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## Single-family housing values in DC have risen much more over 25 years than in the metro area or the US

### *The biggest difference: DC values have risen much faster relative to growth in average household income*

The Federal Housing Finance Agency (FHFA) compiles a quarterly index of single-family house prices for the US, all states (including DC), and metropolitan areas. The index starts in 1991, and is based on how the same properties have changed in value since that time based on sales and refinancing obtained from mortgage and other data sources. (For more detail on the index see p. 22).

From 1991 to 2016, a 25 year period, DC's four fold increase is almost twice the increase in the Washington metropolitan area and the US. Over the period, DC's average annual rate of growth was 5.9%, compared to 3.4% for the metro area and 3.1% for the US.

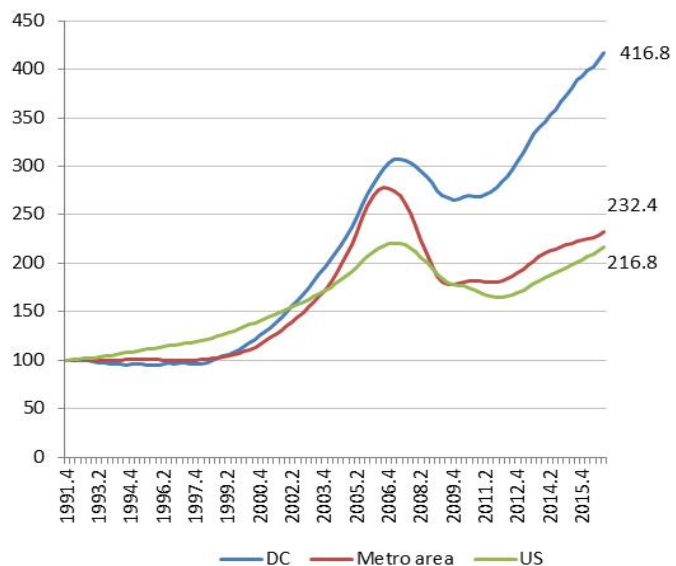
Price change patterns were fairly similar from 1991 to 2002, although DC and the metro area initially lagged the US in early 1990's when DC's economy was faltering.

When price growth started to pick up after 2002, DC's increased faster. In the 14 years from 2002 to 2016, DC's grew 147%, compared to 55% in the metro area and 36% in the US.

DC's prices also fell less in the recession, and recovery from the recession was much faster. In the 10 years from 2006 (the prior peak) to 2016, DC's prices gained 37.5%, the US was essentially flat (-1.4%), and the metro area fell 16.3%.

Why have single-family house prices risen so much faster in DC than in the metropolitan area and the US? The explanation does not lie primarily (continued on p. 2)

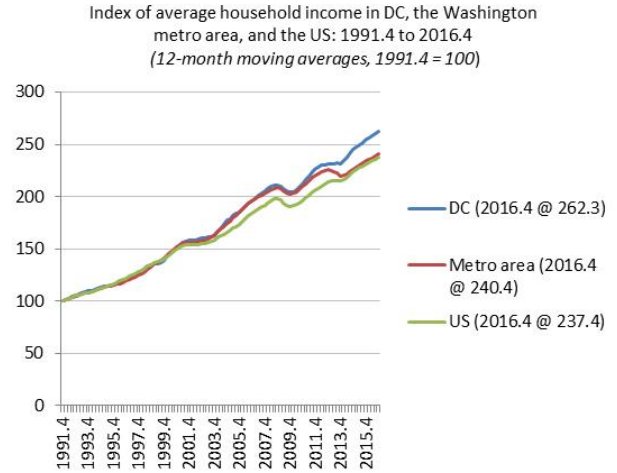
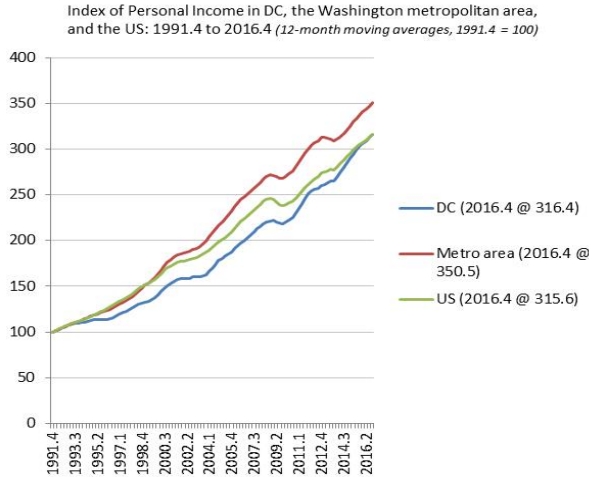
FHFA Housing Price Index for DC, the Washington metropolitan area, and the US: 1991.4 to 2016.4 (12-month moving averages, 1991.4 = 100)



