

The All Transactions House Price Index (HPI) for Maryland's MSAs, 1995 – 2009

All Areas in Maryland See Declines, but Some Decline More Than Others

Like the nation as a whole, Maryland has seen a dramatic increase in the value of single-family housing units purchased with conforming mortgage loans¹ in the past 10 years, followed by an equally dramatic decline. However, this boom and bust in housing values has not been evenly distributed across the state. The Washington-Arlington-Alexandria MSA Division (which consists mostly of counties outside of Maryland) had the highest increase in value, with 150.1 percent price appreciation from 1995:Q1 to its peak quarter of 2006:Q4, while the Cumberland MD-WV MSA had the lowest and latest peak, with a 47.7 percent price appreciation to its peak quarter of 2008:Q4. Since the peak, housing in Washington-Arlington-Alexandria has decreased in value by 28.1 percent, while Cumberland has decreased by 9.5 percent. For comparison's sake, when change is measured starting in 1995:Q1 the State of Maryland peaked in 2007:Q1 at a 125.9 percent cumulative price appreciation over 1995:Q1, and by 2009:Q4 that had fallen to a 73.5 percent price appreciation (a 24.3 percent drop).

Washington Metro Housing Value Changes

Due to its size, the Washington-Arlington-Alexandria, DC-VA-MD-WV Metropolitan Statistical Area is divided into two divisions: the Washington-Arlington-Alexandria, DC-VA-MD-WV Metropolitan Division (MSAD) and the Bethesda-Frederick-Gaithersburg, MD MSAD. The FHFA does not publish an HPI value for the MSA as a whole for this dataset.

The Washington-Arlington-Alexandria, DC-VA-MD-WV MSAD had the highest price appreciation of all the MSAs, with a cumulative increase peak of 150.1 percent by 2006:Q4 from 1995:Q1 (See [Map 2](#), [Map 3](#), and [Map 4](#)). Since that point, price appreciation has decreased significantly in that MSAD and by the end of 2009:Q4 was only 83.2 percent above 1995:Q1 values (a 28.1 percent drop from the peak) (See [Table 2](#)). Single-family home price appreciation in this MSAD is now approximately at the point that it was in 2004:Q3. In other words, a hypothetical single-family detached home that was valued at \$100,000 in 1995:Q1 would have been valued at \$250,100 in the peak of 2006:Q4 and would have fallen in value to \$183,200 by 2009:Q4.²

The other portion of the Washington-Arlington-Alexandria MSA, the Bethesda-Frederick-Gaithersburg, MD MSAD, showed similar peaks and declines, gaining 133.0 percent price appreciation from 1995:Q1 by 2006:Q4, and then dropping back to 76.0 percent by 2009:Q4 (a 25.6 percent drop), so that cumulative price appreciation over 1995:Q1 was roughly equal to the point it was at in 2004:Q3. If located in this region, that hypothetical \$100,000 house in 1995:Q1 would have increased in value to \$233,000 by 2006:Q4 and then decreased in value to \$176,000 in 2009:Q4.

¹ According to the FHFA, "Fannie Mae and Freddie Mac are restricted by law to purchasing single-family mortgages with origination balances below a specific amount, known as the "conforming loan limit." Loans above this limit are known as jumbo loans." Conforming loans are the only loans tracked by the House Price Index. See page 7 for more information.

² All dollar values in this report are adjusted for inflation to 2009:Q4.

Baltimore-Towson Housing Value Changes

The Baltimore-Towson MSA peaked in 2007:Q1 at 122.7 percent of the 1995:Q1 housing value and subsequently has lost 20.8 percent of its value from the peak to roughly equal the housing values of 2005:Q1. As a result, in 2009:Q4, single-family detached housing units in the Baltimore-Towson MSA were valued at 78.4 percent of their 1995:Q1 valuations. A hypothetical home in this region that was valued at an inflation-adjusted \$100,000 in 1995:Q1 would have been valued at \$222,700 in 2007:Q1 and would now be valued at \$178,400.

Eastern Shore Housing Value Changes

Most of the Eastern Shore is only tracked by the HPI in its “non-metro” series of counties that do not belong to tracked MSAs or MSADs (see below). The exceptions are Queen Anne’s County, which is considered to be a part of the Baltimore-Towson MSA described above, Cecil County, which is a part of the much larger Wilmington, DE-MD-NJ Metropolitan Division, or MSAD (which also contains New Castle County, DE and Salem County, NJ), and the Salisbury MSA in the southern portion of the shore.

