$, $SD = \$3,025$) in estimated list prices between the just-above and just-below conditions was much larger than the average difference ($M = -\$332$, $SD = \$3,065$) between the just-below and far-below conditions ($X^2 = 2.03$, $p=0.154$, $d = 2.16$). While the estimated discontinuity is large, the variance is also large. The pretest revealed a need for significantly more power in order to detect discontinuities. We therefore pre-registered a new study using a much larger sample and added the control variable of participants' home zip codes.

Figure A1: Study 1 Identification Test—Home Sq. Footage Similar Around \$10,000 Discontinuities



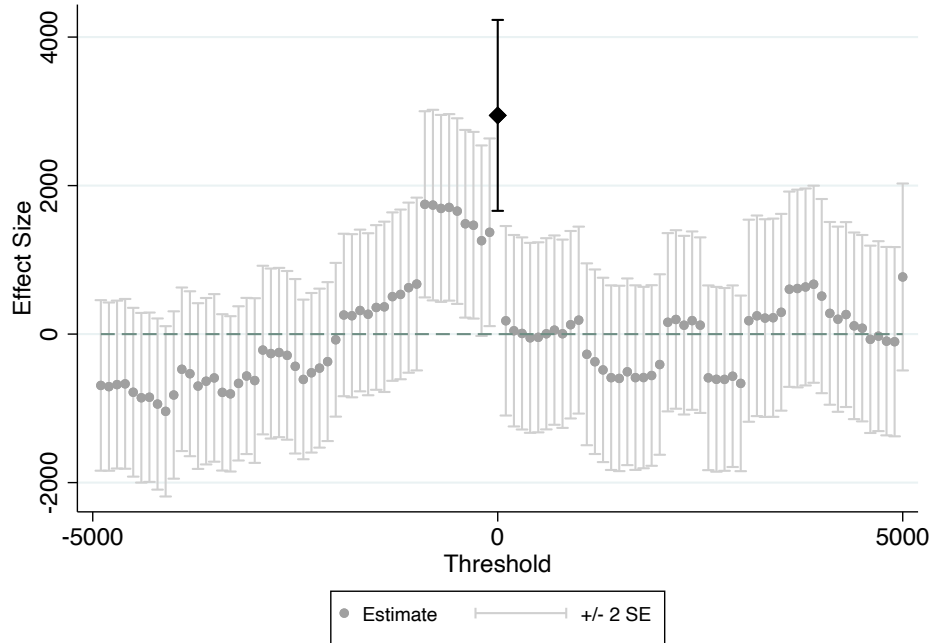
Note: This figure presents raw data for home square footage for all previous sales bucketed by the thousands and hundreds digits in that sales final sales prices. “00” refers to \$10,000. It shows homes are similar in total square footage around the \$10,000 price thresholds.

Figure A2: Study 1 Identification Test—Percentage of Seller Concessions Provided Around \$10,000 Discontinuities are Similar



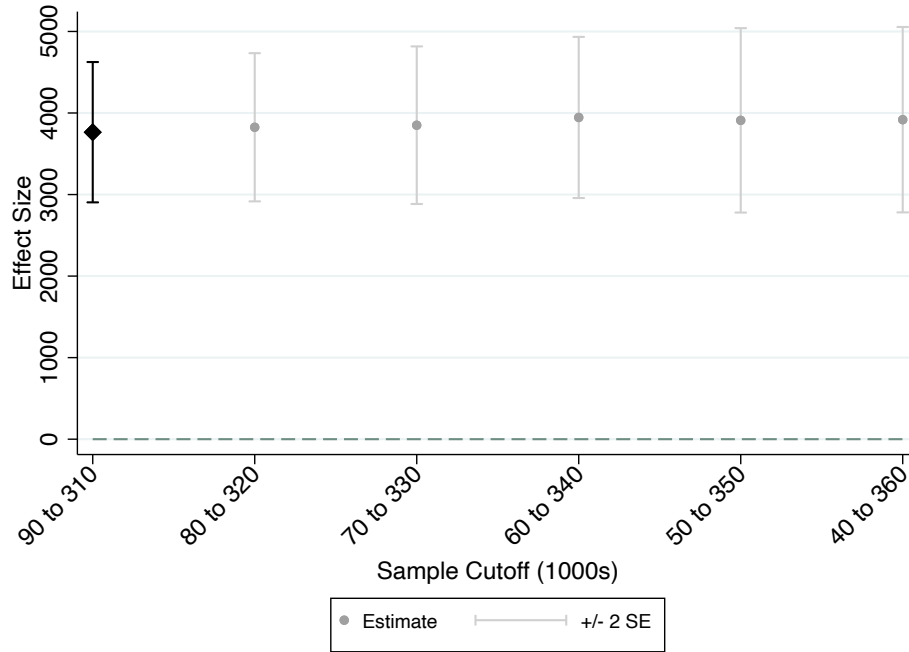
Note: This figure presents raw data for seller concessions given, calculated as a percentage of the home sales price, bucketed by the thousands and hundreds digits in that sales final sales prices. “00” refers to \$10,000. A higher percentage of seller concessions reduces the net price for buyers. This figure suggests similar seller concessions for houses above and below the threshold.

Figure A3: Study 1 Discontinuity Placebo Tests



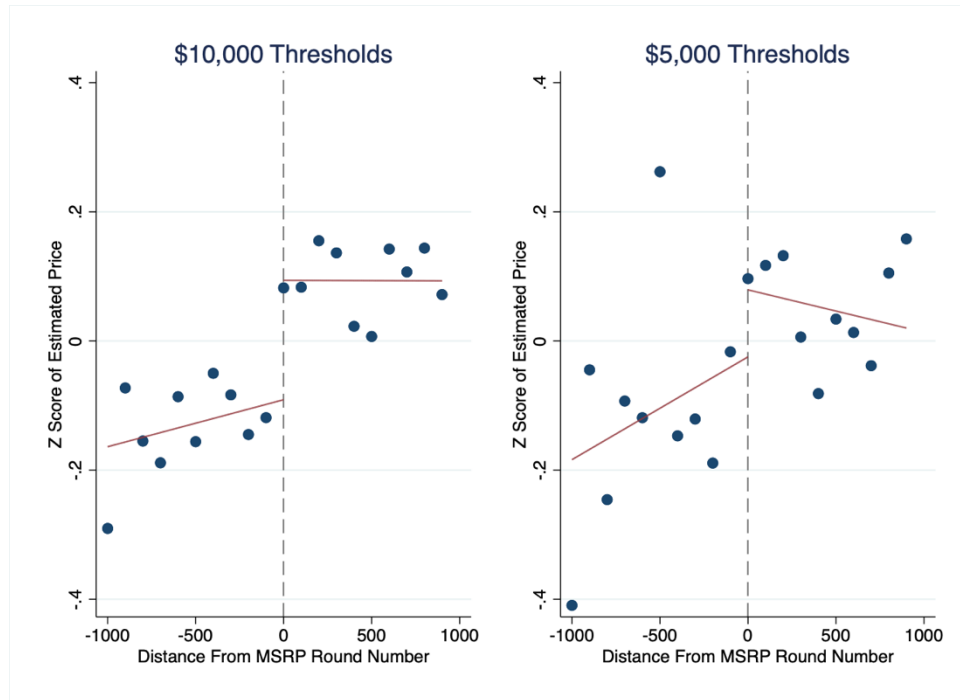
Note: This figure presents the average estimated sales price discontinuities for our fully controlled model with 100 placebo simulations. For each simulation we assigned the discontinuity to a \$100 interval within \$5,000 above and below the true \$10,000 round number discontinuity. The results suggest that our main results using the \$10,000 round number discontinuities is not driven by a spurious correlation in the data or our model.