### **This briefing document was prepared by Stephen Swaim, DC Office of Revenue Analysis**

This brief first appeared in the April 2017 *DC Economic and Revenue Trends*. District of Columbia briefing documents are prepared by the Office of Revenue Analysis, which is part of the Office of the Chief Financial Officer of the District of Columbia government. The purpose of these documents is to make information available that is not of a policy nature. See also *District of Columbia Economic and Revenue Trends and Economic Indicators* issued monthly by the D.C. Office of the Chief Financial Officer ([www.cfo.dc.gov/Reports/Economic Reports/Briefing documents](http://www.cfo.dc.gov/Reports/Economic-Reports/Briefing%20documents)). For comment or further information, please contact Fitzroy Lee, Deputy Chief Financial Officer and Chief Economist, Office of Revenue Analysis, 1101 4th St., SW, Suite W770, Washington D.C. 20024, [fitzroy.lee@dc.gov](mailto:fitzroy.lee@dc.gov), 202-727-7775.

in changes to general measures of income in the economy. Over the past 25 years DC's rate of Personal Income growth has been the same as in the US and a bit less than in the metropolitan area. On a per household basis, DC's income has increased a little faster, but the growth trajectory has still been fairly similar to that in the region and the national economy.

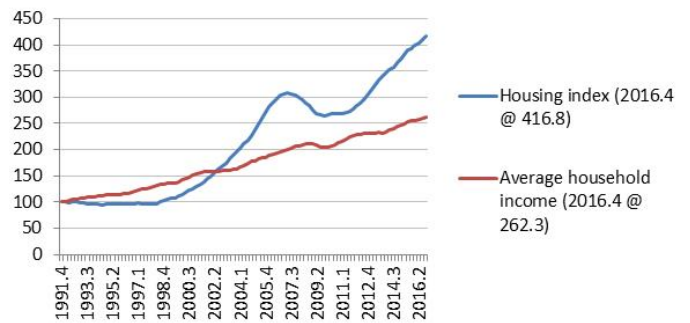


The major differences between DC and both the region and the US lie in the dynamics of the housing markets that go beyond general measures of income. Since 2002 DC's housing price index has increased at a much faster pace than average household income. By contrast, recovery in house prices from the recession has not yet been sufficiently strong to catch up with rising average household income in either the Washington metropolitan area or the US.

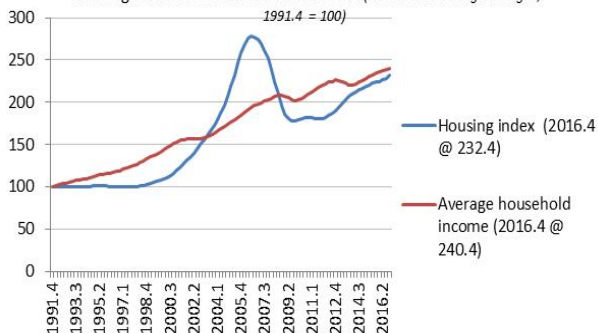
Housing market dynamics involve both supply and demand factors. Without trying to fully explain these, it should be noted that DC's household growth since 2002 has been at a pace comparable to that in the Washington metropolitan area and faster than in the US as a whole. DC's supply of single family housing, however, is relatively fixed. When growing demand from demographic change and rising incomes meets a relatively inelastic supply, prices can be expected to rise.

