



District of Columbia Economic and Revenue Trends: May 2017

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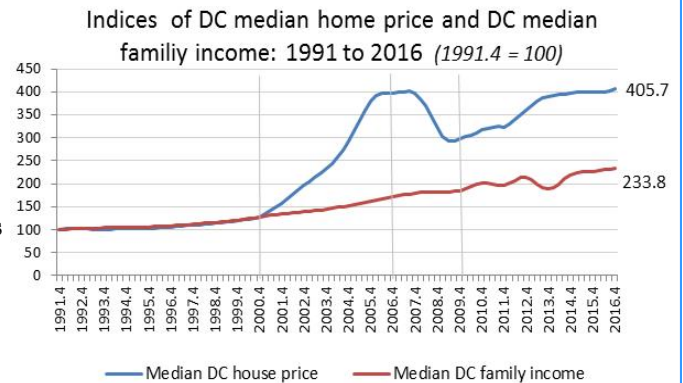
DC’s median home price, 3 times more than median family income in 1991, is now 5 times more

Lower interest rates help with affordability, but also contribute to higher prices

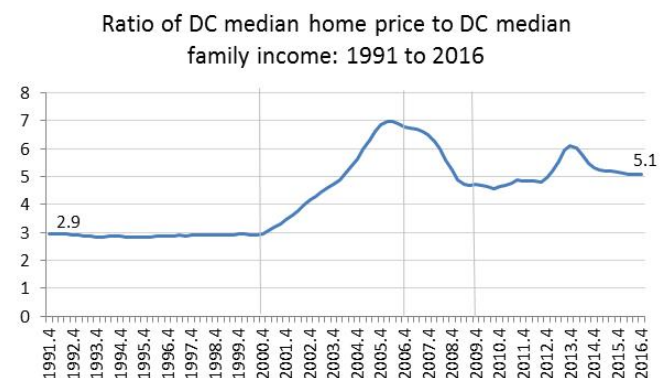
A measure of house affordability developed by the National Association of Realtors (NAR) relates median family income to median house price. Before looking more closely at this index, however, we first describe what has happened to median home prices and median family incomes in DC over the past 25 years. (The median home price includes both single family and condominium units.)

Median home price and family income in DC. DC’s housing market changed fundamentally after the year 2000. During the 1990’s, the median home price and median family income grew at the same pace. Then, from 2000 to 2006 the median home price grew much more quickly than income. The median home price rose from \$198,550 to \$447,850 over those 6 years, a 125.6% gain, while median family income grew only 34.5%.

With the Great Recession the median home price fell by 25%, but this only brought prices partway back to the growth path of median family income. In the recovery period since 2009, median housing prices have modestly outpaced the growth in median family income (36.8% compared to 26.3%). (For more details, see the table on p. 24.)



One way to summarize change in DC’s housing market is the ratio of median home price to median family income. The ratio was close to 3 in the 1990’s, and then shot up to about 7 in 2006.4, just before the onset of the recession. During the recession, the ratio did not fall to pre-recession levels, but only to about 5, where it has remained during the recovery period.



Continued on p. 21)

Wage and salary employment

Federal sector lost jobs

● March wage and salary employment in DC was up by 8,027 (1.0%) from a year earlier as measured by the 3-month moving average.

● Federal government employment in DC for March was down by 300 (0.2%). The private sector gained 7,300(1.4%).

● Total year-over-year DC metropolitan area employment increased by 57,333 (1.8%) in March as measured by the 3-month moving average.

● Suburban Washington employment in March increased by 2.1% from a year earlier.

● Seasonally adjusted DC jobs fell by 700 in March from the prior month and are 1,200 above the level of 5 months ago.

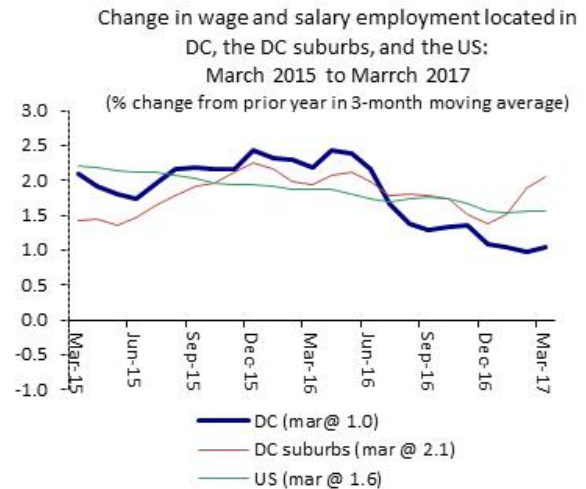


Table 1. Wage and salary employment in DC, Washington Metro area, and the US: March 2017