Housing in the Wilmington, DE-MD-NJ MSAD had much lower price increases than most other Maryland-related MSAs and MSADs. Single-family home values peaked in 2006:Q4 at 84.7 percent above 1995:Q1 values, and then decreased to 56.1 percent of 1995:Q1 values by 2009:Q4 (a 16.4 percent decrease). The hypothetical home in this MSAD would have increased from \$100,000 in 1995:Q1 to \$184,700 in 2006:Q4, and decreased to \$156,100 by 2009:Q4.

Single-family detached housing in the Salisbury MSA also increased in value at a slower pace than in other parts of Maryland, but saw a higher appreciation rate than in the Wilmington, DE-MD-NJ MSAD. Single-family home values peaked in 2007:Q4 in the Salisbury MSA, a year later than in many other areas. Peak value appreciation was at 98.3 percent above 1995:Q1 values, and decreased to 64.0 percent of 1995:Q1 values by 2009:Q4 (a 16.1 percent decrease). The hypothetical home in the Salisbury MSA would have increased from \$100,000 in 1995:Q1 to \$198,300 in 2007:Q4, and decreased to \$164,000 by 2009:Q4.

Western Maryland Housing Value Changes

Western Maryland is represented in the HPI by the Hagerstown-Martinsburg, MD-WV and Cumberland, MD-WV MSAs. The Hagerstown-Martinsburg, MD-WV MAS had moderate appreciation in single-family detached housing (111.7 percent from 1995:Q1 to 2007:Q1), but then suffered from the largest percentage decline in housing unit value in Maryland after the peak, dropping 31.9 percent from 2007:Q1 to 2009:Q4, making overall price appreciation for the region in 2009:Q4 only 41.9 percent over 1995:Q1. In other words, a hypothetical single-family house in this MSA valued at \$100,000 in 1995:Q1 would have been valued at \$211,700 in 2007:Q1 and would have dropped to \$141,900 by 2009:Q4.

The Cumberland, MD-WV MSA is the westernmost MSA in Maryland tracked by the HPI. It has had much lower price appreciation than in other parts of Maryland (peaking late at only 47.7 percent over 1995:Q1 in 2008:Q4). By 2009:Q4, the region had experienced price depreciation of 9.5 percent, making

overall price appreciation 31.2 percent over 1995:Q1. A hypothetical single-family house in this MSA valued at \$100,000 in 1995:Q1 would have been valued at \$147,700 in 2008:Q4 but would have dropped to \$131,200 by 2009:Q4, just one year later.

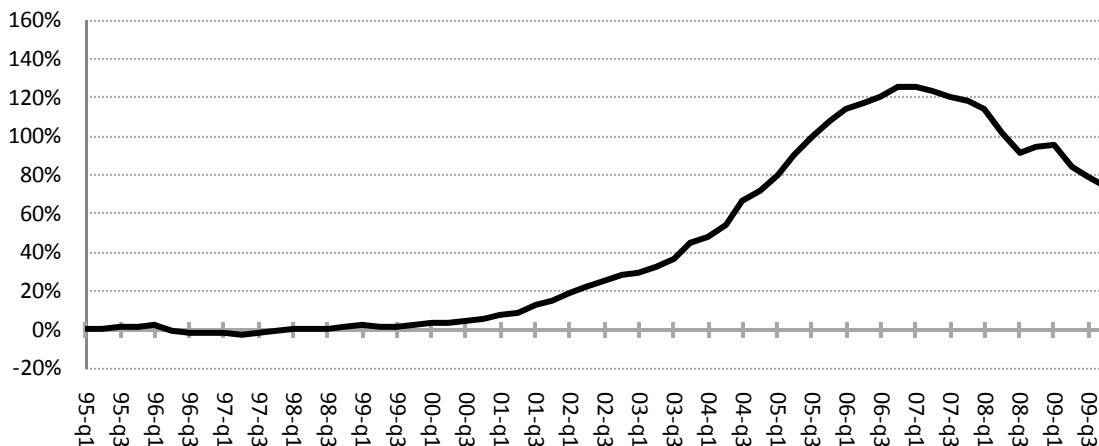
“Non-Metro” Maryland Housing Value Changes

The four micropolitan areas of Maryland that do not have enough transactions to calculate their own MSA index and the three counties that do not lie within any MSA are lumped together into one “non-metro” region by the FHFA. This region includes Garrett County in Western Maryland, St. Mary’s County in Southern Maryland, and Caroline, Dorchester, Kent, Talbot, and Worcester counties, all on the Eastern Shore. Taken as a whole, these areas saw the second-highest increase in home prices since 1995:Q1, increasing 140.6 percent at the peak in 2007:Q1. After the peak, these areas have had the smallest decrease in housing valuations, dropping to 94.5 percent of the 1995:Q1 valuation by 2009:Q4, a decrease of 20.5 percent from the peak. In other words, a hypothetical single-family house in the non-Metro area valued at \$100,000 in 1995:Q1 would have been valued at \$240,600 in 2007:Q1 and would have dropped to \$194,500 by 2009:Q4.

