



Greening the MLS

An Examination of High Performance Housing
Transactions in the Washington, D.C. Real Estate Market

RealEstate Business Intelligence, LLC
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Overview

RealEstate Business Intelligence (RBI) performed an analysis of 2013 residential sales transactions in the District of Columbia real estate market. Specifically, RBI compared the effects of high performance housing (HPH) features to “conventional” homes on key market metrics. The key market metrics analyzed included sale price, time on market, price per square foot, and seller net (or seller proceeds). Broadly, the team found that HPH sales were 18 percent of total sales in 2013, and that these homes’ sale price was 23 percent more on average. A further breakdown is provided in the 15 accompanying figures and the appendices.

Background

As part of the research for this analysis, studies compiled in other real estate markets were identified. These revealed a potential for sales price premium or reduced market time to sell residential properties that included features which improved energy efficiency by increasing performance - hence the term “high performance housing (HPH).” These features are either built-in with new construction or retrofitted by homeowners during renovation and remodeling projects.

As the central hub for real estate market transactions, multiple listing services (MLSs) play an important role in conveying “green” or HPH characteristics of individual properties to potential buyers in the marketplace. Well-advised consumers can then make more informed decisions about which properties meet their needs. A February 2013 article on the National Association of Realtors website stated:

MLS listings are emphasizing the eco-friendliness of homes.

When potential buyers are considering a home or condominium, more and more of them are no longer just looking to see how many bedrooms and bathrooms it has or if the kitchen is equipped with stainless steel appliances and granite countertops.

Some also want to know if the refrigerator has an Energy Star designation, if the toilets are low-flow, or how energy efficient the windows are.

Features that make homes use less energy are becoming more important selling factors, REALTORS® say. And they are studying ways to help their clients go green by taking specialized classes and by highlighting environmentally friendly features via the Multiple Listing Service (MLS).¹

This RBI study set out to establish a usage baseline of HPH features by real estate professionals in the District of Columbia. Data was examined from the period January 1, 2008 through December 31, 2013 to capture and review any fluctuations in use over time and to determine the impact of other trends affecting market activity (such as interest rate changes or regulation). While this longer-term information is used in this report to create context, the conclusions in this analysis are based on activity during the *last complete seasonal real estate cycle* (calendar year) of real estate transactions, January through December 2013.

District of Columbia Real Estate Market Review

To understand the current real estate market in the District, we must quickly review its recent history and consider the market drivers that have made the region one of the most desirable real estate markets in the country. The pre-recession housing bubble that affected real estate markets across the nation also affected the District.

Figure 1 shows the dramatic increase in inventory (Active Listings) in Q4 2005 as many sellers listed properties for sale to take advantage of increases in sale prices. Interestingly, the rate of sales remained at a relatively constant rate of 300 per quarter over the last 10 years.

Figure 1

¹ “Selling Green,” by Judy Newman. Printed Feb. 8, 2013 at www.realtor.org/articles/selling-green. Accessed online September 2014.

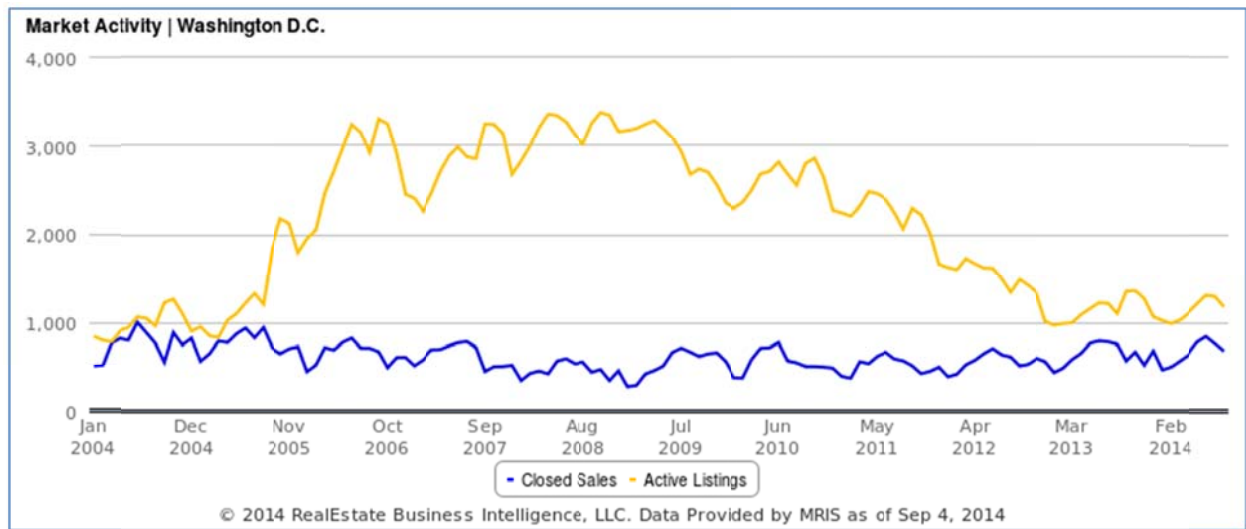
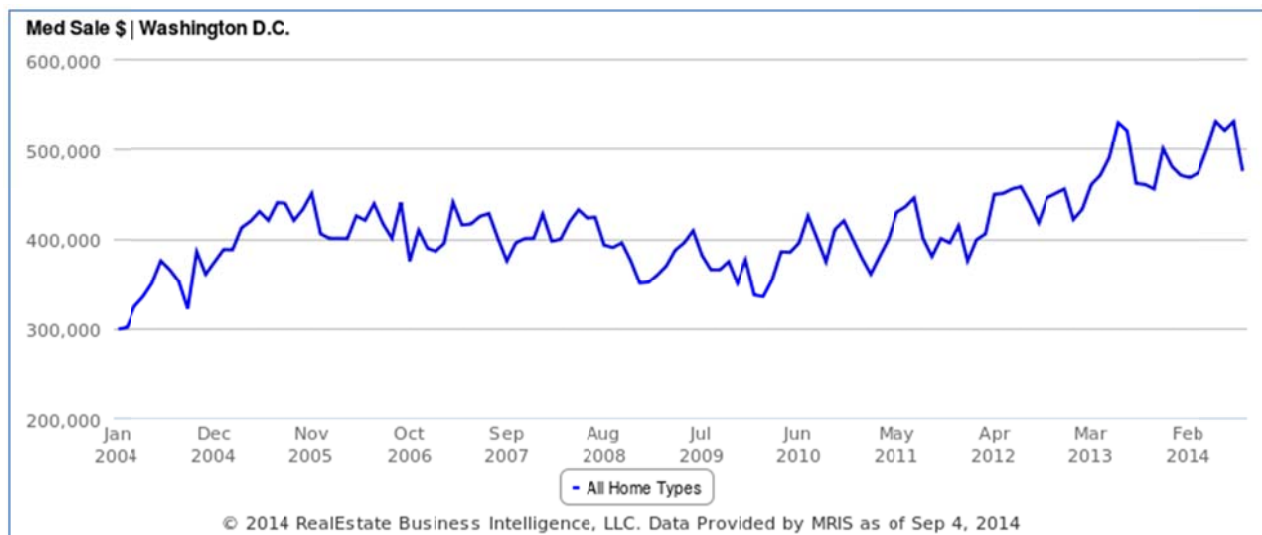


Figure 2 shows steady gains in sale price through 2004 and 2005 ahead of the large inventory bubble. While a larger emphasis was placed on home ownership, it was ironic that as home prices increased, fewer qualified buyers could afford to purchase and affordability actually decreased. To resolve that dilemma, the mortgage industry, with regulators' approval, relaxed lending restrictions and credit guidelines and set the stage for what would later become the Great Recession.