See the following page for a graph of household growth, an explanation of the FHFA housing price index, and a table showing the changes in house prices and income from 2002 to 2016.

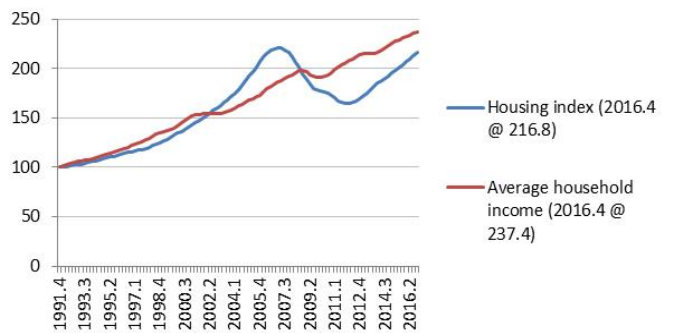
Index of housing prices and index of average household income in DC: 1991.4 to 2016.4 (12-month moving averages, 1991.4 = 100)

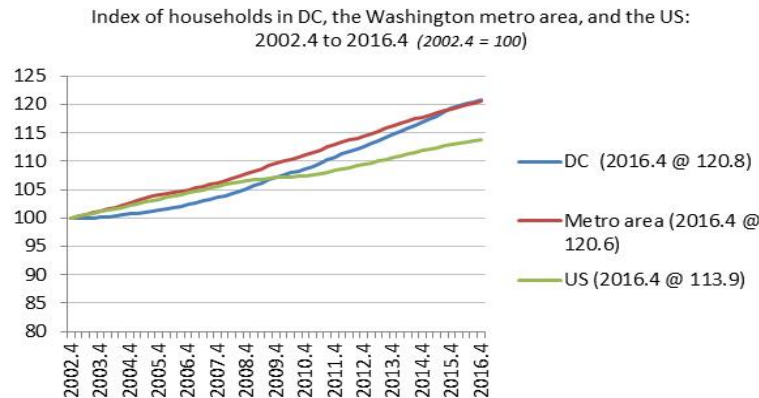


Index of housing prices and index of average household income in the Washington metro area: 1991.4 to 2016.4 (12-month moving averages, 1991.4 = 100)



Index of housing prices and index of average household income in the US: 1991.4 to 2016.4 (12-month moving averages, 1991.4 = 100)





**About the data.** The analysis of housing price in DC, the Washington metropolitan area, and the US is from the Expanded-Data Housing Price Index of single family house prices prepared quarterly by the Federal Housing Finance Agency (FHFA). FHFA calculates the index from repeat sales and refinancing of the same single family properties. It is estimated using Enterprise (federal housing finance agencies), FHA, and real property recorder data licensed from DataQuick. Personal Income and average household income for DC, the Washington metropolitan area, and the US is from Moody's Analytics.

FHFA Housing price index and average household income in DC, the Washington metropolitan area, and the US: 1991.4, 2002.4, and 2016.4

	Level of housing and income measures			% change:	
	1991.4	2002.4	2016.4	1991.4 to 2002.4	2002.4 to 2016.4
<b>DC</b>					
Housing price index	100.00	168.12	416.76	68.1	147.9
Average household income	65,500	105,296	171,823	60.8	63.2
<b>Washington metro area</b>					
Housing price index	100.00	149.64	232.43	49.6	55.3
Average household income	74,489	117,097	179,085	57.2	52.9
<b>US</b>					
Housing price index	100.00	160.05	216.83	60.0	35.5
Average household income	54,321	83,924	128,935	54.5	53.6

Source: FHFA (House price index) and Moody's Analytics