Charting the Changes

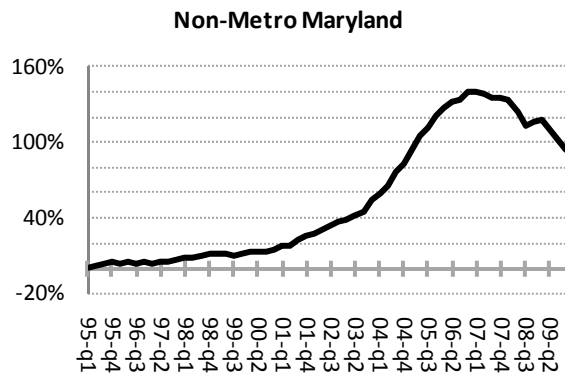
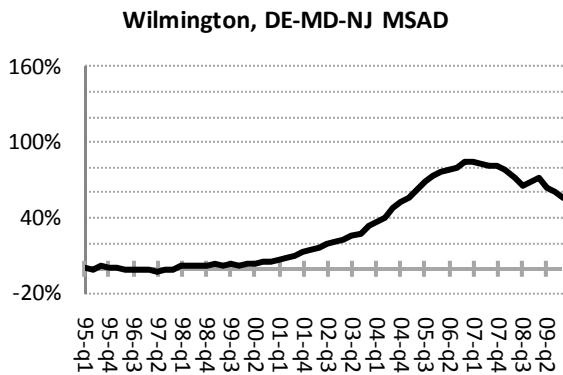
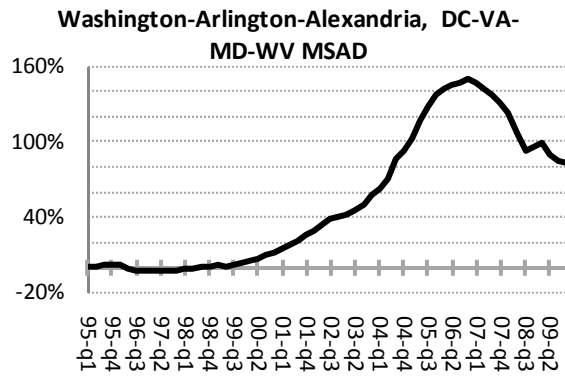
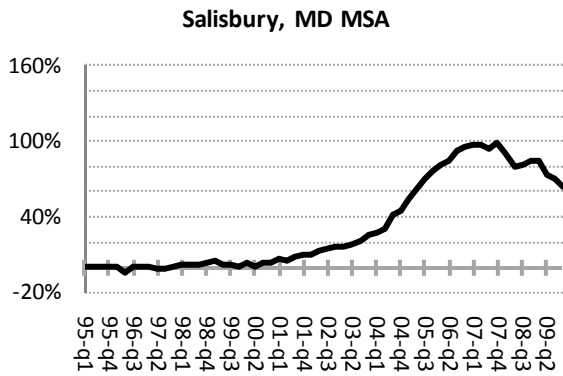
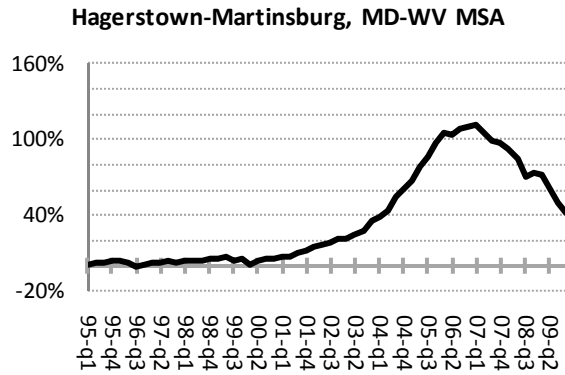
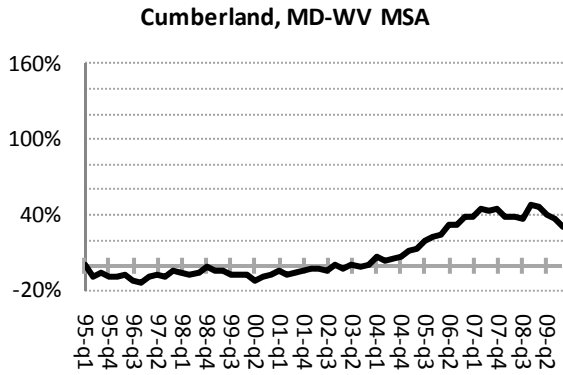
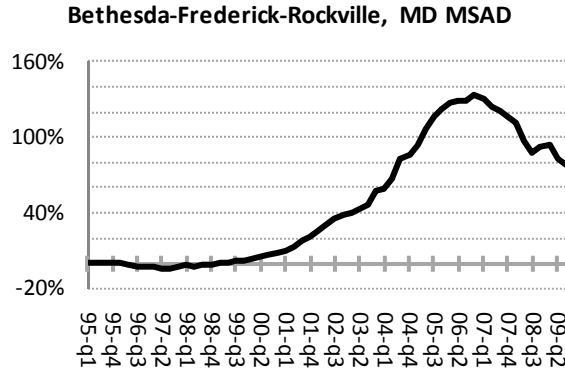
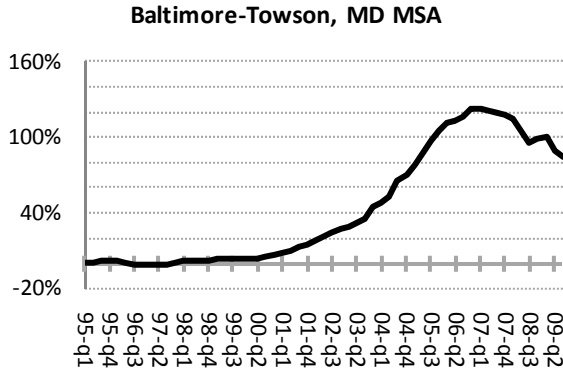
The following eight charts show the inflation-adjusted change in the HPI for each of these MSAs and MSADs and for Maryland. As the HPI data for all MSAs is indexed so that the first quarter of 1995 is set at 100, both housing unit value change and inflation change were calculated forward from that point. This makes the cumulative change percentages reported here different from the ones discussed in the [statewide report](#), which was calculated starting from the first quarter of 1975.