Jurisdiction	FY 2014	FY 2015	FY 2016	3-mo		
				12-mo avg	average	This month
District of Columbia	751,592	764,583	780,033	784,167	783,600	785,900
1 year change	6,375	12,992	15,450	10,758	8,067	6,200
% change	0.9	1.7	2.0	1.4	1.0	0.8
Washington metro area	3,107,792	3,143,100	3,218,833	3,243,767	3,234,400	3,245,000
1 year change	12,558	36,800	63,167	54,333	57,333	50,500
% change	0.4	1.2	2.0	1.7	1.8	1.6
Washington suburbs (% ch)	0.3	1.5	2.0	1.8	2.1	1.8
US (% ch)	1.8	2.1	1.8	1.7	1.6	1.5

Not seasonally adjusted. Suburban employment is the difference between the metro area total and the DC portion.

Source: BLS. March is preliminary.

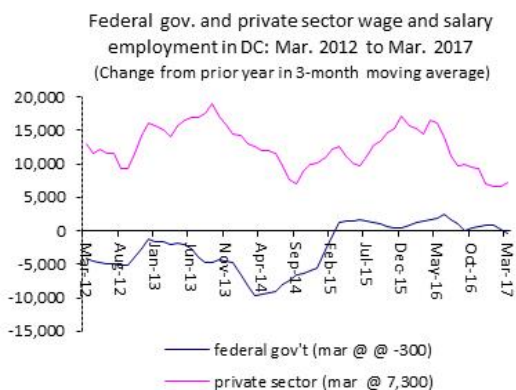


Table 2. Federal government and private sector wage and salary employment in DC: March 2017

Sector	FY 2014	FY 2015	FY 2016	3-month		
				12-mo avg	average	This month
Federal government	198,367	198,025	199,125	199,250	198,800	198,300
1 year ch.	-7,533	-342	1,100	733	-300	-900
% change	-3.7	-0.2	0.6	0.4	-0.2	-0.5
Private sector	515,558	527,033	540,992	544,600	544,867	547,500
1 year ch.	11,442	11,475	13,958	9,625	7,300	6,000
% change	2.3	2.2	2.6	1.8	1.4	1.1

Source: BLS. Not seasonally adjusted. March is preliminary.

Table 3. Seasonally adjusted DC Employment: October 2016 to March 2017

Indicator	October	November	December	January	February	March
D.C. Wage and Salary employment	786,400	785,900	787,600	787,500	788,300	787,600
change from prior month	3,000	-500	1,700	-100	800	-700
% change from prior month	0.4	-0.1	0.2	0.0	0.1	-0.1

Source: BLS seasonally adjusted. March is preliminary

Resident employment and unemployment

Steady gain in resident employment

- In March DC resident employment was up 8,132 (2.2%) from a year earlier (3-mo. moving average). The labor force grew by 6,772 (1.7%).
- The seasonally adjusted unemployment rate rose slightly to 5.8% in March. DC's unemployment rate has been below 7% for 6 months in a row, and is about where it was before the Great Recession.
- March initial unemployment insurance claims were up 9.1% from last year (3-month moving average).

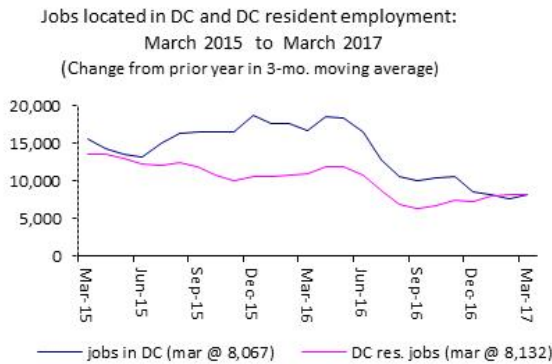
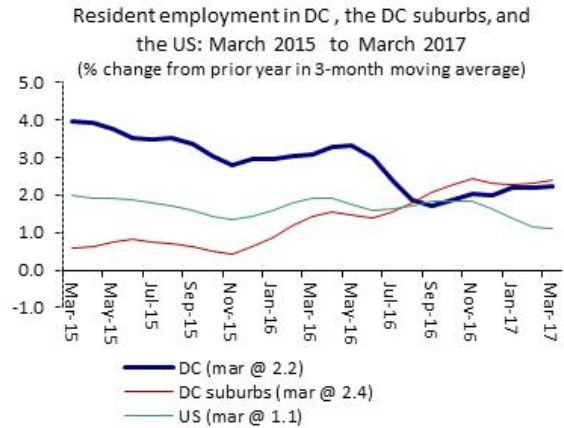