Figure A4: Study 1 Robustness to Sample Cutoff Points



Note: This table presents the average estimated sales price discontinuity for the fully controlled model with variations in the sample cutoff at both the bottom and top ends of the distribution. The main models presented in the paper use a sample cutoff of \$90,000-\$310,000 (bolded estimate shown as the diamond on the far left of the figure). This table presents robustness of our main model estimates to a maximum sample cutoff of \$360,000 on the top end, with the bottom end of the distribution extended to \$40,000.

Figure A5: Study 4 Binned Scatter Plot of Car Price by \$10K and \$5K Thresholds



Note: This figure presents a raw data binned scatter plot using all vehicle estimates from the car pricing experiment. The panel on the left shows the discontinuity for the five vehicles whose MSRP spanned a \$10K price threshold. The panel on the right shows the discontinuity for the two vehicles whose MSRP spanned a \$5K price threshold. Solid lines represent linear fits above or below the round number price threshold.

Table A1: Study1 Balance T-Tests for Each \$10,000 Round Number Threshold

Previous Sales Price +/- 500 from \$100,000 Threshold

<u>Variable</u>	<u>N</u>		<u>Mean</u>		<u>Diff.</u>	<u>Std. Dev.</u>		<u>P-Value</u>
	<u>Below</u>	<u>Above</u>	<u>Below</u>	<u>Above</u>		<u>Diff.</u>		
Square Feet	337	519	1416.602	1452.921	-36.31863	29.66191	.2211315	
Acreage	337	520	.1317211	.1376154	-.0058943	.0072711	.4177903	
# Bedrooms	337	520	2.928783	2.996154	-.0673705	.0633792	.2880938	
# Bathrooms	337	520	1.543027	1.567308	-.024281	.0413735	.5574443	
% Finished Basement	337	520	27.37389	29.61538	-2.241497	2.743824	.4141991	
Year Built	338	520	1961.207	1961.531	-.3236686	1.922089	.866313	

Previous Sales Price +/- 500 from \$110,000 Threshold

<u>Variable</u>	<u>N</u>		<u>Mean</u>		<u>Diff.</u>	<u>Std. Dev.</u>		<u>P-Value</u>
	<u>Below</u>	<u>Above</u>	<u>Below</u>	<u>Above</u>		<u>Diff.</u>		
Square Feet	374	683	1477.449	1565.378	-87.92855	27.49113	.0014229	
Acreage	374	683	.1409893	.1419327	-.0009433	.0074846	.8997257	
# Bedrooms	374	683	3.026738	3.122987	-.0962489	.0575152	.0945348	
# Bathrooms	374	683	1.671123	1.698389	-.0272665	.0392318	.487203	
% Finished Basement	374	683	31.57487	36.79649	-5.22162	2.643491	.0484973	
Year Built	374	683	1968.086	1964.772	3.313966	1.704262	.0520987	

Previous Sales Price +/- 500 from \$120,000 Threshold

<u>Variable</u>	<u>N</u>		<u>Mean</u>		<u>Diff.</u>	<u>Std. Dev.</u>		<u>P-Value</u>
	<u>Below</u>	<u>Above</u>	<u>Below</u>	<u>Above</u>		<u>Diff.</u>		
Square Feet	537	665	1630.108	1717.517	-87.40929	25.68914	.0006895	
Acreage	537	665	.1524767	.1550226	-.0025458	.0057997	.6607678	
# Bedrooms	537	665	3.180633	3.374436	-.1938029	.0537829	.0003269	
# Bathrooms	537	665	1.780261	1.864662	-.0844009	.0372202	.0235302	
% Finished Basement	537	665	40.81192	42.33534	-1.52342	2.492751	.5412226	
Year Built	538	665	1968.697	1968.713	-.0157559	1.467697	.9914365	

Previous Sales Price +/- 500 from \$130,000 Threshold

<u>Variable</u>	<u>N</u>		<u>Mean</u>		<u>Diff.</u>	<u>Std. Dev.</u>		<u>P-Value</u>
	<u>Below</u>	<u>Above</u>	<u>Below</u>	<u>Above</u>		<u>Diff.</u>		
Square Feet	597	780	1713.626	1745.512	-31.88507	23.58949	.176705	
Acreage	597	780	.158526	.1620897	-.0035638	.0048048	.4583869	
# Bedrooms	597	780	3.301508	3.357692	-.0561848	.0477216	.239262	
# Bathrooms	597	780	1.859296	1.901282	-.0419856	.0343166	.2213598	
% Finished Basement	597	780	46.66332	44.81154	1.851778	2.369578	.4346547	
Year Built	598	781	1972.05	1969.498	2.552088	1.397968	.0681317	

Previous Sales Price +/- 500 from \$140,000 Threshold

Variable	<u>N</u> <u>Below</u>	<u>N</u> <u>Above</u>	<u>Mean</u> <u>Below</u>	<u>Mean</u> <u>Above</u>	<u>Diff.</u>	<u>Std. Dev.</u> <u>Diff.</u>	<u>P-Value</u>
Square Feet	537	765	1838.741	1877.336	-38.59479	26.97271	.1527041
Acreage	537	766	.1634078	.1967363	-.0333285	.0181767	.0669448
# Bedrooms	536	766	3.43097	3.460836	-.0298654	.0506039	.5551735
# Bathrooms	537	766	2.046555	2.010444	.0361111	.0375711	.33666
% Finished Basement	537	766	49.00186	49.58616	-.5842997	2.456397	.8120205
Year Built	539	766	1975.382	1972.304	3.078012	1.349745	.0227425