Figure 2



The aftermath of the recession dealt serious blows and long-term consequences to many metropolitan markets, but the District was not one of them. Figure 3 shows the relatively short-lived duration of significant foreclosure and short sale activity in the District. After two years, from 2009 to 2011, the percentage of bank mediated sales accounted for only 10.6 percent market share. This was down from the Q4 2009 high level of 18.9 percent of all sales. In Q2 2014, foreclosures (bank-owned properties) accounted for 0.7 percent of all sales and short sales had a 2.3 percent share of all sales.

Figure 3

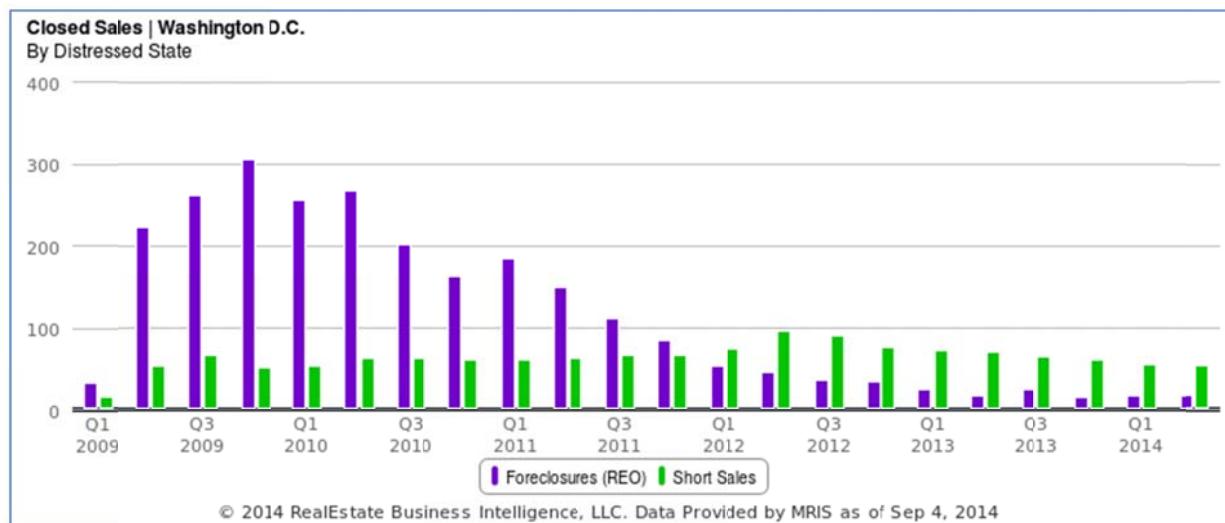
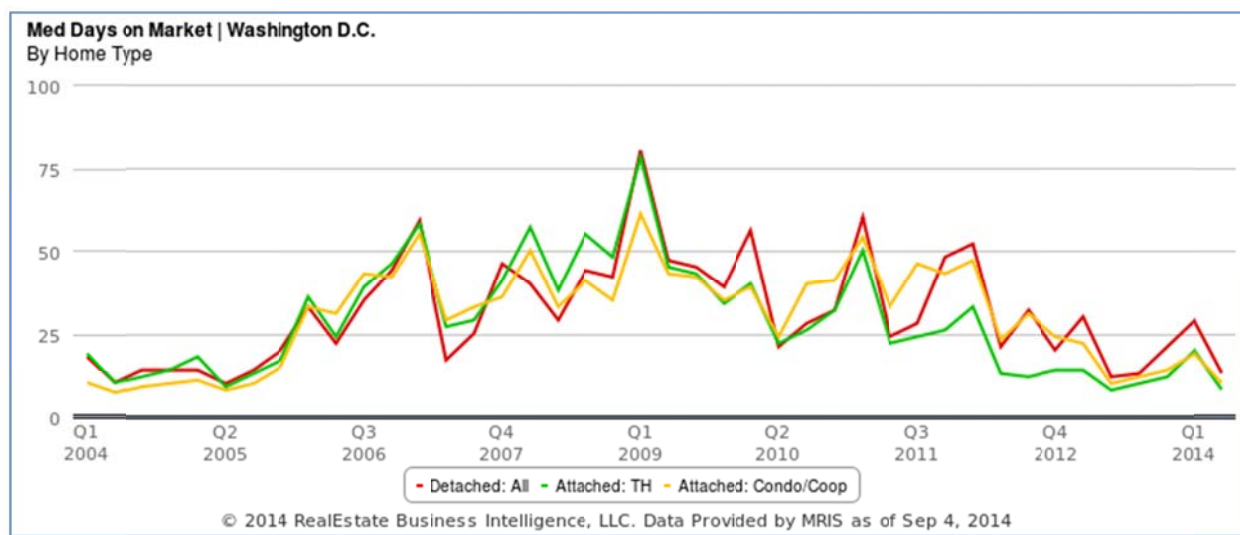


Figure 4 demonstrates the impact of excess inventory on the market from 2006 to 2010 with increased median days on market, the number of days it takes for a property to secure a ratified contract after it comes on the market. This chart also shows a breakdown of inventory by residential single-family home types. These are detached, townhouse or row house, and condo/coop (apartment style) homes. All three home types performed similarly during this timeframe since all had more supply than demand.

Figure 4



The District's Real Estate Market Today

Being the urban core of a large metropolitan region with limited land space, the majority of the District's residential dwellings are apartment style, condos, and coops (32.4 percent) or townhouses (47.4 percent). The smallest housing type segment is detached properties (20.2 percent). Figure 5 shows the quarterly number of MLS sales for each home between Q1 2009 and Q2 2014.

Figure 5

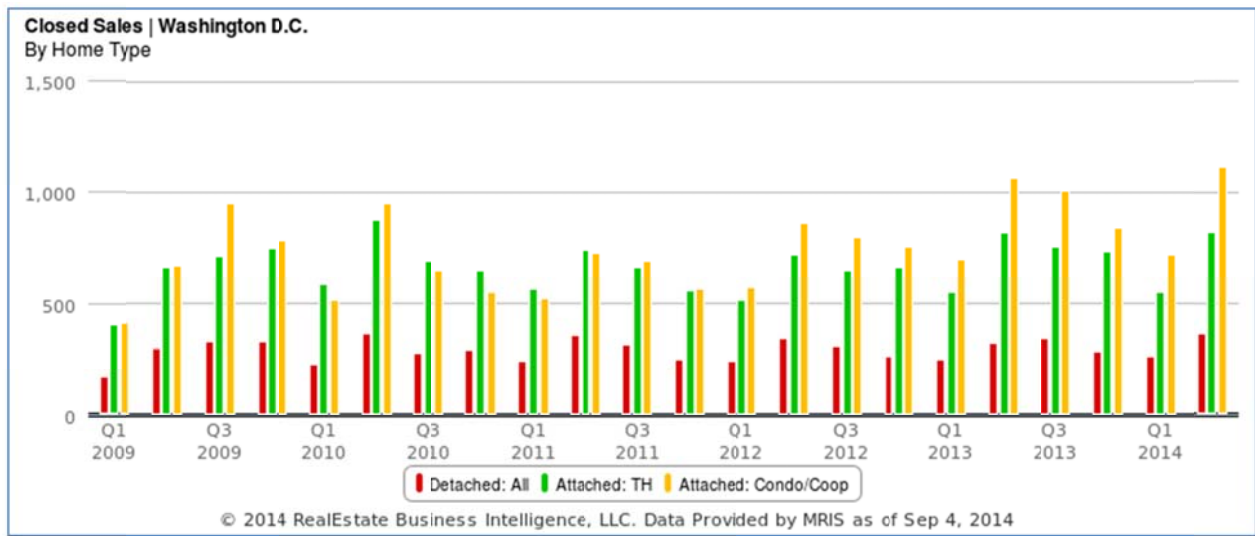


Figure 6 shows a relatively constant median sale price of the condo/coop segment over the past two years near \$400,000. However, the effect of very low inventory has been the main driver behind increasing sale prices. For the past three years, townhouses have steadily increased in sale price by 14.6 percent. The small, single-family detached segment commands the highest price points, typical of most markets with this housing type mix. Detached sales have averaged 300 per quarter for the past decade, and median prices have averaged just under \$600,000 in the same period. However, four out of the five most recent quarters have seen detached homes median sale prices average \$765,000.