**All Transactions House Price Index for Maryland: 1995:Q1 to 2009:Q4
(Adjusted for Inflation)**

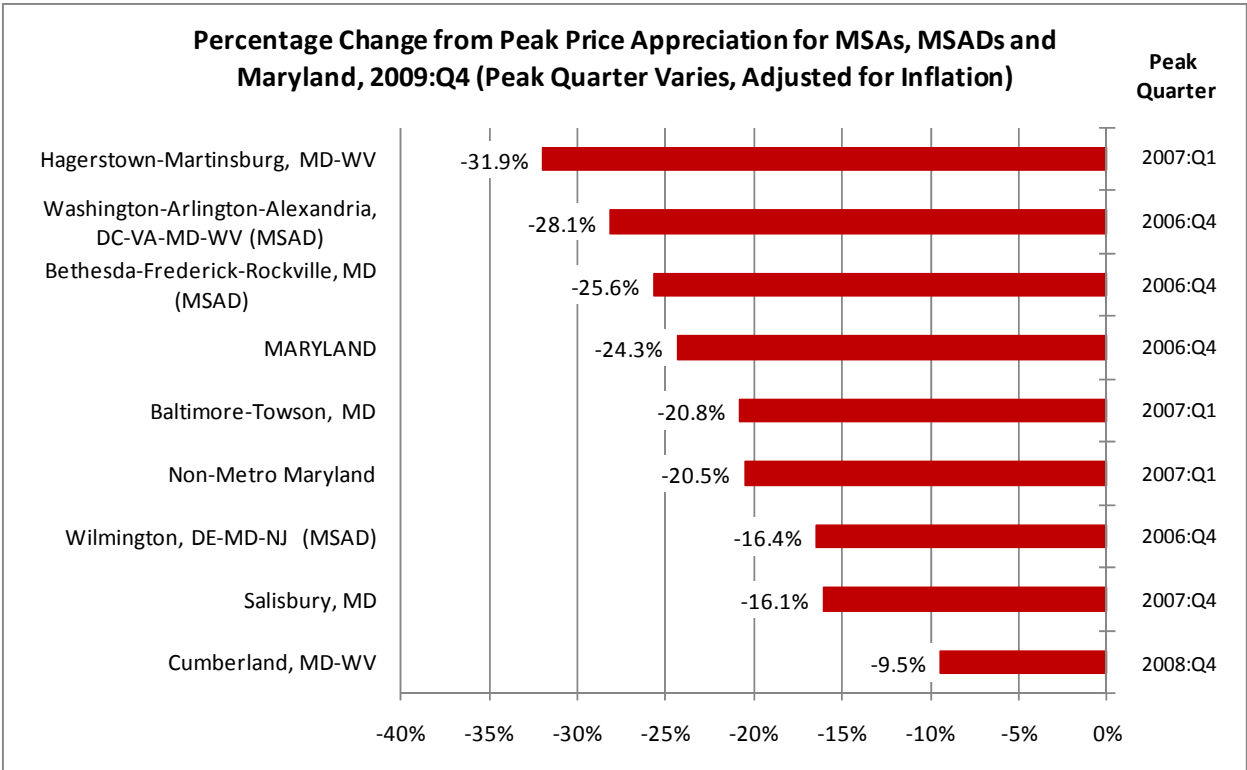