Previous Sales Price +/- 500 from \$150,000 Threshold

Variable	<u>N</u> <u>Below</u>	<u>N</u> <u>Above</u>	<u>Mean</u> <u>Below</u>	<u>Mean</u> <u>Above</u>	<u>Diff.</u>	<u>Std. Dev.</u> <u>Diff.</u>	<u>P-Value</u>
Square Feet	555	764	1928.953	2016.463	-87.5102	27.84909	.0017136
Acreage	556	764	.1661331	.177055	-.0109219	.0050887	.0320296
# Bedrooms	556	761	3.48741	3.646518	-.1591077	.0499204	.0014703
# Bathrooms	556	764	2.133094	2.217277	-.084184	.0378017	.0261164
% Finished Basement	556	764	47.32374	53.62173	-6.297987	2.456176	.0104531
Year Built	556	764	1976.038	1974.692	1.345361	1.347396	.3182252

Previous Sales Price +/- 500 from \$160,000 Threshold

Variable	<u>N</u> <u>Below</u>	<u>N</u> <u>Above</u>	<u>Mean</u> <u>Below</u>	<u>Mean</u> <u>Above</u>	<u>Diff.</u>	<u>Std. Dev.</u> <u>Diff.</u>	<u>P-Value</u>
Square Feet	468	705	2071.429	2017.555	53.87488	30.36568	.0762894
Acreage	468	705	.1790812	.201305	-.0222238	.0332751	.5043417
# Bedrooms	468	705	3.666667	3.558865	.1078014	.059032	.0680819
# Bathrooms	468	705	2.320513	2.190071	.1304419	.0414701	.0017001
% Finished Basement	468	705	56.67521	50.60993	6.065285	2.595542	.019617
Year Built	468	705	1975.325	1974.577	.7474814	1.539964	.6274913

Previous Sales Price +/- 500 from \$170,000 Threshold

Variable	<u>N</u> <u>Below</u>	<u>N</u> <u>Above</u>	<u>Mean</u> <u>Below</u>	<u>Mean</u> <u>Above</u>	<u>Diff.</u>	<u>Std. Dev.</u> <u>Diff.</u>	<u>P-Value</u>
Square Feet	461	622	2138.523	2128.111	10.41184	34.73618	.7644327
Acreage	461	622	.1768764	.1858039	-.0089275	.0067545	.1865455
# Bedrooms	461	622	3.574837	3.596463	-.0216257	.0594741	.716216
# Bathrooms	461	622	2.314534	2.278135	.0363986	.0485372	.4534712
% Finished Basement	461	622	46.20174	50.7926	-4.590869	2.685647	.0876622
Year Built	461	622	1980.098	1973.683	6.414334	1.602822	.0000671

Previous Sales Price +/- 500 from \$180,000 Threshold

<u>Variable</u>	<u>N</u> <u>Below</u>	<u>N</u> <u>Above</u>	<u>Mean</u> <u>Below</u>	<u>Mean</u> <u>Above</u>	<u>Diff.</u>	<u>Std. Dev.</u> <u>Diff.</u>	<u>P-Value</u>
Square Feet	341	516	2213.66	2267.684	-54.02428	41.54018	.1937696
Acreage	341	516	.198563	.2116473	-.0130842	.0140609	.352354
# Bedrooms	341	516	3.624633	3.70155	-.076917	.0679275	.2578094
# Bathrooms	341	516	2.404692	2.352713	.0519789	.0500624	.2994317
% Finished Basement	341	516	52.19648	55.26744	-3.070961	3.067341	.317023
Year Built	341	516	1975.833	1973.634	2.199124	1.875145	.2412126

Previous Sales Price +/- 500 from \$190,000 Threshold

<u>Variable</u>	<u>N</u> <u>Below</u>	<u>N</u> <u>Above</u>	<u>Mean</u> <u>Below</u>	<u>Mean</u> <u>Above</u>	<u>Diff.</u>	<u>Std. Dev.</u> <u>Diff.</u>	<u>P-Value</u>
Square Feet	299	477	2362.201	2291.208	70.99312	47.32126	.1339608
Acreage	299	477	.1992308	.2131027	-.013872	.0212859	.5147898
# Bedrooms	299	477	3.732441	3.737945	-.005504	.0717744	.938894
# Bathrooms	299	477	2.545151	2.471698	.0734524	.0549159	.1814387
% Finished Basement	299	477	50.71906	55.75262	-5.033557	3.277737	.1250254
Year Built	299	477	1983.09	1975.138	7.951936	1.91876	.0000378

Previous Sales Price +/- 500 from \$200,000 Threshold

<u>Variable</u>	<u>N</u> <u>Below</u>	<u>N</u> <u>Above</u>	<u>Mean</u> <u>Below</u>	<u>Mean</u> <u>Above</u>	<u>Diff.</u>	<u>Std. Dev.</u> <u>Diff.</u>	<u>P-Value</u>
Square Feet	283	395	2340.668	2390.073	-49.40557	52.45333	.3465824
Acreage	283	395	.2005654	.2031646	-.0025992	.0121663	.8308935
# Bedrooms	283	395	3.759717	3.832911	-.0731941	.0819566	.3721306
# Bathrooms	283	395	2.572438	2.518987	.0534508	.0616691	.3863941
% Finished Basement	283	395	54.30742	57.4481	-3.140681	3.455174	.3636851
Year Built	283	395	1981.813	1975.711	6.101328	2.064652	.003234

Previous Sales Price +/- 500 from \$210,000 Threshold

<u>Variable</u>	<u>N</u> <u>Below</u>	<u>N</u> <u>Above</u>	<u>Mean</u> <u>Below</u>	<u>Mean</u> <u>Above</u>	<u>Diff.</u>	<u>Std. Dev.</u> <u>Diff.</u>	<u>P-Value</u>
Square Feet	176	414	2474.682	2407.37	67.31225	60.08651	.2630622
Acreage	176	414	.2373295	.2174879	.0198416	.0348102	.5688987
# Bedrooms	176	414	3.721591	3.785024	-.0634332	.0915946	.4888693
# Bathrooms	176	414	2.5	2.521739	-.0217391	.0697518	.7554063
% Finished Basement	176	414	48.8125	54.14976	-5.337258	4.077032	.1910105
Year Built	176	414	1980.273	1973.529	6.743742	2.52227	.0077109

Previous Sales Price +/- 500 from \$220,000 Threshold

Variable	<u>N</u> <u>Below</u>	<u>N</u> <u>Above</u>	<u>Mean</u> <u>Below</u>	<u>Mean</u> <u>Above</u>	<u>Diff.</u>	<u>Std. Dev.</u> <u>Diff.</u>	<u>P-Value</u>
Square Feet	165	397	2488.6	2544.139	-55.53854	68.74514	.4194967
Acreage	165	398	.2455152	.2346985	.0108167	.0322203	.7372152
# Bedrooms	165	398	4.036364	3.801508	.2348561	.0983616	.0172851
# Bathrooms	165	398	2.672727	2.610553	.0621745	.0678181	.3596503
% Finished Basement	165	398	59.80606	53.13317	6.672895	4.148751	.1083079
Year Built	165	398	1979.436	1977.49	1.946414	2.458631	.4288901