Figure 6

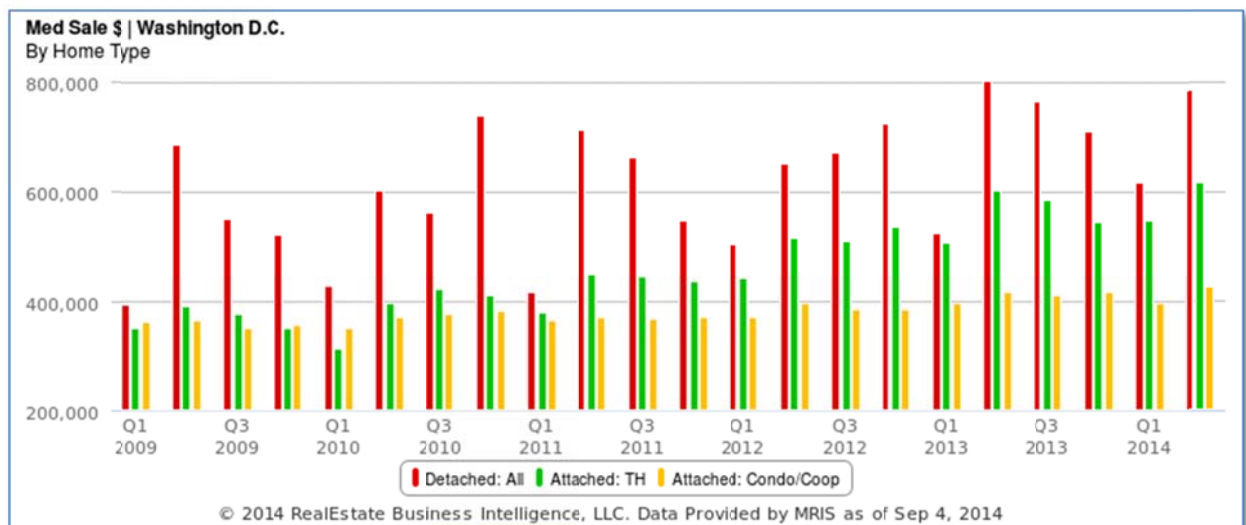
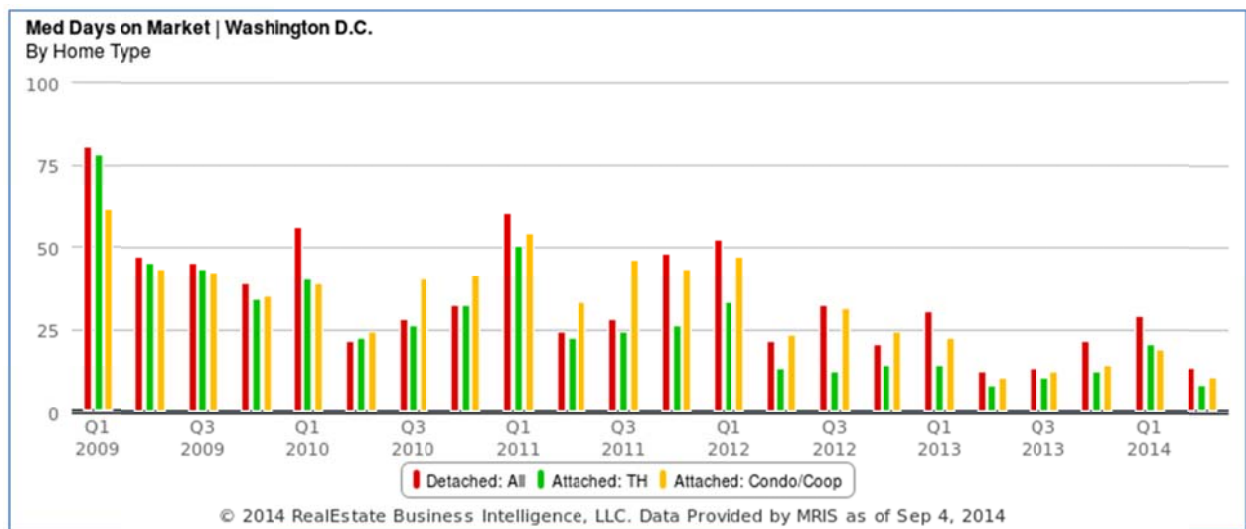


Figure 7 shows the current market's extremely high levels of buyer demand for available properties relative to the previous five years. Multiple contract offers and single digit days on market are no longer unusual occurrences.

Figure 7



Impact of Green and HPH on Property Transactions

RBI's review of sold transactions identified three groups of green or eco-friendly property attributes used by the MRIS MLS system. The four categories were:

- 1) Third Party Verified. These are features that could be certified by an entity such as the U.S. Green Building Council or the National Association of Home Builders.
- 2) Energy Efficient. These features are usually installed within the premises (such as Energy Star heating/cooling or appliances, or a tankless water heater).
- 3) Transportation. These features identify proximity to bus, rail, subway, shopping, or grocery.

An additional group, Environment Quality features, identified recycled materials installed by the seller such as Silestone countertops and fiber cement siding, or recycling measures in place such as rainwater harvesting. Since there were relatively few transactions that had these features, they were excluded from this study. To isolate the effect of the transportation features, we compared HPHs to non-HPHs for only those listings where one or more of the Location Efficiency options was selected. These 1,408 sales represent 17.7 percent of the 7,954 sales in the District for 2013. Due to reduced sample size, analysis at the zip code level may prove to be more informative in future studies.