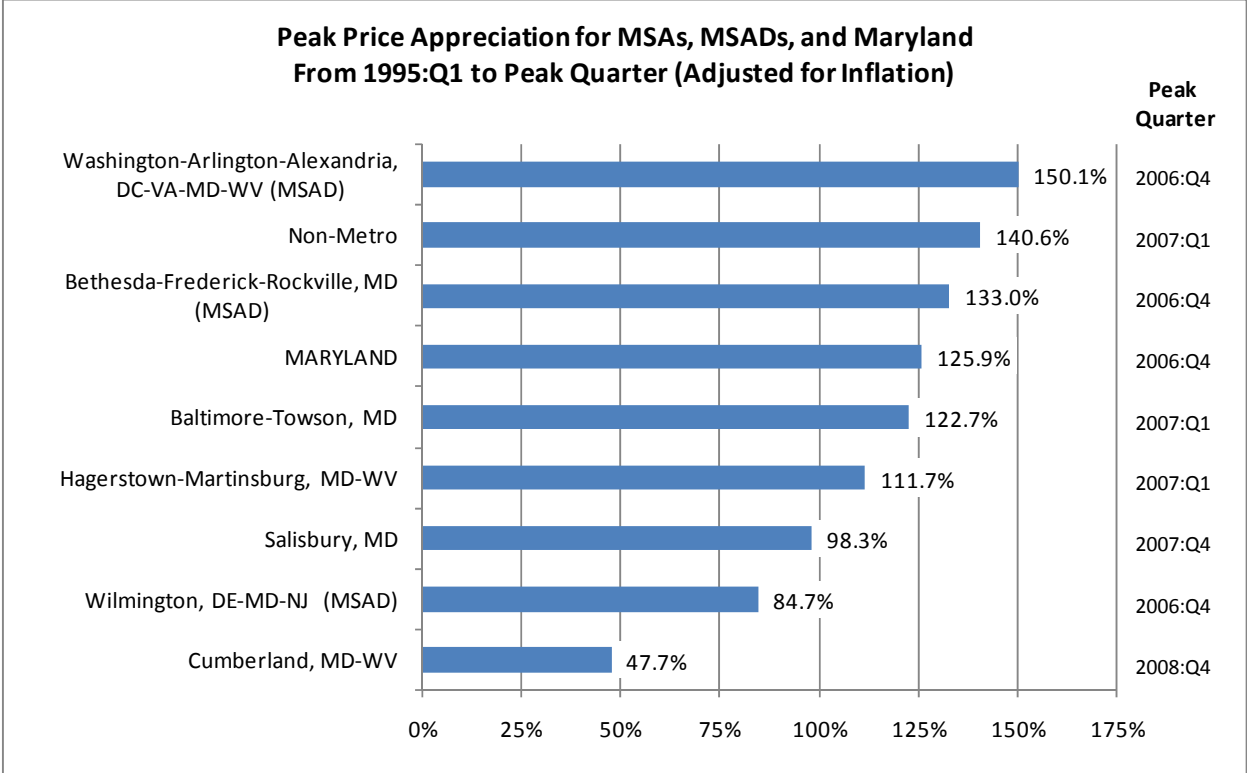


Source: Quarterly House Price Index, Fourth Quarter 2009, Federal Housing Finance Agency, 2010