Previous Sales Price +/- 500 from \$230,000 Threshold

Variable	<u>N</u> <u>Below</u>	<u>N</u> <u>Above</u>	<u>Mean</u> <u>Below</u>	<u>Mean</u> <u>Above</u>	<u>Diff.</u>	<u>Std. Dev.</u> <u>Diff.</u>	<u>P-Value</u>
Square Feet	184	339	2541.31	2646.198	-104.8879	66.46036	.1151262
Acreage	184	339	.2010326	.2175811	-.0165485	.013994	.2375298
# Bedrooms	184	338	3.896739	3.828402	.0683368	.0937991	.4666086
# Bathrooms	184	339	2.673913	2.666667	.0072464	.074596	.9226513
% Finished Basement	184	339	54.14674	55.9351	-1.788364	4.059224	.6597085
Year Built	184	339	1979.554	1976.681	2.872932	2.691244	.2862357

Previous Sales Price +/- 500 from \$240,000 Threshold

Variable	<u>N</u> <u>Below</u>	<u>N</u> <u>Above</u>	<u>Mean</u> <u>Below</u>	<u>Mean</u> <u>Above</u>	<u>Diff.</u>	<u>Std. Dev.</u> <u>Diff.</u>	<u>P-Value</u>
Square Feet	181	309	2684.066	2836.725	-152.6586	69.23359	.0279213
Acreage	181	309	.2028177	.2331392	-.0303215	.0178068	.0892418
# Bedrooms	181	308	3.966851	3.996753	-.0299024	.0975933	.7594325
# Bathrooms	181	309	2.674033	2.834951	-.1609183	.067575	.0176328
% Finished Basement	181	309	56.97238	54.6343	2.338071	4.190598	.5771462
Year Built	181	309	1978.343	1979.961	-1.618624	2.635803	.5394411

Previous Sales Price +/- 500 from \$250,000 Threshold

Variable	<u>N</u> <u>Below</u>	<u>N</u> <u>Above</u>	<u>Mean</u> <u>Below</u>	<u>Mean</u> <u>Above</u>	<u>Diff.</u>	<u>Std. Dev.</u> <u>Diff.</u>	<u>P-Value</u>
Square Feet	166	378	2779.669	2812.926	-33.25725	71.83693	.6435826
Acreage	166	378	.235241	.2538624	-.0186215	.0323311	.5648807
# Bedrooms	166	378	3.993976	3.957672	.0363039	.1015195	.7207777
# Bathrooms	166	378	2.837349	2.820106	.0172436	.0704602	.8067597
% Finished Basement	166	378	52.13855	56.00265	-3.864091	4.167002	.3541798
Year Built	167	378	1981.443	1978.034	3.408722	2.584999	.1878403

Previous Sales Price +/- 500 from \$260,000 Threshold

Variable	<u>N</u> <u>Below</u>	<u>N</u> <u>Above</u>	<u>Mean</u> <u>Below</u>	<u>Mean</u> <u>Above</u>	<u>Diff.</u>	<u>Std. Dev.</u> <u>Diff.</u>	<u>P-Value</u>
Square Feet	116	237	2853.19	2886.211	-33.02132	97.38227	.734745
Acreage	116	237	.2456897	.2525738	-.0068842	.0221992	.7566613
# Bedrooms	116	237	4.017241	3.953586	.0636549	.1188995	.5927351
# Bathrooms	116	237	2.758621	2.746835	.0117852	.0884891	.894125
% Finished Basement	116	237	56.08621	55.4346	.6516077	4.958629	.8955272
Year Built	116	237	1982.233	1975.321	6.912084	3.113007	.0270305

Previous Sales Price +/- 500 from \$270,000 Threshold

Variable	<u>N</u> <u>Below</u>	<u>N</u> <u>Above</u>	<u>Mean</u> <u>Below</u>	<u>Mean</u> <u>Above</u>	<u>Diff.</u>	<u>Std. Dev.</u> <u>Diff.</u>	<u>P-Value</u>
Square Feet	89	215	2977.202	3056.056	-78.85357	109.4157	.4716645
Acreage	89	215	.3230337	.2884651	.0345686	.0693026	.6182787
# Bedrooms	89	215	3.921348	4.204651	-.2833028	.1263453	.0256681
# Bathrooms	89	215	2.707865	2.865116	-.1572511	.0966295	.1047031
% Finished Basement	89	215	53.83146	63.51163	-9.680167	5.374095	.0726586
Year Built	89	215	1980.36	1977.135	3.224667	3.179387	.3112792

Previous Sales Price +/- 500 from \$280,000 Threshold

Variable	<u>N</u> <u>Below</u>	<u>N</u> <u>Above</u>	<u>Mean</u> <u>Below</u>	<u>Mean</u> <u>Above</u>	<u>Diff.</u>	<u>Std. Dev.</u> <u>Diff.</u>	<u>P-Value</u>
Square Feet	80	201	2864.863	3071.791	-206.9285	115.0095	.0730627
Acreage	80	201	.18475	.2429851	-.0582351	.021229	.0064787
# Bedrooms	80	200	3.8375	4.275	-.4375	.1494395	.0036984
# Bathrooms	80	201	2.8	2.870647	-.0706468	.1042266	.4984483
% Finished Basement	80	201	57.825	62.18905	-4.364055	5.679655	.4429195
Year Built	80	201	1977.875	1975.597	2.277985	3.825435	.5520027

Previous Sales Price +/- 500 from \$290,000 Threshold

Variable	<u>N</u> <u>Below</u>	<u>N</u> <u>Above</u>	<u>Mean</u> <u>Below</u>	<u>Mean</u> <u>Above</u>	<u>Diff.</u>	<u>Std. Dev.</u> <u>Diff.</u>	<u>P-Value</u>
Square Feet	93	197	3043.462	3183.102	-139.6392	112.0905	.2138606
Acreage	93	197	.2849462	.2973604	-.0124142	.0542294	.819094
# Bedrooms	92	197	4.163043	4.116751	.0462922	.1376178	.7368284
# Bathrooms	93	197	2.935484	2.956853	-.0213689	.0982114	.8279098
% Finished Basement	93	197	46.80645	58.16244	-11.35598	5.755631	.0494491
Year Built	93	197	1988.538	1973.132	15.40565	3.58408	.0000236

Previous Sales Price +/- 500 from \$300,000 Threshold

<u>Variable</u>	<u>N</u> <u>Below</u>	<u>N</u> <u>Above</u>	<u>Mean</u> <u>Below</u>	<u>Mean</u> <u>Above</u>	<u>Diff.</u>	<u>Std. Dev.</u> <u>Diff.</u>	<u>P-Value</u>
Square Feet	92	155	3033.772	3141.329	-107.5573	125.0384	.390523
Acreage	92	155	.2502174	.2450968	.0051206	.0278638	.8543433
# Bedrooms	92	155	4.097826	4.154839	-.0570126	.1486153	.7015887
# Bathrooms	92	155	2.793478	2.909677	-.1161992	.1121207	.3010486
% Finished Basement	92	155	59.86957	62.71613	-2.846564	5.73275	.619557
Year Built	92	155	1982.739	1979.09	3.648808	3.582117	.3093893

Note: Balance tests compare homes within \$500 (above and below) of a \$10,000 round number reference point threshold. Data are presented for variables cited in the literature as being key determinants of home value. P-values for Wald tests testing differences in variable means are presented in the final column.