Table 4. Unemployment rates for DC, metro area, and US: March 2017
(percent of labor force)

Jurisdiction	Not seasonally adj.		Seasonally adj.	
	Mar. 2016	Mar. 2017	Mar. 2016	Mar. 2017
US	5.1	4.6	5.0	4.5
DC	6.0	5.7	6.2	5.8
DC metro area	3.9	3.7	na	na
DC suburbs	3.6	3.4	na	na

Source: U.S. BLS. na= data not available

Table 5. Resident employment and unemployment: March 2017

Indicator	FY 2014	FY 2015	FY 2016	12-mo avg	3-mo. avg.	This month
DC Labor force summary						
Resident employment	345,061	357,437	367,036	370,879	374,302	374,328
1 year change	3,562	12,376	9,599	8,083	8,132	6,505
% change	1.0	3.6	2.7	2.2	2.2	1.8
Labor Force	374,726	385,038	391,310	394,141	397,834	396,909
1 year change	904	10,311	6,272	5,666	6,772	5,585
% change	0.2	2.8	1.6	1.5	1.7	1.4
Unemployed	29,665	27,601	24,274	23,262	23,533	22,581
1 year change	-2,659	-2,065	-3,327	-2,418	-1,360	-920
% change	-8.2	-7.0	-12.1	-9.4	-5.5	-3.9
Unemployment rate	7.9	7.2	6.2	5.9	5.9	5.7
DC Unemployment insurance (state program)						
Initial claims (monthly avg.)	1,851	1,596	1,472	1,519	1,430	1,262
1 year change	-64	-255	-123	17	119	-25
% change	-3.3	-13.8	-7.7	1.1	9.1	-1.9
Weeks compensated (mo. avg.)	42,133	32,811	30,261	30,345	32,449	31,150
1 year change	-729	-9,322	-2,550	-858	1,160	-3,130
% change	-1.7	-22.1	-7.8	-2.8	3.7	-9.1

Source: Labor force: BLS. Unemployment Insurance: US Dept of Labor. Not seasonally adj.

Table 6. Seasonally adjusted DC Resident employment and unemployment: Oct. 2016 to Mar. 2017

Indicator	October	November	December	January	February	March
DC Resident employment	369,920	370,653	371,329	373,223	374,369	375,016
change from prior month	742	733	676	1,894	1,146	647
% change from prior month	0.2	0.2	0.2	0.5	0.3	0.2
DC Unemployment rate (%)	5.8	5.8	5.7	5.7	5.7	5.8

Source: BLS seasonally adjusted. March is preliminary.

Jobs by sectors of the economy

Education tops job growth in DC

- In March the increase of 4,033 in education over the prior year was more than in any other sector. (3-month moving avg.)
- In the private sector, food service (2,867), other business services (1,967), other professional services (1,433), and amusement and recreation (1,000) were other sectors that grew by 1,000 or more jobs in March.
- Private sector industries losing jobs included organizations, construction, health, retail trade, and information.
- Local government rose by 1,067 (2.7%).
- The federal government accounted for 25.4% of all DC jobs in March. Over the past year, DC's share of US federal employment fell in both the metro area and the US.

Change in private sector wage and salary jobs located in DC, the DC suburbs, and the US: March 2015 to March 2017 (% change from prior year in 3-month moving average)