	# Solds	% Total Solds	Median SP	Median DOM	Median SP/SqFt	Avg SP/OLP
3rd Party Verified	27	0.3%	\$655,000	23	\$552	101.7%
Non-3rd Party Verified	7927	99.7%	\$475,000	13	\$452	98.8%
% Difference			37.9%	76.9%	22.0%	2.9%

Total 2013 MLS Sales 7954

	# Solds	% Total Solds	Median SP	Median DOM	SP/SqFt	Avg SP/OLP
Energy Efficient Features	658	8.3%	\$566,000	14	\$504	98.9%
Non- Energy Efficient Features	7296	91.7%	\$465,000	13	\$448	98.8%
% Difference			21.7%	7.7%	12.5%	0.1%

Total 2013 MLS Sales 7954

	# Solds	% Total Solds	Median SP	Median DOM	SP/SqFt	Avg SP/OLP
HPH	352	25.0%	\$606,500	13	\$492	99.1%
Non-HPH	1056	75.0%	\$484,000	11	\$474	99.2%
% Difference			25.3%	18.2%	3.8%	-0.1%

Transpo Sales Only 1408

Figure 8

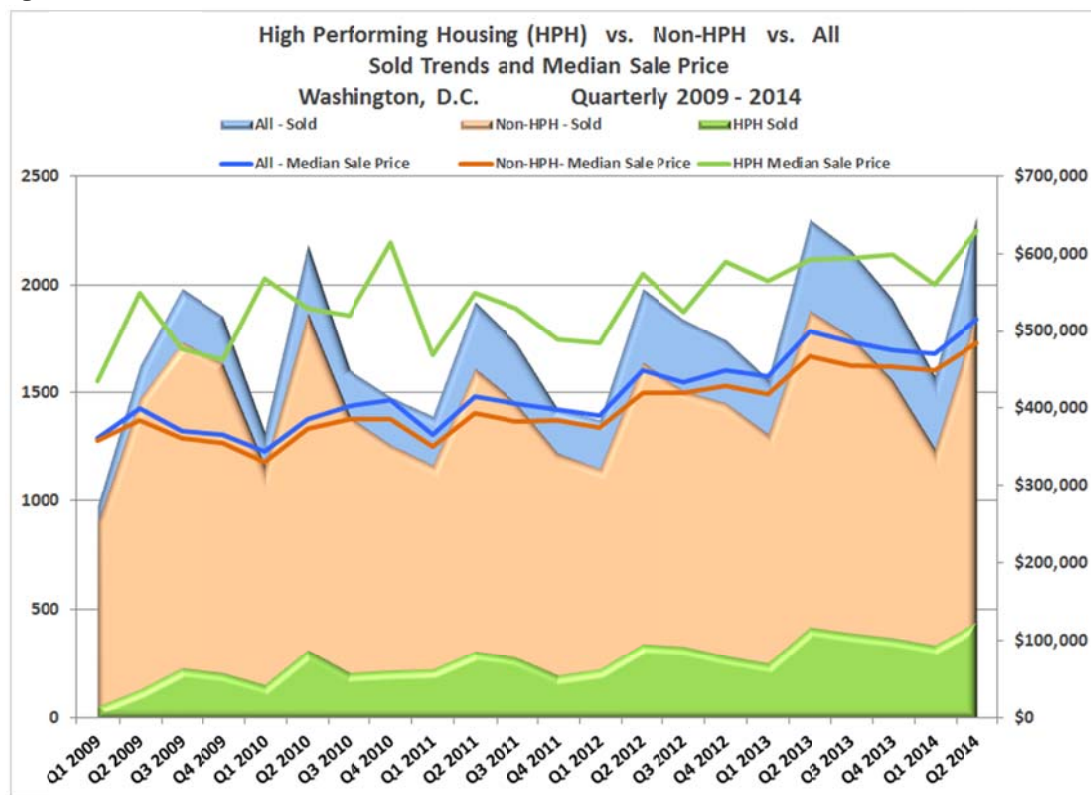


Figure 9 shows the percentage of HPH sales within each of the 21 zip codes where residential sales occurred during 2013. All of these areas presented some degree of high-performance housing at the time of sale. Overall, HPH sales accounted for 18 percent of the total residential sales in the District in 2013. The market share, or percentage of HPH sales, range from a minimum of 3.5 percent in zip code 20032 (Congress Heights) to a maximum of 29.1 percent in zip code 20015 (Friendship/Chevy Chase).

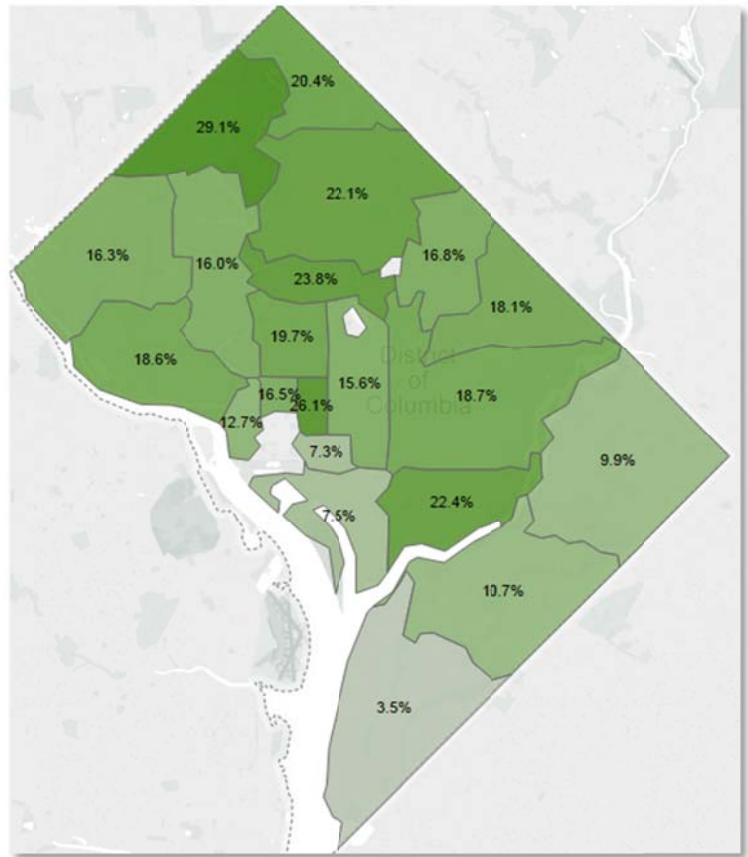


Figure 9. HPH Percent of market share by zip–2013 Sales

Figure 10. HPH 2013 sales distribution by zip code.

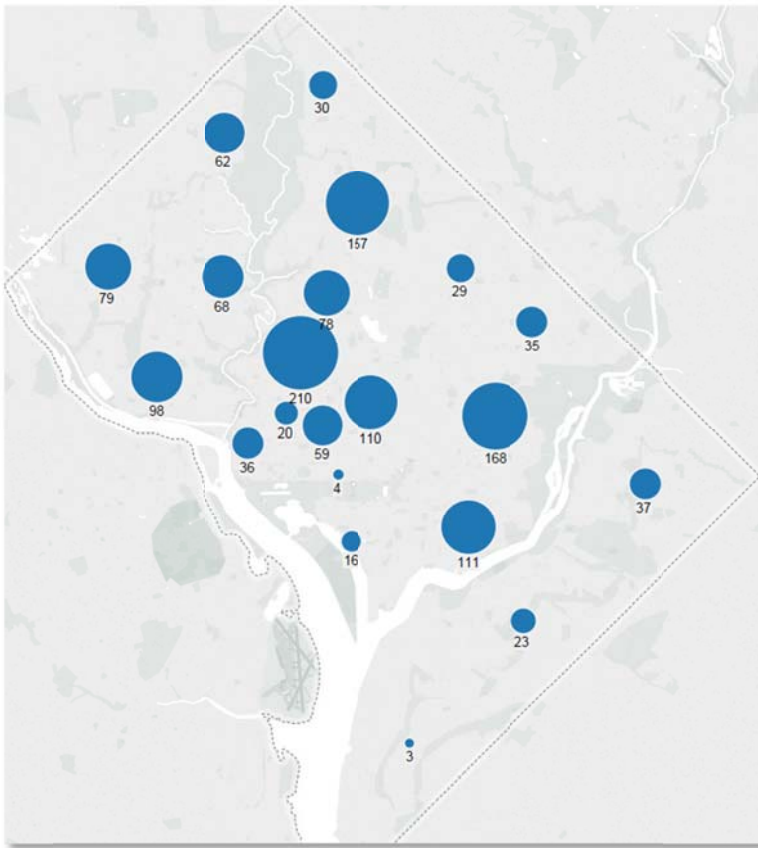


Figure 10 shows the number of residential sales in each zip code presenting high-performance attributes at the time of sale in the District in 2013. Out of the total of 7,954 residential sales in 2013, there were 1,433 HPH sales. The smallest number of HPH sales were three sales in zip code 20032 (Congress Heights) and the highest was 210 in zip code 20009 (Dupont/Adams Morgan).