Table A2: Study 1 Control Variables

Archival Data Variable	N	Mean	Std Dev	Min	Max
<i>House Controls</i>					
Total # of bedrooms	83164	3.70	1.06	1	15
Total # of bathrooms	83163	2.30	0.81	1	7
Total # of kitchens	83164	1.05	0.22	1	5
Total # of fireplaces	83164	0.62	0.70	0	11
Total # of laundry rooms	83160	0.98	0.28	0	3
Total # of dining rooms	83164	0.15	0.36	0	2
Total # of family rooms	83161	1.18	0.68	0	4
% of basement finished	83163	57.27	44.39	0	100
Garage capacity	83158	1.42	0.95	0	16
Pool	83164	0.07	0.26	0	1
log(square feet)	83164	7.57	0.35	6.21	8.92
log(acres)	83164	0.16	0.10	0	2.94
Year built	83164	1974	26.23	1848	2013
Property type	83152	3.92	0.80	1	6
Quality control dummies (*See list below)					
<i>Transaction Controls</i>					
Immediate possession	83164	0.27	0.44	0	1
Dual agent	83164	0.13	0.33	0	1
Dual office	83164	0.10	0.30	0	1
<i>Time and Geographic Controls</i>					
Days since last sale	83164	1514.16	1103.70	1	6530
Year	83164	2007	3.70	1996	2014
Month	83164	6.12	3.23	1	12
Zip	83164	84142	162.14	84003	84664

Quality control dummies: TLC, needs updating, estate sale, foreclosure, handyman, as is, rehabber, bank owned, priced to sell, motivated, potential, close, exclamation, new, spacious, elegance, beautiful, remodeled, historic, maintained, wonderful, fantastic, charming, stunning, amazing, granite, immaculate, breathtaking, neighborhood, spectacular, landscaped, stained glass, built in, tasteful, must see, fabulous, leaded, delightful, move in, gourmet, Corian, custom, unique, maple, newer, hurry, pride, clean, quiet, dream, block, huge, deck, mint, hardwood, views, new roof, upgraded, vaulted, floor plan, award, hot tub, tile, cul-de-sac, jacuzzi, park, brick, value, windows, mother in law, stainless, theater, surround sound, pickiest, rare, starter, master, cute, warranty, temple, fenced

Renovation controls: Change in house, transaction, and quality controls between periods

Table A3: Study 1 Discontinuity Results by Organizational Size

Dependent Variable:	(1) Large Firm List Price	(2) Small Firm List Price	(3) Large Firm Sales Price	(4) Small Firm Sales Price	(5) Large Firm Net Price	(6) Small Firm Net Price
Avg. Discontinuity	4127.44	2844.59	3063.72	2476.54	3103.69	2449.98
F-stat	66.30	12.09	30.08	10.43	30.13	10.15
Prob > F	0.0000	0.0005	0.0000	0.0013	0.0000	0.0015
\$100k	2426.3** (1154.6)	-2771.7** (1397.5)	1336.2 (1031.9)	-1046.2 (1333.3)	1461.8 (1033.4)	-989.6 (1340.4)
\$110k	451.2 (651.0)	-1264.6 (883.9)	22.1 (605.7)	-1346.8 (843.3)	-15.2 (604.3)	-1307.1 (839.7)
\$120k	613.7 (490.5)	426.4 (791.4)	251.2 (533.4)	882.6 (807.4)	183.2 (532.0)	859.1 (800.1)
\$130k	870.3* (446.8)	1385.0* (726.6)	687.9 (468.3)	2183.0*** (747.9)	668.1 (465.6)	2053.4*** (748.6)
\$140k	933.1** (372.1)	899.3 (652.6)	914.7** (462.6)	1569.2** (681.8)	885.6* (462.5)	1541.4** (676.5)
\$150k	1713.3*** (415.2)	1432.5** (691.2)	2018.6*** (463.1)	1700.0** (751.5)	2059.7*** (453.9)	1770.5** (757.3)
\$160k	1687.3*** (446.1)	1725.3** (849.9)	1349.6*** (479.0)	2112.7** (830.5)	1352.5*** (493.0)	2157.3*** (826.3)
\$170k	2001.1*** (583.5)	-442.2 (906.0)	1465.5** (586.2)	277.3 (971.8)	1420.9** (602.9)	388.8 (967.6)
\$180k	1413.6** (616.3)	1519.6 (985.2)	1917.3*** (721.7)	270.5 (1081.3)	1853.1** (724.1)	368.0 (1087.1)
\$190k	2741.0*** (845.2)	-461.2 (1150.1)	1090.6 (707.8)	1574.5 (1271.7)	1000.7 (715.2)	1722.7 (1263.5)
\$200k	2352.3*** (825.2)	-462.8 (1292.1)	2519.4*** (885.6)	-1131.3 (1454.3)	2416.6*** (871.6)	-953.0 (1444.7)
\$210k	2505.1*** (887.1)	1664.3 (1305.0)	561.4 (817.6)	1056.4 (1588.6)	787.6 (821.4)	933.4 (1595.0)
\$220k	3606.2*** (871.9)	3546.5** (1778.0)	1423.2 (949.3)	3350.2* (1746.8)	1349.8 (939.4)	3234.7* (1748.3)
\$230k	6026.9*** (1038.2)	6585.5*** (2018.2)	4567.1*** (1293.5)	3955.4* (2043.5)	4706.2*** (1295.4)	3733.9* (2056.9)
\$240k	6833.1*** (1481.2)	6546.9** (2583.3)	2289.5 (1624.5)	4451.7* (2422.8)	2486.0 (1639.9)	4692.1* (2445.3)
\$250k	4908.8*** (1519.3)	7792.7** (3059.8)	2984.5* (1628.7)	5140.3* (2877.0)	3180.4* (1659.8)	5005.4* (2900.7)
\$260k	11285.2*** (1926.6)	11029.2*** (3546.1)	6285.2*** (2010.7)	7600.7** (3118.5)	6459.2*** (2064.9)	7341.1** (3134.5)
\$270k	6980.6*** (2252.8)	7403.0** (3582.8)	6311.8*** (2145.5)	7826.8** (3239.8)	6498.9*** (2152.3)	7738.6** (3259.2)
\$280k	9466.5*** (2231.2)	10353.0** (4038.6)	7243.6*** (2337.0)	6706.3* (3657.0)	7525.2*** (2362.3)	6579.9* (3718.2)
\$290k	10645.8*** (3235.1)	-1046.8 (4818.0)	9856.1*** (3265.2)	1782.3 (4554.9)	9905.9*** (3281.3)	1089.7 (4588.4)
\$300k	7215.0* (4017.5)	3876.4 (4965.1)	9242.8** (3635.4)	3091.7 (5158.7)	8991.2** (3691.0)	3489.4 (5211.7)
5th-Order Poly	YES	YES	YES	YES	YES	YES
Time Controls	YES	YES	YES	YES	YES	YES
Zip Code Dummies	YES	YES	YES	YES	YES	YES
House Controls	YES	YES	YES	YES	YES	YES
Transaction Controls	YES	YES	YES	YES	YES	YES
Renovation Controls	YES	YES	YES	YES	YES	YES
Observations	48237	20179	48237	20179	48237	20179
R-squared	0.943	0.936	0.928	0.922	0.927	0.921