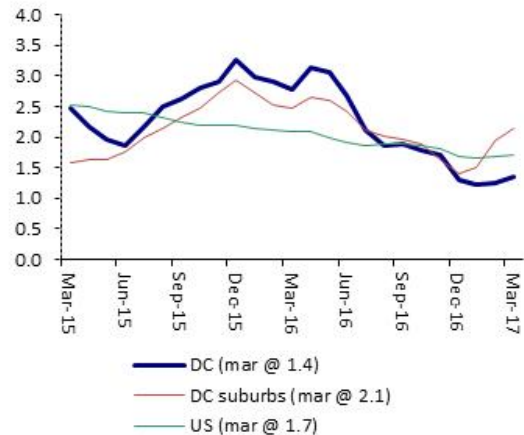


Table 7. Wage and salary employment located in DC: March 2017

Industry sector	3-month moving average				12-mo. moving avg: % change	Sector % of all DC jobs, Mar 2017	DC share (%) in Mar 2017 of all sector jobs in:			Change from Mar 2016 to Mar 2017 in DC share of sector jobs in:	
	Mar 2016	Mar 2017	Amount	%			metro area	US	metro area	US	
Federal government	199,100	198,800	-300	-0.2	0.4	25.4	54.0	7.10	-0.5	-0.11	
Local government	38,867	39,933	1,067	2.7	1.0	5.1	12.0	0.20	0.1	0.00	
Legal services	28,100	28,133	33	0.1	0.4	3.6		2.52		-0.01	
Other Professional and technical	85,067	86,500	1,433	1.7	2.2	11.0	22.7	1.08	-0.2	-0.02	
Employment services	14,567	14,800	233	1.6	0.8	1.9	35.3	0.42	1.5	-0.01	
Other Business services	35,267	37,233	1,967	5.6	4.4	4.8	19.0	0.49	0.1	0.01	
Information	17,000	16,733	-267	-1.6	-2.1	2.1	23.3	0.61	0.7	-0.01	
Finance	29,567	29,233	-333	-1.1	0.8	3.7	18.8	0.35	-0.3	-0.01	
Organizations	63,800	62,733	-1,067	-1.7	0.8	8.0	36.4	2.14	-0.8	-0.05	
Education	66,733	70,767	4,033	6.0	4.3	9.0	53.8	1.93	0.2	0.07	
Health	68,700	67,267	-1,433	-2.1	0.4	8.6	21.6	0.35	-0.6	-0.02	
Food service	49,833	52,700	2,867	5.8	3.5	6.7	22.5	0.47	0.3	0.02	
Accommodations	14,533	14,800	267	1.8	0.1	1.9	33.9	0.79	-1.7	0.01	
Amusement and recreation	7,633	8,633	1,000	13.1	11.0	1.1	20.8	0.43	0.8	0.05	
Retail trade	22,667	22,400	-267	-1.2	-0.3	2.9	8.1	0.14	-0.2	0.00	
Wholesale trade	5,000	4,767	-233	-4.7	1.9	0.6	7.8	0.08	-0.4	0.00	
Construction	15,733	14,400	-1,333	-8.5	-2.0	1.8	9.5	0.22	-0.8	-0.03	
Personal and miscellaneous ser.	7,600	7,733	133	1.8	1.2	1.0		0.28		0.00	
Other private	5,767	6,033	267	4.6	2.5	0.8	5.2	0.03	0.2	0.00	
Total	775,533	783,600	8,067	1.0	1.4	100.0	24.2	0.54	-0.2	0.00	
Public sector	237,967	238,733	767	0.3	0.5	30.5	34.0	1.06	-0.3	0.00	
Private sector	537,567	544,867	7,300	1.4	1.8	69.5	21.5	0.45	-0.1	0.00	

Source: BLS. not seasonally adjusted. na=not available. For the metro area, legal is included in other professional and technical, and personal and miscellaneous services is included in organizations (a category BLS calls "other services")

Jobs and wages by sector

In the December quarter, professional and business services accounted for 45% of last year's job growth and 30% of the growth in wages and salaries

- In the December quarter, the federal government accounted for 25% of the jobs and a 32% of the wages and salaries paid in DC. The federal share of last year's job growth fell to 9%, but it still accounted for 33% of all growth in wages.
- Professional and business services accounted for about 26% of wages paid in DC in December, but 30% of the increase in wages paid in DC over the past year.
- Education and health services accounted for 19% of last year's job increases, but only 4% of the increase in wages.
- Trade and hospitality accounted for 28% of the increase in jobs over the past year and 8% of the increase in wages.