Figure 11. HPH median sale price by zip code, 2013 sales

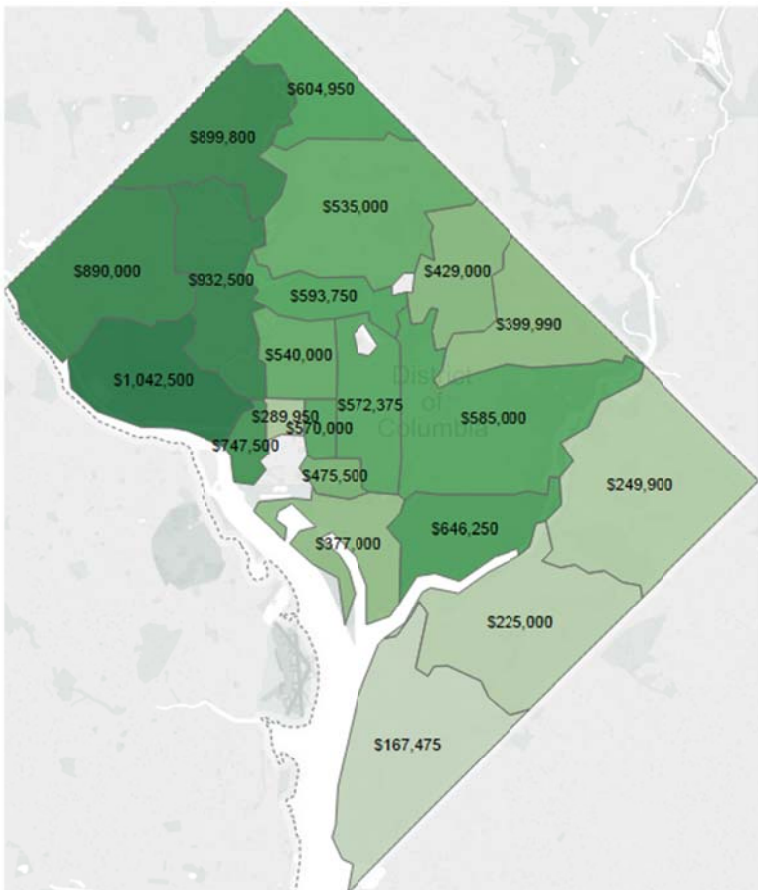


Figure 11 shows the median sale price associated with each zip code. These values range from a minimum of \$167,475 in zip code 20032 (Congress Heights) to a maximum of \$1,042,500 in zip code 20007 (Georgetown/Burleith).

Overall, the median sale price for HPH residential properties was \$585,000 in 2013. The median sale price for all residential property sales in 2013 was \$475,500. This represented a 9.3 percent increase from the previous year.

Figure 12. Median sale price percentage difference, HPH vs Non-HPH

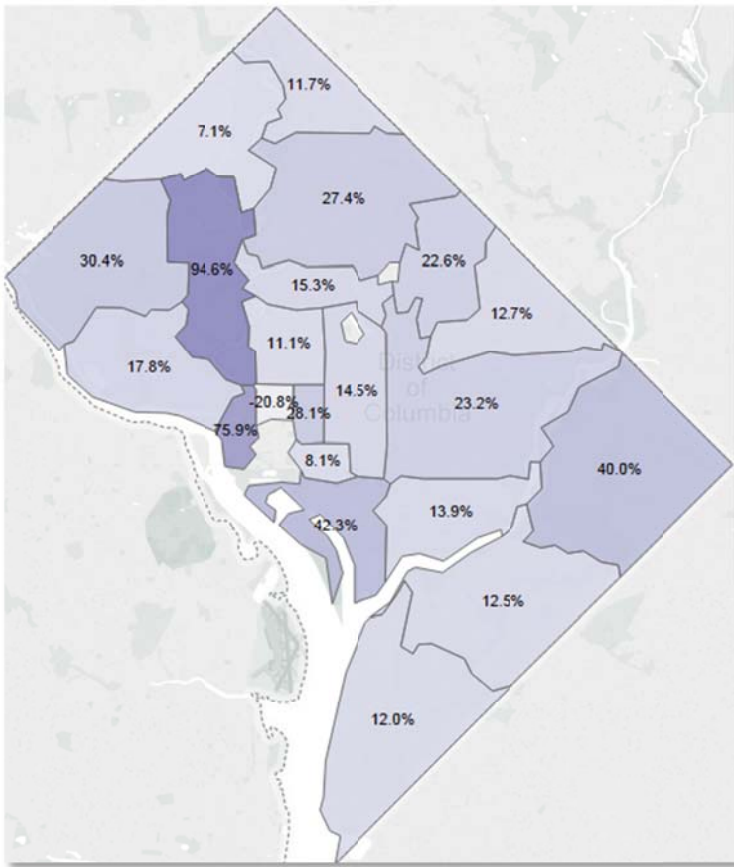
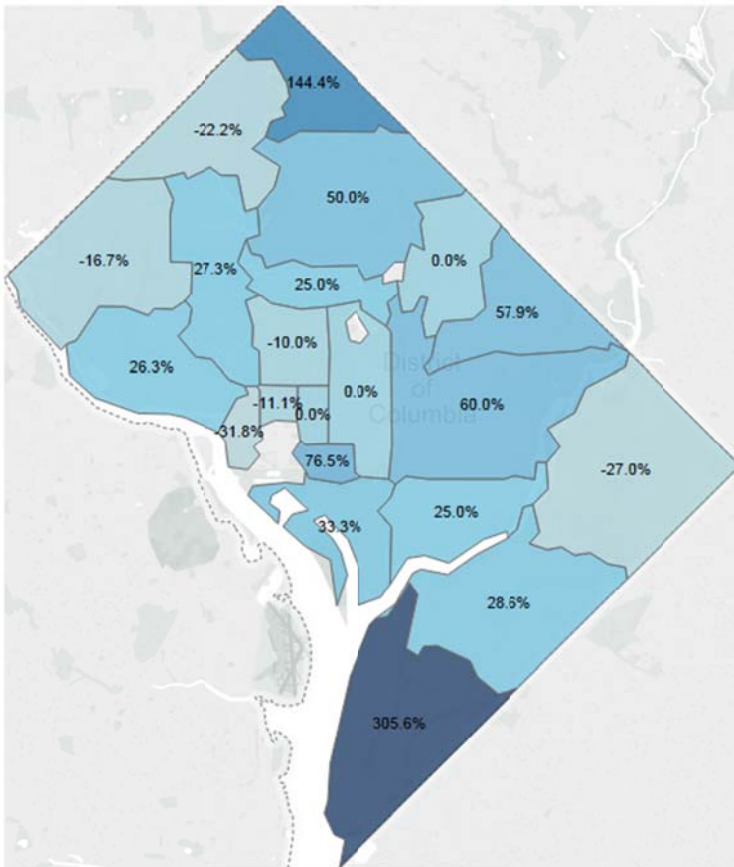


Figure 12 shows the percentage difference in median sale price between residential properties presenting high performance housing (HPH) attributes and residential properties that did not include these attributes (non-HPH) at the time of sale. Twenty of the twenty-one zip codes examined in this report demonstrated a positive variance where HPH median sale price exceeded non-HPH median sale price. Zip code 20036 (Downtown) presented the single negative variance—that is, the non-HPH median sale price exceeded the HPH median sale price for sales in this zip code.