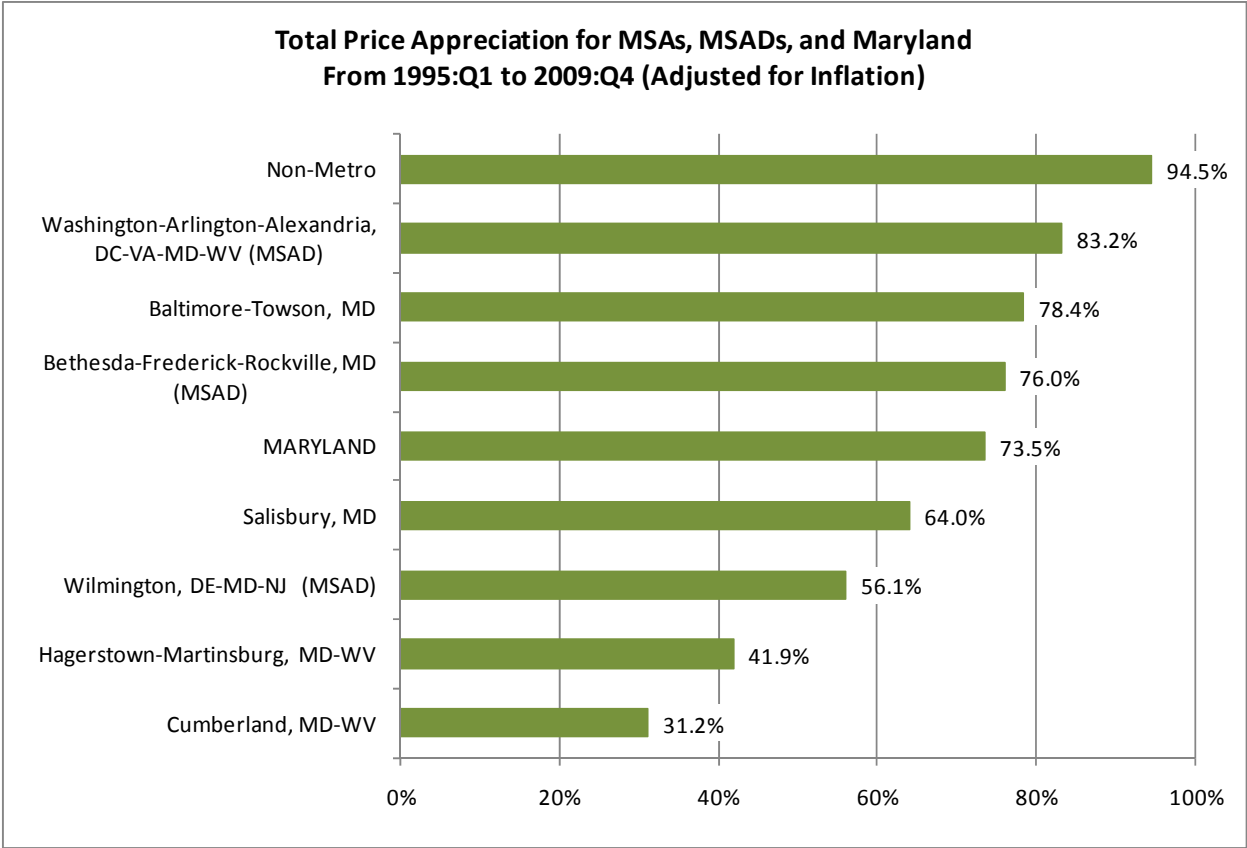
**All Transactions House Price Index for Maryland's MSAs and MSADs: 1995:Q1 to 2009:Q4
(Adjusted for Inflation)**



Source: Quarterly House Price Index, Fourth Quarter 2009, Federal Housing Finance Agency, 2010



Source: Quarterly House Price Index, Fourth Quarter 2009, Federal Housing Finance Agency, 2010



Source: Quarterly House Price Index, Fourth Quarter 2009, Federal Housing Finance Agency, 2010

Note that the data in the previous three figures are illustrated in [Map 2](#), [Map 3](#), and [Map 4](#).

For more information, contact James Palma at jpalma@mdp.state.md.us.

About GSE Conforming Mortgage Loans

Both the Purchase Only House Price Index (HPI) and the All Transactions House Price Index are calculated from information gathered from the Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddie Mac). Both Fannie Mae and Freddie Mac are government-sponsored enterprises (GSEs), and are limited by law as to the value of the mortgages that they can purchase from mortgage originators (such as banks and other mortgage lenders). Mortgages that can be purchased by the GSEs are known as conforming conventional mortgages, as they conform to the rules set by Congress for purchase by the GSEs.

This means that other types of mortgages are not included in the HPI calculation. Single-family homes financed by government insured loans (such as VA loans) and those financed by mortgages whose value exceeds the conforming loan threshold (known as jumbo loans) are not included in the HPI. Also, because the HPI only measures single family units, loans for all attached homes, townhomes and condominiums are excluded whether these loans are conforming or not.

Obtaining a conforming loan can be problematic in areas with expensive housing, as even a modest single-family house may require a mortgage that is too large to conform to GSE regulations. In 2008, the FHFA recognized this issue and implemented different maximum levels for “high-cost” counties across the United States.³ Previously, the only deviations from the national conforming loan limit were for high costs states like Alaska and Hawaii. Current 2010 conforming loan limits for Maryland jurisdictions are listed below.