Note: Models are estimated using OLS with errors clustered by agency. The bolded lines present a joint significance test for whether all estimated discontinuities are jointly statistically different from zero. Time controls include dummies for year and month of the current sale as well as the logged number of days between sales. House, transaction, and renovation controls listed in appendix Table A2. Large and small firms are measured as being above or below the median of brokerage size, calculated using the number of agents employed at the brokerage in a given year. * p<0.1, ** p<0.05, *** p<0.01.

Table A4: Study 1 Discontinuity Results by Franchise Non-Franchise Brokerages

Dependent Variable:	(1) Non-Franchise List Price	(2) Franchise List Price	(3) Non-Franchise Sales Price	(4) Franchise Sales Price	(5) Non-Franchise Net Price	(6) Franchise Net Price
Avg. Discontinuity	3705.88	3727.24	3020.66	2670.73	3018.82	2720.09
F-stat	38.93	37.63	24.35	15.90	24.12	16.19
Prob > F	0.0000	0.0000	0.0000	0.0001	0.0000	0.0001
\$100k	-917.8 (1048.4)	2568.0* (1387.5)	-399.7 (910.5)	1472.9 (1277.9)	-282.4 (918.8)	1584.4 (1276.1)
\$110k	-1081.5 (713.6)	1185.0 (765.7)	-820.7 (695.5)	165.4 (700.9)	-811.5 (702.0)	152.8 (688.8)
\$120k	461.4 (570.0)	677.9 (605.8)	663.9 (565.1)	90.0 (672.0)	627.3 (559.2)	26.4 (673.7)
\$130k	1065.7* (579.3)	974.5* (510.2)	1484.1** (617.2)	621.5 (500.9)	1377.4** (614.8)	650.8 (495.3)
\$140k	944.5* (493.0)	921.7** (419.5)	1360.1*** (509.0)	830.1 (562.6)	1353.2*** (507.6)	789.2 (561.6)
\$150k	1568.7*** (516.1)	1665.4*** (479.0)	2105.0*** (573.7)	1684.5*** (539.7)	2064.0*** (590.7)	1843.8*** (503.2)
\$160k	1799.5*** (644.4)	1489.7*** (480.1)	2205.5*** (603.9)	831.9 (567.8)	2286.0*** (601.1)	765.1 (590.0)
\$170k	1160.7* (702.8)	1184.5* (654.7)	1147.5 (762.1)	825.4 (677.9)	1178.2 (765.5)	795.7 (694.1)
\$180k	1295.4* (753.8)	1482.0** (699.4)	946.6 (781.7)	1691.3* (905.9)	957.1 (787.1)	1646.4* (904.1)
\$190k	2019.3** (990.9)	1417.8 (946.1)	2180.4** (931.7)	296.6 (764.5)	2159.4** (934.4)	292.9 (763.7)
\$200k	639.7 (1035.4)	2282.6** (887.9)	-224.1 (1028.1)	2810.1*** (1045.1)	-59.1 (1018.6)	2590.6** (1024.9)
\$210k	2896.2*** (1092.4)	1430.2 (934.3)	1068.3 (1183.1)	179.9 (857.6)	1015.8 (1181.7)	482.1 (870.8)
\$220k	4074.6*** (1231.7)	3152.1*** (969.6)	2899.9** (1275.7)	960.7 (1124.8)	2933.0** (1267.7)	762.9 (1107.3)
\$230k	6809.0*** (1400.9)	5371.4*** (1215.0)	3271.6** (1491.6)	5104.5*** (1584.4)	3212.4** (1481.5)	5231.7*** (1605.3)
\$240k	6654.3*** (1818.2)	6464.1*** (1829.8)	2926.6* (1753.9)	2523.2 (2075.3)	3125.3* (1778.8)	2746.1 (2104.4)
\$250k	7718.9*** (2096.7)	3947.2** (1850.4)	4749.9** (1940.4)	2673.5 (2077.7)	4773.4** (1950.7)	2848.6 (2121.6)
\$260k	11617.7*** (2638.9)	10956.5*** (2093.6)	7877.6*** (2474.9)	5488.4** (2330.6)	7680.6*** (2495.0)	5753.5** (2398.0)
\$270k	8132.3*** (2562.5)	6098.4** (2823.2)	6878.7*** (2509.0)	6395.2** (2625.0)	6844.0*** (2522.2)	6652.5** (2641.6)
\$280k	12471.4*** (2559.1)	6870.0** (2796.6)	8044.9*** (2454.7)	6137.1** (3014.7)	8187.9*** (2488.1)	6372.8** (3033.7)
\$290k	2624.0 (4059.2)	11327.6*** (3712.0)	9229.5*** (3470.4)	5610.1 (4016.8)	8806.5** (3515.6)	5710.7 (4034.5)
\$300k	5869.5 (4714.8)	6805.4 (4268.2)	5838.2 (4377.2)	9693.0** (4109.2)	5966.9 (4447.9)	9422.8** (4136.7)
5th-Order Poly	YES	YES	YES	YES	YES	YES
Time Controls	YES	YES	YES	YES	YES	YES
Zip Code Dummies	YES	YES	YES	YES	YES	YES
House Controls	YES	YES	YES	YES	YES	YES
Transaction Controls	YES	YES	YES	YES	YES	YES
Renovation Controls	YES	YES	YES	YES	YES	YES
Observations	34531	33885	34531	33885	34531	33885
R-squared	0.938	0.944	0.922	0.930	0.921	0.929

Note: Models are estimated using OLS with errors clustered by agency. The bolded lines present a joint significance test for whether all estimated discontinuities are jointly statistically different from zero. Time controls include dummies for year and month of the current sale as well as the logged number of days between sales. House, transaction, and renovation controls listed in appendix Table A2. Franchise brokerages are brokerages that belong to national franchised chains (i.e., Keller Williams, RE/Max, Coldwell Banker, etc.). * p<0.1, ** p<0.05, *** p<0.01.