The HPH median sale price premium in zip code (20008 Woodley/Cleveland Park) was nearly double that of non-HPH (\$932,500 vs \$479,250). Overall, median sale price for HPH residential properties demonstrated a 30 percent premium over their non-HPH counterparts.

Figure 13. Median days on market percentage difference, HPH vs Non-HPH



The Days on Market (DOM) measures the number of days from when a property is entered in the MLS until a ratified purchase contract is negotiated between buyer and seller. With DOM, lower values (fewer days on the market) are considered favorable to the seller. Higher values are considered favorable to the buyer. Lower DOM indicates high demand, fewer seller concessions, and seller strength in negotiations. Higher DOM indicates excess inventory, more buyer options, and greater negotiating strength for the buyer.

Figure 13 shows the percentage difference between HPH and non-HPH median DOM. The high percentage difference in zip code 20032 (305.6 percent) can be attributed to low sample size of HPH sales (3 out of 85). In nine zip codes, HPH sales had fewer or the same DOM as non-HPH sales. In 12 zip codes, HPHs had greater DOM than non-HPHs. properties.

Figure 14. Average sale price per square foot percentage difference, HPH vs Non-HPH

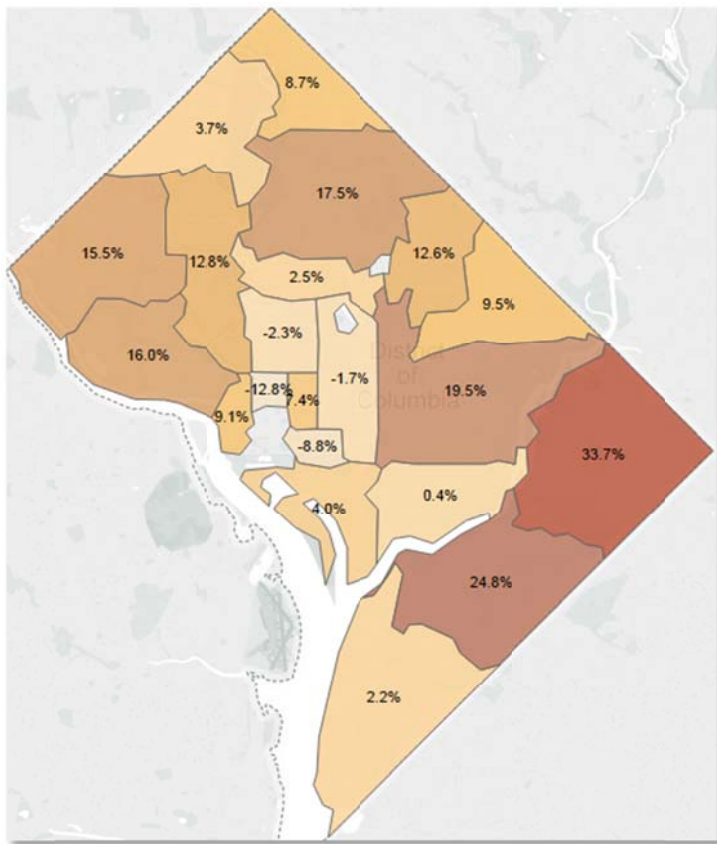


Figure 14 shows the percentage difference in average sale price per square foot between HPHs and non-HPHs.

Sales in zip code 20019 (Benning Heights/Deanwood) had an HPH price per square foot of \$218. The non-HPH price per square foot was \$163. While HPH properties comprise only 9.9 percent market share in this zip code, the HPH price per square foot outperformed the non-HPH price per square foot by 33.7 percent. At \$249,900, this zip code has one of the most affordable median sale prices in the District. Sellers in this zip code have been successful in capturing a premium for their properties' HPH attributes.

Figure 15. HPH months supply of inventory (MSI)

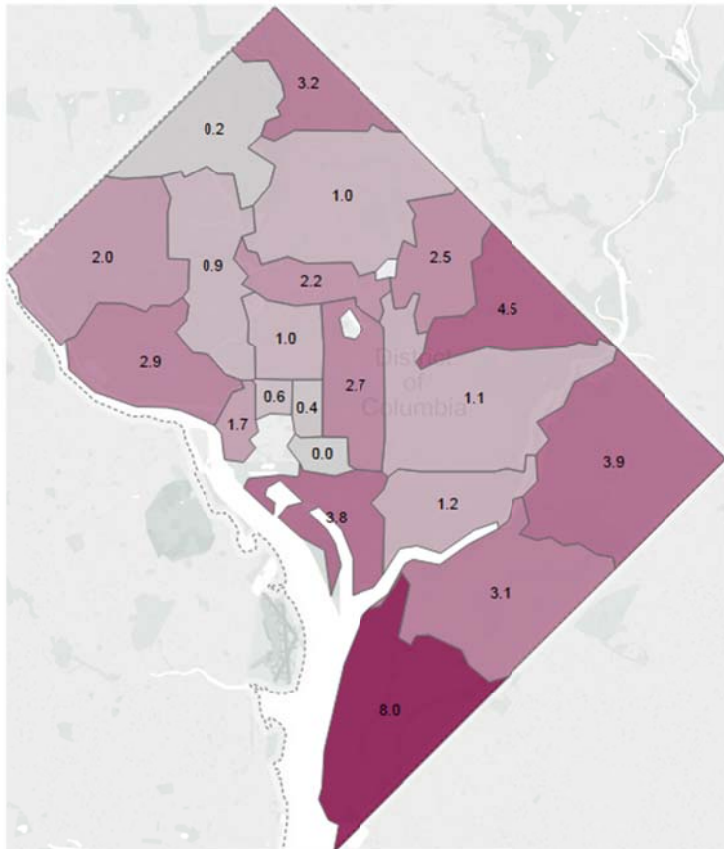


Figure 15 shows the Months' Supply of Inventory (MSI) for HPH by zip code. MSI is the number of months it takes for inventory to sell, given the sales rate in the market. The calculation takes into account seasonal fluctuations by applying the average sales rate of the prior 12 months. Four to six months of supply is considered a balanced market. Less than four months is considered a sellers' market as there are more buyers than homes available; more than six months is considered a buyers' market as there are more homes for sale than buyers to purchase them. Nineteen of the 21 zip codes have MSI less than four months. Overall, the MSI for HPH in the District was 1.7 months. The MSI for all sales in 2013 was virtually identical and demonstrates the severe shortage of available inventory relative to continued buyer demand. The extreme seller's market continues to put upward pressure on pricing, on both HPH and non-HPH properties.