Conforming Loan Limits for Single Family Homes in High Cost Jurisdictions in Maryland, 2010

Metropolitan Statistical Area / Jurisdiction	Conforming Loan Limit
Baltimore-Towson (Metropolitan Area) Component Jurisdictions: Anne Arundel, Baltimore, Carroll, Harford, Howard, and Queen Anne's Counties, Baltimore City	\$560,000
Easton (Micropolitan Area) Component Jurisdictions: Talbot County	\$443,750
Ocean Pines (Micropolitan Area) Component Jurisdictions: Worcester County	\$437,500
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD (Metropolitan Area) Component Jurisdictions (MD): Cecil County	\$420,000
Washington-Arlington-Alexandria, DC-VA-MD-WV (Metropolitan Area) Component Jurisdictions (MD): Calvert, Charles, Frederick, Montgomery, and Prince George's Counties	\$729,750
Garrett County	\$437,500
All Other Jurisdictions	\$417,000

Source: Federal Home Finance Agency

³ The conforming loan limit in “general” cost counties across the lower 48 states has been \$417,000 since 2006. Before 2008, no conforming mortgage in any county in the lower 48 states could exceed this value.

About the FHFA's All Transactions House Price Index (HPI)

The All Transactions House Price Index (HPI) is a data series formerly published by the Office of Housing Enterprise Oversight (OFHEO) and now published by the Federal Housing Finance Agency (FHFA), a government agency responsible for overseeing the actions of the Federal National Mortgage Association (FNMA), commonly known as Fannie Mae, and the Federal Home Loan Mortgage Corporation (FHLMC), commonly known as Freddie Mac.⁴ According to the FHFA, "The HPI for each geographic area is estimated using repeated observations of housing values for individual single-family residential properties on which at least two mortgages were originated and subsequently purchased by either Freddie Mac or Fannie Mae since January 1975."⁵ Data from these two sources cover 40 percent of all mortgages issued in the U.S. Restricting the index to existing housing sales helps to control for the effect that differing housing types and characteristics might have on the data.⁶ To remove the effects that inflation has on home prices, the HPI was adjusted for inflation using the Bureau of Labor Statistics' Consumer Price Index "All Items Less Shelter" series.⁷

As this data is published for states and many Metropolitan Statistical Areas (MSAs) within the U.S., it is useful for tracking housing price trends on the state and local level. One fault with this data set is that it only tracks single-family detached housing, which in Maryland only comprises 52 percent of all housing units (61 percent in the U.S. as a whole). Another is that it doesn't capture the price effects that newly-built homes may have on the housing market until after they have been sold and resold. Even with these faults, the HPI is useful as it supplies consistent data across the U.S. for tracking home price appreciation trends over a 33 year period.

Number of Housing Units by Units in Structure, Maryland, 3-Year 2005-2007 Estimate

	Estimate	Margin of Error	Percentage	Margin of Error
Total housing units	2,296,973	+/-290	100.0%	
1-unit, detached	1,188,547	+/-5,418	51.7%	+/-0.2%
1-unit, attached	483,342	+/-4,804	21.0%	+/-0.2%
2 units	43,419	+/-2,364	1.9%	+/-0.1%
3 or 4 units	56,672	+/-2,496	2.5%	+/-0.1%
5 to 9 units	126,125	+/-3,502	5.5%	+/-0.2%
10 to 19 units	189,099	+/-3,623	8.2%	+/-0.2%
20 or more units	168,771	+/-3,148	7.3%	+/-0.1%
Mobile home	40,826	+/-1,936	1.8%	+/-0.1%
Boat, RV, van, etc.	172	+/-103	0.0%	+/-0.0%

Source: 2005-2007 American Community Survey 3-Year Estimates

The HPI does not track Metropolitan Statistical Areas (MSAs) over the same time series as it does states and the U.S. This is due to rules that suppress data for individual MSAs until there are at least 1,000 total

⁴ The Federal Housing Finance Agency (FHFA) was created on July 30, 2008 through a legislative merger of the Office of Federal Housing Enterprise Oversight (OFHEO), the Federal Housing Finance Board (FHFB) and the U.S. Department of Housing and Urban Development (HUD) government-sponsored enterprise (GSE) mission team. FHFA regulates Fannie Mae, Freddie Mac and the 12 Federal Home Loan Banks.

⁵ http://www.fhfa.gov/webfiles/896/hpi_tech.pdf.

⁶ For more information, see http://www.fhfa.gov/webfiles/896/hpi_tech.pdf.