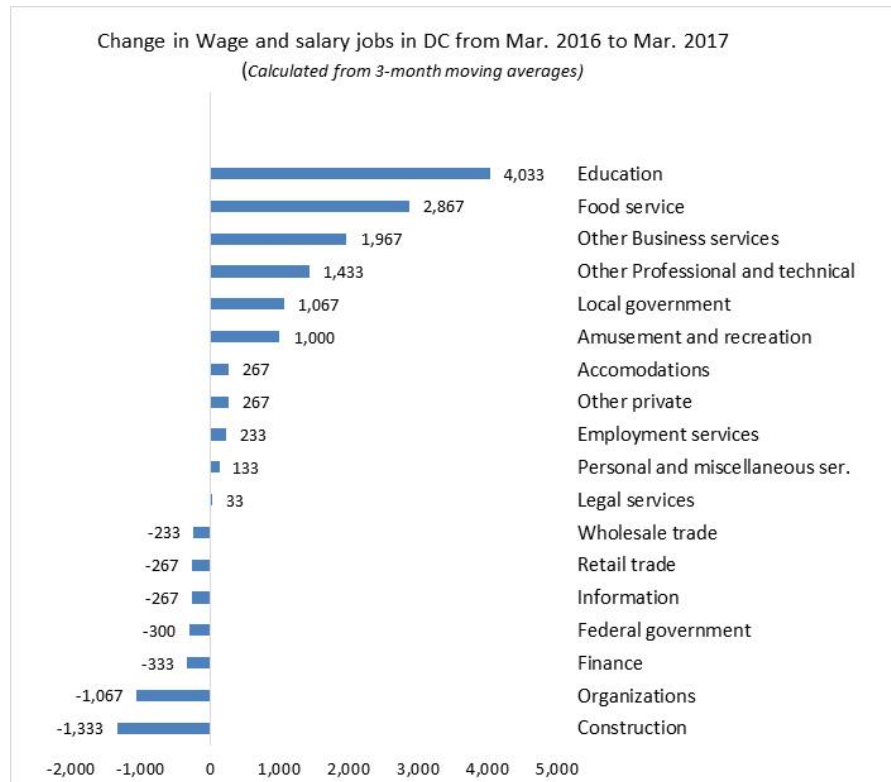


Table 8. Employment and income by sector of the DC economy: December 2016 (2016.4)

Sector	Wage and salary employment in DC in the Dec. 2016 quarter			Wages and salaries earned in DC in the Dec. 2016 quarter			Percentage Distributions			
	Level	Change from Dec. 2015		Level (\$B)	Ch. from Dec. 2015		Employment		Wages	
		2015	% change		(\$B)	% change	Dec. 2016	2015	Dec. 2016	2015
Total	790,200	8,467	1.1	72.19	3.73	5.45	100.0	100.0	100.0	100.0
Federal government	199,167	800	0.4	23.20	1.23	5.62	25.2	9.4	32.1	33.1
Local government	39,833	533	1.4	3.16	0.26	8.81	5.0	6.3	4.4	6.9
Business and professional services	168,167	3,833	2.3	18.95	1.13	6.34	21.3	45.3	26.2	30.2
Information and financial services	46,867	-200	-0.4	4.86	0.18	3.88	5.9	-2.4	6.7	4.9
Education and health services	139,267	1,633	1.2	7.79	0.17	2.17	17.6	19.3	10.8	4.4
Trade and hospitality services	104,400	2,400	2.4	6.73	0.30	4.63	13.2	28.3	9.3	8.0
Organizations and personal services	71,867	633	0.9	4.50	0.25	5.96	9.1	7.5	6.2	6.8
Other private	20,633	-1,167	-5.4	3.00	0.22	7.75	2.6	-13.8	4.2	5.8
<i>Private sector</i>	<i>551,200</i>	<i>7,133</i>	<i>1.3</i>	<i>45.83</i>	<i>2.24</i>	<i>5.15</i>	<i>69.8</i>	<i>84.2</i>	<i>63.5</i>	<i>60.1</i>
<i>Government</i>	<i>239,000</i>	<i>1,333</i>	<i>0.6</i>	<i>26.37</i>	<i>1.49</i>	<i>5.99</i>	<i>30.2</i>	<i>15.7</i>	<i>36.5</i>	<i>39.9</i>

Source: BLS and BEA. Wage data, but not wage and salary employment, is seasonally adjusted.

Wages and income

DC Personal Income growth was above 5% in the December quarter

- Wages and salaries earned in the District of Columbia were 5.5% higher in the December quarter compared to the same quarter of 2015.
- Wages earned by DC residents grew an estimated 4.6% in the December quarter compared to last year.
- In the December quarter, DC Personal Income grew 5.1%, above the US increase (3.7%).
- The growth rate of proprietors' income was 4.8% in the December quarter.
- Pensions and other transfers grew 7.3% over last year in the December quarter.

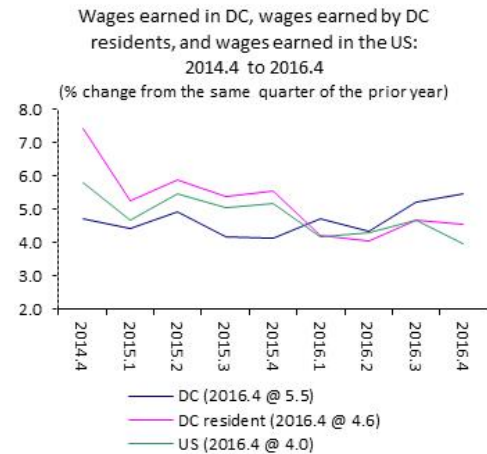


Table 9. DC Wages and Personal Income: December 2016 (2016.4)