Table A5: Study 1 Main Discontinuity Results, 7th Order Polynomial

Dependent Variable:	(1) List Price	(2) List Price	(3) Sales Price	(4) Sales Price	(5) Net Price	(6) Net Price
Avg. Discontinuity	6296.26	3000.77	5291.53	2068.77	5307.29	2098.06
F-stat	72.10	80.79	52.95	32.31	53.50	33.00
Prob > F	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
\$100k	7069.0*** (1408.5)	608.2 (985.8)	5783.2*** (1445.9)	450.0 (845.1)	5889.0*** (1426.3)	560.7 (847.5)
\$110k	6445.3*** (1150.8)	438.4 (596.7)	4960.6*** (1053.6)	64.1 (530.2)	4909.1*** (1096.5)	67.9 (524.1)
\$120k	6350.8*** (960.8)	1021.0** (422.5)	5507.0*** (891.2)	781.3* (458.4)	5409.1*** (898.5)	739.8 (458.1)
\$130k	5171.4*** (872.6)	1308.7*** (361.7)	4837.8*** (876.4)	1250.6*** (390.0)	4869.3*** (884.6)	1207.6*** (385.7)
\$140k	3505.7*** (1053.5)	885.2*** (333.0)	3968.3*** (976.6)	931.0** (386.2)	3931.1*** (996.2)	904.4** (384.5)
\$150k	2201.0** (954.2)	1259.9*** (383.7)	2527.0*** (867.7)	1481.0*** (379.5)	2599.5*** (872.1)	1517.7*** (376.9)
\$160k	1860.2* (1037.4)	1165.1** (459.1)	2374.7** (1027.7)	1162.7** (482.1)	2346.7** (1013.4)	1161.5** (487.3)
\$170k	2705.3** (1357.0)	720.6 (469.2)	2165.6* (1205.5)	797.3 (495.4)	2139.7* (1212.3)	771.5 (501.9)
\$180k	2214.4 (1387.8)	1089.7** (514.5)	2067.9 (1352.3)	1374.0** (597.7)	2015.3 (1366.6)	1342.1** (596.6)
\$190k	2973.2* (1568.8)	1805.3** (723.4)	2781.7** (1329.9)	1639.4** (649.2)	2780.5** (1334.7)	1609.2** (651.3)
\$200k	3066.2* (1776.0)	1829.9** (823.1)	3494.5** (1748.6)	2011.4** (878.1)	3375.5* (1735.7)	1989.8** (864.1)
\$210k	6559.7*** (2168.4)	2946.9*** (859.2)	5104.1** (2048.7)	1501.4* (858.7)	5139.0** (2059.7)	1637.0* (864.9)
\$220k	9349.9*** (2349.7)	4634.3*** (948.2)	7903.0*** (2263.1)	2741.1*** (952.5)	7894.6*** (2276.1)	2679.5*** (946.4)
\$230k	8728.9*** (2485.3)	7064.8*** (969.2)	8553.8*** (2379.8)	4680.8*** (1073.9)	8585.9*** (2394.5)	4754.0*** (1076.0)
\$240k	12943.3*** (2492.0)	7363.8*** (1360.3)	8905.8*** (2875.1)	2680.8* (1488.9)	9052.2*** (2893.8)	2925.7* (1502.7)
\$250k	8223.7*** (3097.5)	5858.5*** (1529.9)	6041.7** (2870.6)	2777.2* (1538.3)	6177.9** (2897.8)	2895.0* (1561.7)
\$260k	16293.2*** (3700.3)	10657.1*** (1951.5)	11327.0*** (3406.1)	5323.1*** (1829.4)	11469.2*** (3465.8)	5387.2*** (1871.3)
\$270k	13442.2*** (3951.8)	5371.5** (2116.6)	11159.6*** (3744.7)	5001.2** (2129.4)	11176.7*** (3801.1)	5059.9** (2141.0)
\$280k	13118.1*** (4154.8)	6987.1*** (2549.8)	11658.6*** (4233.6)	6795.7*** (2531.7)	11693.0*** (4253.0)	6848.8*** (2543.9)
7th-Order Poly	YES	YES	YES	YES	YES	YES
Time Controls	YES	YES	YES	YES	YES	YES
Zip Code Dummies		YES		YES		YES
House Controls		YES		YES		YES
Transaction Controls		YES		YES		YES
Renovation Controls		YES		YES		YES
Observations	81305	67014	67668	67014	67641	67014
R-squared	0.693	0.939	0.698	0.923	0.701	0.922

Note: Models are estimated using OLS with errors clustered by agency. The bolded lines present a joint significance test for whether all estimated discontinuities are jointly statistically different from zero. Time controls include dummies for year and month of the current sale as well as the logged number of days between sales. House, transaction, and renovation controls listed in appendix Table A2. * p<0.1, ** p<0.05, *** p<0.01.