Appendix

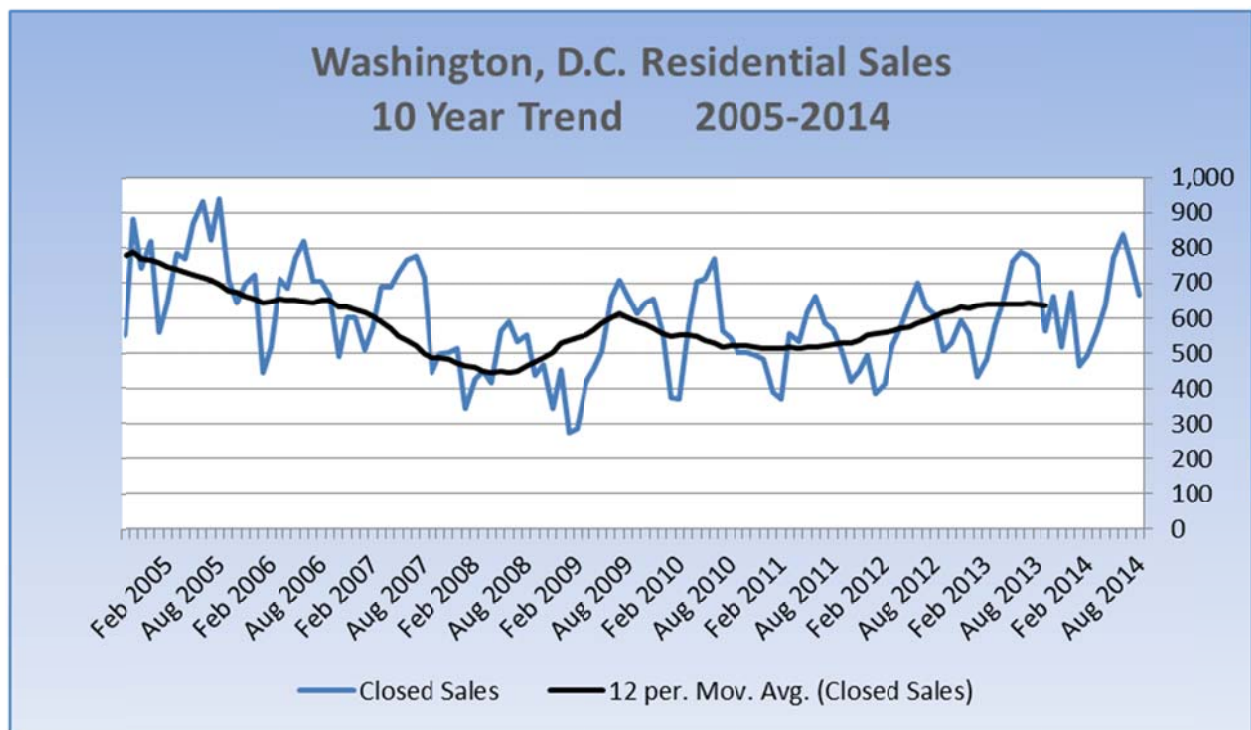


Figure 16

Zip code, Location	Median Sale Price - August			Median Sale Price - Year to Date		
	2014	2013	% Change	2014	2013	% Change
20001, Howard U/Shaw, DC	\$520,000	\$455,000	14.3%	\$550,000	\$515,000	6.8%
20002, Capitol Hill/North, DC	\$525,000	\$500,000	5.0%	\$512,850	\$499,000	2.8%
20003, Capitol Hill/South, DC	\$602,000	\$555,750	8.3%	\$602,750	\$599,000	0.6%
20004, Central, Washington, DC	\$425,500	\$437,000	-2.6%	\$451,000	\$449,000	0.5%
20005, Logan Cir/Thomas Circle, DC	\$465,000	\$485,000	-4.1%	\$536,000	\$459,250	16.7%
20006, Washington, DC	\$326,000	\$350,000	-6.9%	\$258,500	\$235,000	10.0%
20007, Georgetown/Burleith, DC	\$838,000	\$1,050,000	-20.2%	\$927,000	\$902,450	2.7%
20008, Woodley/Cleveland Pk, DC	\$392,500	\$440,000	-10.8%	\$448,750	\$530,000	-15.3%
20009, Dupont/Adams Morgan, DC	\$499,450	\$497,250	0.4%	\$517,000	\$489,900	5.5%
20010, Columbia Hts/Mt Plt, DC	\$500,000	\$532,000	-6.0%	\$545,000	\$540,000	0.9%
20011, 16th St Hts/Crstwd, DC	\$524,995	\$417,000	25.9%	\$499,000	\$440,000	13.4%
20012, Colonial Vlg/Takoma, DC	\$648,152	\$291,750	122.2%	\$575,000	\$545,500	5.4%
20015, Friendship/Chevy Chs, DC	\$849,325	\$850,000	-0.1%	\$950,000	\$866,000	9.7%
20016, Cathedral Hts/AU Pk, DC	\$487,500	\$696,000	-30.0%	\$807,500	\$736,000	9.7%
20017, Brookland/CatholicU, DC	\$350,000	\$450,500	-22.3%	\$397,500	\$385,000	3.3%
20018, Brentwood/Lincoln, DC	\$353,000	\$397,500	-11.2%	\$399,900	\$356,000	12.3%
20019, Benning Hts/Deanwd, DC	\$230,000	\$177,500	29.6%	\$204,000	\$180,000	13.3%
20020, Anacostia/Hillcrest, DC	\$247,450	\$200,500	23.4%	\$235,000	\$194,000	21.1%
20024, SW Waterfront, DC	\$258,970	\$278,000	-6.9%	\$288,000	\$259,897	10.8%
20032, Congress Heights, DC	\$198,000	\$164,000	20.7%	\$153,500	\$147,900	3.8%
20036, Downtown, DC	\$387,500	\$366,000	5.9%	\$355,000	\$350,000	1.4%
20037, West End/Foggy Btm, DC	\$435,000	\$427,000	1.9%	\$500,000	\$445,000	12.4%
District of Columbia (All zips)	\$475,000	\$461,000	3.0%	\$499,700	\$479,000	4.3%

Figure 17

Zip code, Location	# Sales - August			# Sales - Year to Date		
	2014	2013	% Change	2014	2013	% Change
20001, Howard U/Shaw, DC	61	71	-14.1%	531	476	11.6%
20002, Capitol Hill/North, DC	75	67	11.9%	596	571	4.4%
20003, Capitol Hill/South, DC	39	42	-7.1%	310	335	-7.5%
20004, Central, Washington, DC	6	8	-25.0%	41	39	5.1%
20005, Logan Cir/Thomas Circle, DC	21	29	-27.6%	127	150	-15.3%
20006, Washington, DC	1	1	0.0%	4	8	-50.0%
20007, Georgetown/Burleith, DC	47	42	11.9%	349	358	-2.5%
20008, Woodley/Cleveland Pk, DC	38	39	-2.6%	248	275	-9.8%
20009, Dupont/Adams Morgan, DC	72	110	-34.6%	625	737	-15.2%
20010, Columbia Hts/Mt Plt, DC	35	31	12.9%	309	193	60.1%
20011, 16th St Hts/Crstwd, DC	50	56	-10.7%	479	449	6.7%
20012, Colonial Vlg/Takoma, DC	14	10	40.0%	101	100	1.0%
20015, Friendship/Chevy Chs, DC	15	28	-46.4%	135	137	-1.5%
20016, Cathedral Hts/AU Pk, DC	48	43	11.6%	349	334	4.5%
20017, Brookland/CatholicU, DC	17	22	-22.7%	119	109	9.2%
20018, Brentwood/Lincoln, DC	21	10	110.0%	127	109	16.5%
20019, Benning Hts/Deanwd, DC	32	32	0.0%	220	240	-8.3%
20020, Anacostia/Hillcrest, DC	16	14	14.3%	172	134	28.4%
20024, SW Waterfront, DC	19	28	-32.1%	162	142	14.1%
20032, Congress Heights, DC	8	12	-33.3%	78	53	47.2%
20036, Downtown, DC	12	17	-29.4%	112	77	45.5%
20037, West End/Foggy Btm, DC	19	40	-52.5%	143	199	-28.1%
District of Columbia (All zips)	666	752	-11.4%	5,340	5,225	2.2%