(\$ billion at seasonally adjusted annual rates unless otherwise noted)

Indicator	FY 2013	FY 2014	FY 2015	FY 2016	4-qr. moving avg.	Latest qtr. (Dec)
Wages and salaries earned in DC	62.08	63.97	66.88	69.95	70.89	72.19
1 year change	1.43	1.89	2.91	3.08	3.33	3.73
% change	2.4	3.0	4.5	4.6	4.9	5.5
Supplements to wages & salaries	16.44	17.22	17.91	18.78	19.05	19.34
% change	-0.1	4.7	4.0	4.9	5.5	5.9
Income earned in DC**	74.25	77.01	81.21	85.17	86.33	87.92
% change	0.5	3.7	5.5	4.9	5.1	5.5
Net resident adjustment***	-45.54	-46.28	-47.93	-50.15	-50.90	-51.84
% change	-0.4	1.6	3.6	4.6	5.4	6.1
Income earned by DC residents**	28.71	30.74	33.29	35.02	35.43	36.07
% change	2.1	7.0	8.3	5.2	4.6	4.7
Wages and salaries of DC residents****	21.66	22.85	24.21	25.33	25.61	26.07
change from one year ago	0.85	1.18	1.36	1.12	1.07	1.14
% change	4.1	5.5	6.0	4.6	4.4	4.6
Proprietors' income earned by DC residents*	4.31	5.03	6.10	6.56	6.63	6.77
% change	1.3	16.6	21.3	7.5	4.8	4.8
Property income of DC residents	8.44	8.77	9.12	9.26	9.37	9.56
% change	5.3	3.9	4.1	1.5	2.5	4.7
Pensions and other transfers for DC residents	5.92	6.03	6.18	6.58	6.70	6.82
% change	3.3	1.8	2.5	6.4	7.0	7.3
DC Personal Income	43.08	45.53	48.59	50.86	51.49	52.45
1 year change	1.19	2.46	3.06	2.27	2.22	2.52
% change	2.8	5.7	6.7	4.7	4.5	5.1
US Personal income (% change from prior year)	3.0	3.5	5.0	3.7	3.6	3.7
US Wages and salaries (% change from prior year)	4.0	4.1	5.2	4.6	4.3	4.0

Addendum:

DC res. wages as % of wages earned in DC 34.9 35.7 36.2 36.2 36.1 36.1

* Proprietors' income is derived from federal tax data and therefore all proprietors' income is earned by DC residents.

**does not include social insurance paid by individuals. Wage and salary amounts shown do include social insurance paid by individuals.

***algebraic sum of (1) income earned in DC by non residents (negative) and (2) income earned by DC residents outside of DC (positive).

Since this is a negative number, the larger the increase (or faster the rate of growth), the less growth for income earned by DC residents.

****Est. by ORA; assumes wage and salary suppl. are the same % for DC resident wages as for wages earned in DC; excludes social insurance paid by individuals.

Source: BEA; date released March 28, 2017

Population, jobs, and per capita income

In 2015 and 2016 DC jobs grew faster than population

- For 2016, population increased 10,793 (1.6%) and wage and salary employment grew 13,258 (1.7%).
- In the past year population grew below the 5 year average from 2011 to 2016, and jobs were above the average.
- In the December quarter, DC's Personal Income grew at a faster rate than the US average, and DC outpaced the US in both population and per capita income.
- In the December quarter, wages per job in DC grew faster than wages per job in the US (4.3% v 2.4%).

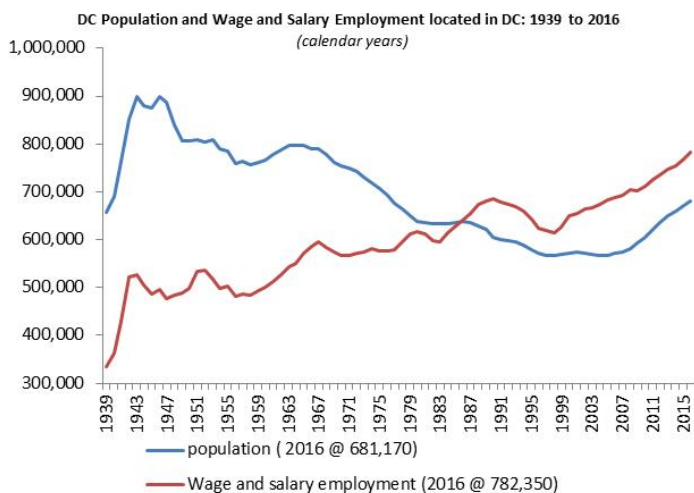
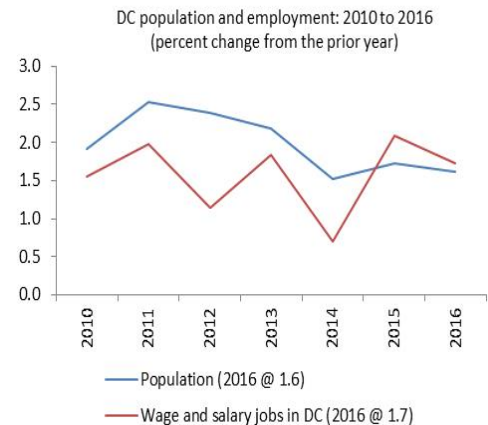