⁷ Adjusted using series ID# CUUR0000SA0L2 as described in question 17 of the HPI FAQ, available at <http://www.fhfa.gov/Default.aspx?Page=196>.

transactions that meet the index's criteria.⁸ Because of this limitation, only six MSAs in Maryland have published HPIs: Baltimore-Towson, MD; Cumberland, MD-WV; Hagerstown-Martinsburg, MD-WV; Philadelphia-Camden-Wilmington, PA-NJ-DE-MD; Salisbury, MD; and Washington-Arlington-Alexandria, DC-VA-MD-WV. Due to the size of the Washington-Arlington-Alexandria and Philadelphia-Camden-Wilmington MSAs, they are split into MSA Divisions (MSADs): the Bethesda-Frederick-Gaithersburg, MD MSAD, the Washington-Arlington-Alexandria, DC-VA-MD-WV MSAD, and the Wilmington, DE-MD-NJ MSAD, whose only Maryland component is Cecil County (See [Map 1](#)).

This data set is also related to, but is not the same as, the S&P/Case-Shiller[®] Home Price Indices published by Standard & Poors. There are four major differences between the S&P/Case-Shiller[®] Index and FHFA's All Transactions Home Price Index. First, S&P/Case-Shiller[®] uses only purchase prices to calibrate their index, while FHFA's All Transactions HPI uses both purchase prices and refinance appraisals.⁹ Second, S&P/Case-Shiller uses sales data collected from county assessor's and recorder's offices, while FHFA uses data from conforming, conventional mortgages provided by Fannie Mae and Freddie Mac. Third, S&P/Case-Shiller[®] "value-weights" its index, meaning that more expensive homes have more influence on the index, while FHFA weights all home prices equally. Finally, S&P/Case-Shiller[®] does not cover 13 states, while FHFA data covers all 50 states. The FHFA created a detailed report that covers the similarities and differences between the two indexes, available at <http://www.fhfa.gov/webfiles/1163/OFHEOSPCS12008.pdf>.

⁸ <http://www.fhfa.gov/Default.aspx?Page=216>.

⁹ FHFA has a separate index, the Purchase Only HPI, that uses only purchase price data. That index is discussed in the report *The House Price Index (HPI) for Purchase-Only Mortgage Transactions in Maryland, 1991 – 2009*, also on this website.

Metropolitan Statistical Area Definitions as of December 2009 (OMB 10-02)

Maryland Counties are in **Bold Type**

The following are definitions of each of the six MSAs in Maryland covered by the HPI index. The HPI does not report data for the four Micropolitan Statistical Areas in the state: Cambridge, MD (OMB Code 15700, covering Dorchester County), Easton, MD (OMB Code 20660, covering Talbot County), Lexington Park, MD (OMB Code 30500, covering St. Mary's County), and Ocean Pines, MD (OMB Code 36180, covering Worcester County) (See [Map 1](#)). Caroline, Garrett, and Kent counties are not part of any metropolitan or micropolitan areas. A full list and description of every current MSA and its components is available from the Office of Management and Budget in its publication entitled OMB Bulletin No. 10 – 02, *Update of Statistical Area Definitions and Guidance on Their Uses*, published December 1, 2009.

Baltimore-Towson, MD Metropolitan Statistical Area (12580)

- **Anne Arundel County, Baltimore County, Carroll County, Harford County, Howard County, Queen Anne's County, Baltimore city**

Cumberland, MD-WV Metropolitan Statistical Area (19060)

- **Allegany County, MD**; Mineral County, WV

Hagerstown-Martinsburg, MD-WV Metropolitan Statistical Area (25180)

- **Washington County, MD**; Berkeley County, WV; Morgan County, WV

Salisbury, MD Metropolitan Statistical Area (41540)

- **Somerset County, Wicomico County**

Philadelphia-Camden-Wilmington, PA-NJ-DE-MD Metropolitan Statistical Area (37980)

- Camden, NJ Metropolitan Division (15804)
 - Burlington County, Camden County, Gloucester County
- Philadelphia, PA Metropolitan Division (37964)
 - Bucks County, Chester County, Delaware County, Montgomery County, Philadelphia County
- Wilmington, DE-MD-NJ Metropolitan Division (48864)
 - New Castle County, DE; **Cecil County, MD**; Salem County, NJ

Washington-Arlington-Alexandria, DC-VA-MD-WV Metropolitan Statistical Area (47900)

- Bethesda-Frederick-Gaithersburg, MD Metropolitan Division (13644)
 - **Frederick County, MD; Montgomery County, MD**
- Washington-Arlington-Alexandria, DC-VA-MD-WV Metropolitan Division (47894)
 - District of Columbia, DC; **Calvert County, MD; Charles County, MD; Prince George's County, MD**; Arlington County, VA; Clarke County, VA; Fairfax County, VA; Fauquier County, VA; Loudoun County, VA; Prince William County, VA; Spotsylvania County, VA; Stafford County, VA; Warren County, VA; Alexandria city, VA; Fairfax city, VA; Falls Church city, VA; Fredericksburg city, VA; Manassas city, VA; Manassas Park city, VA; Jefferson County, WV