Figure 18

2013 Washington, D.C. Solds by ZIP: HPH vs Non-HPH

Zip	HPH					Non-HPH					HPH % Total Solds	HPH vs Non-HPH % Difference			
	Median SP	Median DOM	# Solds	SP/SqFt	Avg SP/OLP	Median SP	Median DOM	# Solds	SP/SqFt	Avg SP/OLP		Median SP	Median DOM	SP/SqFt	Avg SP/OLP
20001	\$572,375	10	110	\$478	101.2%	\$500,000	10	596	\$486	99.6%	15.6%	14.5%	0.0%	-1.7%	1.6%
20002	\$585,000	16	168	\$484	98.5%	\$475,000	10	733	\$405	100.9%	18.7%	23.2%	60.0%	19.5%	-2.4%
20003	\$646,250	10	111	\$514	99.7%	\$567,500	8	384	\$512	100.0%	22.4%	13.9%	25.0%	0.4%	-0.3%
20004	\$475,500	30	4	\$549	99.1%	\$440,000	17	51	\$602	98.5%	7.3%	8.1%	76.5%	-8.8%	0.6%
20005	\$570,000	8	59	\$655	100.1%	\$445,000	8	167	\$610	99.9%	26.1%	28.1%	0.0%	7.4%	0.2%
20007	\$1,042,500	24	98	\$702	97.5%	\$885,000	19	429	\$605	97.4%	18.6%	17.8%	26.3%	16.0%	0.0%
20008	\$932,500	14	68	\$598	97.8%	\$479,250	11	356	\$530	98.4%	16.0%	94.6%	27.3%	12.8%	-0.6%
20009	\$540,000	9	210	\$562	99.8%	\$486,000	10	858	\$575	99.9%	19.7%	11.1%	-10.0%	-2.3%	-0.1%
20010	\$593,750	10	78	\$447	99.2%	\$515,000	8	250	\$436	101.4%	23.8%	15.3%	25.0%	2.5%	-2.2%
20011	\$535,000	21	157	\$389	99.2%	\$420,000	14	553	\$331	99.0%	22.1%	27.4%	50.0%	17.5%	0.2%
20012	\$604,950	22	30	\$364	96.2%	\$541,500	9	117	\$335	99.3%	20.4%	11.7%	144.4%	8.7%	-3.2%
20015	\$899,800	7	62	\$499	99.2%	\$840,000	9	151	\$481	99.0%	29.1%	7.1%	-22.2%	3.7%	0.2%
20016	\$890,000	15	79	\$565	97.7%	\$682,500	18	406	\$489	97.8%	16.3%	30.4%	-16.7%	15.5%	-0.1%
20017	\$429,000	10	29	\$340	99.0%	\$350,000	10	144	\$302	100.9%	16.8%	22.6%	0.0%	12.6%	-1.9%
20018	\$399,990	30	35	\$301	96.4%	\$355,000	19	158	\$275	97.3%	18.1%	12.7%	57.9%	9.5%	-0.9%
20019	\$249,900	27	37	\$218	95.2%	\$178,500	37	336	\$163	95.4%	9.9%	40.0%	-27.0%	33.7%	-0.2%
20020	\$225,000	27	23	\$201	94.2%	\$200,000	21	193	\$161	95.7%	10.7%	12.5%	28.6%	24.8%	-1.6%
20024	\$377,000	20	16	\$386	96.1%	\$265,000	15	198	\$371	97.4%	7.5%	42.3%	33.3%	4.0%	-1.4%
20032	\$167,475	146	3	\$140	103.3%	\$149,500	36	82	\$137	93.5%	3.5%	12.0%	305.6%	2.2%	10.5%
20036	\$289,950	8	20	\$520	100.2%	\$366,000	9	101	\$596	99.6%	16.5%	-20.8%	-11.1%	-12.8%	0.6%
20037	\$747,500	15	36	\$699	98.1%	\$425,000	22	248	\$641	96.2%	12.7%	75.9%	-31.8%	9.1%	1.9%
All D.C.	\$585,000	13	1433	\$497	98.8%	\$450,000	13	6521	\$443	98.9%	18.0%	30.0%	0.0%	12.2%	0.0%

Figure 19

2013 Washington, D.C. Solds by ZIP: Months Supply of Inventory (MSI) for HPH vs Non-HPH

Zip	HPH				Non-HPH				HPH % Total Solds (Market Share)	HPH vs Non-HPH %	
	# Solds	# Actives	Avg Solds /Month	MSI	# Solds	# Actives	Avg Solds /Month	MSI		Avg Solds /Month	MSI
20001	110	25	9	2.7	596	65	50	1.3	15.6%	-82.0%	108.4%
20002	168	16	14	1.1	733	86	61	1.4	18.7%	-77.1%	-18.8%
20003	111	11	9	1.2	384	29	32	0.9	22.4%	-71.9%	31.2%
20004	4	0	0	0.0	51	3	4	0.7	7.3%	-100.0%	-100.0%
20005	59	2	5	0.4	167	9	14	0.6	26.1%	-64.3%	-37.1%
20007	98	24	8	2.9	429	63	36	1.8	18.6%	-77.8%	66.8%
20008	68	5	6	0.9	356	51	30	1.7	16.0%	-80.0%	-48.7%
20009	210	18	18	1.0	858	63	72	0.9	19.7%	-75.0%	16.7%
20010	78	14	7	2.2	250	22	21	1.1	23.8%	-66.7%	104.0%
20011	157	13	13	1.0	553	102	46	2.2	22.1%	-71.7%	-55.1%
20012	30	8	3	3.2	117	15	10	1.5	20.4%	-70.0%	108.0%
20015	62	1	5	0.2	151	16	13	1.3	29.1%	-61.5%	-84.8%
20016	79	13	7	2.0	406	59	34	1.7	16.3%	-79.4%	13.2%
20017	29	6	2	2.5	144	28	12	2.3	16.8%	-83.3%	6.4%
20018	35	13	3	4.5	158	26	13	2.0	18.1%	-76.9%	125.7%
20019	37	12	3	3.9	336	62	28	2.2	9.9%	-89.3%	75.8%
20020	23	6	2	3.1	193	51	16	3.2	10.7%	-87.5%	-1.3%
20024	16	5	1	3.8	198	14	17	0.8	7.5%	-94.1%	342.0%
20032	3	2	0	8.0	82	29	7	4.2	3.5%	-100.0%	88.5%
20036	20	1	2	0.6	101	4	8	0.5	16.5%	-75.0%	26.3%
20037	36	5	3	1.7	248	50	21	2.4	12.7%	-85.7%	-31.1%
All D.C.	1433	200	119	1.7	6521	848	543	1.6	18.0%	-78.1%	7.3%

Solds is the total for the year.

Actives is a snapshot of the number of Actives at the end of the year.

Avg Solds/Month is the average number of sales for 2013 divided by 12.

Months Supply of Inventory is calculated by dividing the # of MLS available properties for sale at end-of-period by the

Average monthly sales over the previous 12 months.