Table 10. DC Population and wage and salary employment located in DC: 2010 to 2016

Calendar year	Population			Wage and salary employment		
	Number	Change from prior yr. Number	%	Number	Change from prior yr. Number	%
2010	605,183	11,383	1.9	712,242	10,859	1.5
2011	620,477	15,294	2.5	726,292	14,050	2.0
2012	635,327	14,850	2.4	734,575	8,283	1.1
2013	649,165	13,838	2.2	748,025	13,450	1.8
2014	659,005	9,840	1.5	753,300	5,275	0.7
2015	670,377	11,372	1.7	769,092	15,791	2.1
2016	681,170	10,793	1.6	782,350	13,258	1.7
<i>Ch. from 2011 to 2016</i>		60,693	9.8		56,058	7.7
<i>Avg. annual ch.</i>		12,139			11,212	

Source: U.S. Bureau of the Census and BLS

Table 11. Per capita income in DC and the US: FY 2014 to December 2016

	DC				US			
	FY 2014	FY 2015	FY 2016	2016.4	FY 2014	FY 2015	FY 2016	2016.4
Per capita income	69,253	72,602	74,956	76,524	45,816	47,732	49,204	50,207
% ch in per capita income	3.8	4.8	3.2	3.4	2.7	4.2	3.1	3.0
% ch in population	1.8	1.8	1.4	1.6	0.8	0.8	0.5	0.7
% ch in personal income	5.7	6.7	4.7	5.1	3.5	5.0	3.7	3.7
Consumer price index	1.9	-0.1	0.9	1.9	1.6	0.3	0.9	1.8

Source: BEA for per capita income, population and Personal Income. Global Insight for DC CPI, Moody's Analytics for US CPI. Note: % changes are from the same period of the prior year.

Table 11A. Wages and salaries per job in DC and the US: FY 2014 to December 2016

	DC				US			
	FY 2014	FY 2015	FY 2016	2016.4	FY 2014	FY 2015	FY 2016	2016.4
Wages per job	85,111	87,469	89,679	91,362	53,275	54,906	56,385	57,028
% ch in wages per job	2.2	2.8	2.5	4.3	2.2	3.1	2.7	2.4
% ch in jobs	0.9	1.7	2.0	1.1	1.8	2.1	1.8	1.6
% ch in total wages and salaries	3.0	4.5	4.6	5.5	4.1	5.2	4.6	4.0

Source: BEA for wages and salaries and BLS for wage and salary employment. Note: % changes are from the same period of the prior year.

Single family and condominium housing

Some cooling in home sales in April, but average gains for the past three months are strong

- The 3-month moving total of single family home sales in April was up 2.9% from a year earlier, and the average selling price was 9.1% higher. The year-to-date median sales price (\$645,000) was 1.2% higher than the prior year.
- April condominium sales were up 9.7% from last year as measured by the 3-month moving total, and the average selling price was 5.1% higher. The year-to-date median sales price (\$451,500) was up 5.0% from last year.
- The total value of all home sales in April rose 13.4% from last year as measured by the 3-month moving total.