Table A6: Study 1 Performance Results

Dependent Variable:	(1) Days on Mkt	(2) Days on Mkt	(3) Days on Mkt	(4) Prob.(Fail)	(5) Prob.(Fail)
Avg. Discontinuity	1.6786	1.7753	1.5627	-0.0024	-0.0063
F-stat	2.56	2.97	2.36	0.16	1.87
Prob > F	0.1101	0.0851	0.1250	0.6890	0.1721
\$100k	-5.57** (2.42)	-4.24* (2.41)	-2.89 (2.52)	-0.017 (0.014)	-0.0062 (0.011)
\$110k	-2.33 (1.88)	-1.91 (1.84)	-2.24 (1.92)	-0.0093 (0.010)	-0.012 (0.0090)
\$120k	-0.23 (1.62)	0.98 (1.60)	0.23 (1.63)	-0.0075 (0.010)	-0.0092 (0.0081)
\$130k	-0.95 (1.65)	-0.35 (1.63)	-1.31 (1.63)	0.00039 (0.010)	-0.00042 (0.0080)
\$140k	0.40 (1.45)	0.56 (1.47)	1.20 (1.43)	-0.0036 (0.0089)	-0.0091 (0.0075)
\$150k	-0.23 (1.76)	-0.54 (1.76)	-0.11 (1.73)	0.0042 (0.010)	0.00019 (0.0080)
\$160k	1.18 (1.57)	1.47 (1.56)	2.21 (1.55)	0.019* (0.010)	0.014* (0.0083)
\$170k	1.63 (1.92)	1.36 (1.89)	2.04 (1.74)	-0.0051 (0.012)	-0.0042 (0.0087)
\$180k	0.59 (2.00)	0.90 (2.00)	2.46 (2.05)	0.020 (0.012)	0.014 (0.010)
\$190k	4.16** (2.04)	4.63** (2.03)	6.11*** (2.00)	0.012 (0.013)	0.011 (0.010)
\$200k	3.15 (2.41)	2.85 (2.40)	3.71 (2.44)	-0.011 (0.016)	-0.012 (0.013)
\$210k	1.78 (2.50)	2.60 (2.49)	4.15 (2.52)	-0.015 (0.015)	-0.0038 (0.012)
\$220k	3.56 (2.70)	3.76 (2.71)	3.63 (2.74)	-0.011 (0.015)	-0.019* (0.011)
\$230k	4.56 (2.93)	4.30 (2.91)	4.33 (3.04)	0.0065 (0.018)	0.0030 (0.014)
\$240k	7.11** (2.97)	7.84*** (2.92)	5.92** (2.81)	-0.035** (0.018)	-0.034** (0.014)
\$250k	13.5*** (3.59)	12.9*** (3.52)	11.8*** (3.75)	-0.027 (0.021)	-0.032** (0.016)
\$260k	5.82 (3.82)	4.51 (3.88)	0.89 (4.39)	-0.032 (0.024)	-0.037** (0.017)
\$270k	7.58* (4.25)	6.51 (4.13)	3.27 (4.19)	0.024 (0.024)	-0.00096 (0.019)
\$280k	0.33 (4.38)	-0.35 (4.37)	-2.59 (4.61)	-0.023 (0.025)	-0.028 (0.020)
\$290k	-0.31 (4.46)	-0.047 (4.34)	0.0049 (4.13)	0.062* (0.032)	0.037 (0.023)
\$300k	-10.5* (6.16)	-10.4* (6.04)	-9.99* (6.00)	-0.00096 (0.037)	-0.0054 (0.026)
5th-Order Poly	YES	YES	YES	YES	YES
Time Controls	YES	YES	YES	YES	YES
Zip Code Dummies		YES	YES		YES
House Controls		YES	YES		YES
Transaction Controls		YES	YES		YES
Renovation Controls			YES		
Observations	83122	83079	68382	83164	83121
R-squared	0.092	0.118	0.113	0.094	0.366

Note: Models are estimated using OLS with errors clustered by agency. The bolded lines present a joint significance test for whether all estimated discontinuities are jointly statistically different from zero. Time controls include dummies for year and month of the current sale as well as the logged number of days between sales. House, transaction, and renovation controls listed in appendix Table A2. Days on market is the difference between original listing and close date. Failure is defined as a home being listed but not selling within the original listing contract timeline. * p<0.1, ** p<0.05, *** p<0.01.

Table A7: Study 2 Pre-Test Correlations and Means in Pretest

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>
1. Est. Listing Price	1.00					
2. Age	0.00	1.00				
3. Female	0.00	0.10 **	1.00			
4. Purchased Real Estate	0.01	0.32 **	0.07 *	1.00		
6. Estimated Quality	0.33 **	-0.03	-0.16 **	-0.01	-0.07	
7. Estimated Location	0.24 **	0.06 *	-0.13 **	0.02	0.06 **	1.00
Mean	282,089	34.9	0.41	1.57	75	70
Median	205,000	31.0	0.00	2.00	80	75

** Correlation is significant at the 0.01 level (2-tailed).

Note: N= 1,422 Person-House Estimates. Purchased Real Estate denoted by a dummy variable.

Table A8: Study 2 Pretest Estimated List Price by Condition and House

Previous Sale Price Position Relative to Round Number	House 1				House 2			
	Previous	Estimated Listing Price			Previous	Estimated Listing Price		
	Sale Price	<i>M</i>	<i>SD</i>	<i>N</i>	Price	<i>M</i>	<i>SD</i>	<i>N</i>
Slightly Above	151,000	184,564	95,912	98	201,300	222,474	60,938	95
Slightly Below	149,000	166,849	70,238	97	198,700	204,597	28,549	89
Well Below	147,000	168,088	71,419	90	196,100	206,821	47,700	96
Total		173,332	80,465	285		211,425	48,442	280

Previous Sale Price Position Relative to Round Number	House 3				House 4			
	Previous	Estimated Listing Price			Previous	Estimated Listing Price		
	Price	<i>M</i>	<i>SD</i>	<i>N</i>	Sale Price	<i>M</i>	<i>SD</i>	<i>N</i>
Slightly Above	301,500	318,914	55,921	95	291,000	173,686	63,764	96
Slightly Below	298,500	311,101	48,784	97	289,000	177,603	73,340	93
Well Below	295,500	311,033	41,860	90	287,000	173,582	64,093	94
Total		313,711	49,274	282		174,939	66,953	283

Previous Sale Price Position Relative to Round Number	House 5			
	Previous	Estimated Listing Price		
	Price	<i>M</i>	<i>SD</i>	<i>N</i>
Slightly Above	601,600	542,579	66,426	95
Slightly Below	598,400	541,282	61,956	91
Well Below	595,200	535,858	66,959	94
Total		539,901	65,023	280

Note: Table displays 289 participants' estimated listing prices for each of the three conditions for each of the five houses in the pretest. Just above represents previous sale prices that are up to \$1,600 above the round number, just below represents previous sale prices that are as low as \$1,600 below the round number, and well below represents previous sale prices that are more than \$1,600 below the round number.

Table A9: Study 2 Pretest Linear Cross-Nested Mixed Models

Dependent Variable:	All Participants (1) Z-Score of Estimated Price	All Participants (2) Estimated Price
	Coefficient Estimate	Coefficient Estimate
<i>Intercept</i>	-0.0826 (0.0543)	283364.7*** (62,246.0)
<i>Just Above (a)</i>	0.00583* (0.0264)	6,527.6* (3,024.6)
<i>Just Below (b)</i>	-0.0039 (0.0267)	-332.3 (3,065.2)
Discontinuity Test		
<i>Wald (a-b>b-0)</i>	X ² = 2.03 (p=0.154)	X ² = 1.83 (p=0.176)
Log Likelihood	-905.5	-17,354
Likelihood Ratio Test (vs. OLS)	X ² = 1517.4 (p=0.000)	X ² = 2,936.4 (p=0.000)
# Participants	289	289
# Houses	5	5
Observations	1,410	1,410

Note: This table presents mixed model (HLM) results from the pilot study, with five houses cross-nested with 289 participants. *Just above* represents previous sale prices that are up to \$1,600 above the round number, *just below* represents previous sale prices that are as low as \$1,600 below the round number, and *well below* represents previous sale prices that are more than \$1,600 below the round number. The omitted category is well below. The formal tests of the discontinuity are Wald tests, which are consistent with a large discontinuity but under-powered.