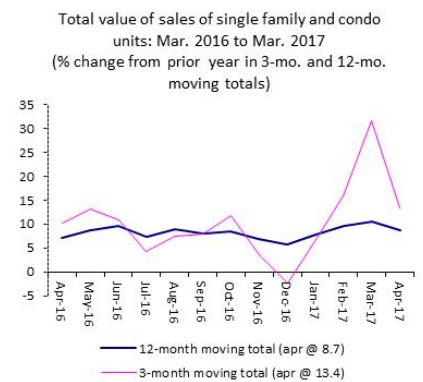
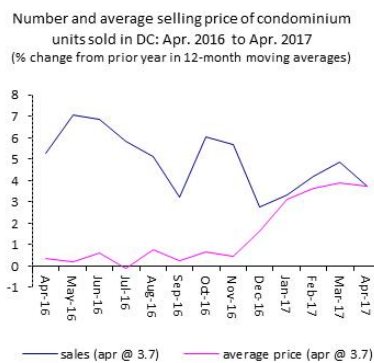
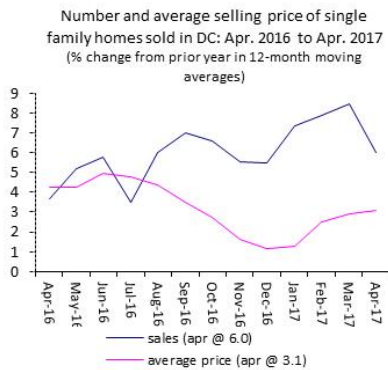


Table 12. D.C. Residential Real Estate Indicators: April 2017

Indicator	FY 2013	FY 2014	FY 2015	FY 2016	12-mo moving total or average	3-mo moving total or average	This month
Number of sales (settled contracts)							
Single family	3,979	4,024	4,097	4,385	4,454	1,003	319
1 year change	416	45	73	288	253	28	-62
% change	11.7	1.1	1.8	7.0	6.0	2.9	-16.3
Condo	3,487	3,592	3,832	3,955	4,047	1,006	371
1 year change	703	105	240	123	146	89	-19
% change	25.3	3.0	6.7	3.2	3.7	9.7	-4.9
Total	7,466	7,616	7,929	8,340	8,501	2,009	690
1 year change	1,119	150	313	411	399	117	-81
% change	17.6	2.0	4.1	5.2	4.9	6.2	-10.5
Average prices of units that sold							
Single family (\$)	712,799	736,362	767,870	794,668	812,520	812,649	781,801
1 year change	82,690	23,563	31,508	26,798	24,507	67,507	-1,018
% change	13.1	3.3	4.3	3.5	3.1	9.1	-0.1
Condo (\$)	447,827	472,419	499,650	500,824	510,860	516,576	496,257
1 year change	18,216	24,592	27,232	1,173	18,372	24,968	11,703
% change	4.2	5.5	5.8	0.2	3.7	5.1	2.4
Total value of all sales (\$ million)							
	4,397.8	4,660.0	5,060.6	5,465.4	5,686.4	1,334.8	433.5
1 year change	956.7	262.2	400.6	404.8	454.8	157.4	-53.7
% change	27.8	6.0	8.6	8.0	8.7	13.4	-11.0
Ratio: active inventory to sales							
Single family	1.6	1.6	1.5	1.6	1.4	1.5	1.4
Condo	1.7	1.9	1.7	1.8	1.6	1.5	1.7

Median contract prices, CY to date in April 2017 : single family \$645,000 (1.2% 1 yr ch); condo \$451,500 (5.0% 1 yr ch)

Closed (settled) contracts. Average prices calculated by ORA based on number of sales and total value of sales.

Source: Metropolitan Regional Information Systems (MRIS); median price and inventory accessed through Greater Capital Area Assn. of Realtors.

Single family and condominium housing

DC home prices have been growing faster in DC than in the US or the metropolitan area

- The percentage change in DC home prices picked up in the December quarter, according to the Federal Housing Finance Agency Index of single-family same-property transactions. DC's gain over the prior year was 7.3%. The US index was up 7.1%, and the Washington metropolitan area gain was 6.5%.
- 22% of all single family sales over the past 12-months have been for properties greater than \$1 million.
- Sales of new condominium over the past 12 months were 13.6% higher than a year earlier, and single family housing permits were up by 31.8%.

Table 13. Federal Housing Finance Agency Price Index for single family property in DC, DC metro area, and US: December 2016 (2016.4)

Indicator	Fiscal year average				Last 2 Q's	
	FY 2013	FY 2014	FY 2015	FY 2016	2016.3	2016.4
% change from prior year in value of index						
DC	12.7	7.2	8.9	5.2	7.1	7.3
DC metro area	8.5	5.8	3.6	2.9	4.3	6.5
US	6.8	6.4	5.8	5.9	6.5	7.1

Source: (1) Federal Housing Finance Agency "Expanded-data HPI Index" (sales plus refinancings) (nsa). This quarterly index is a broad measure of the movement of single-family house price, measuring the average price changes in repeat sales or refinancings of the same properties. This information is estimated using Enterprise, FHA, and Real Property County Recorder data licensed from DataQuik.

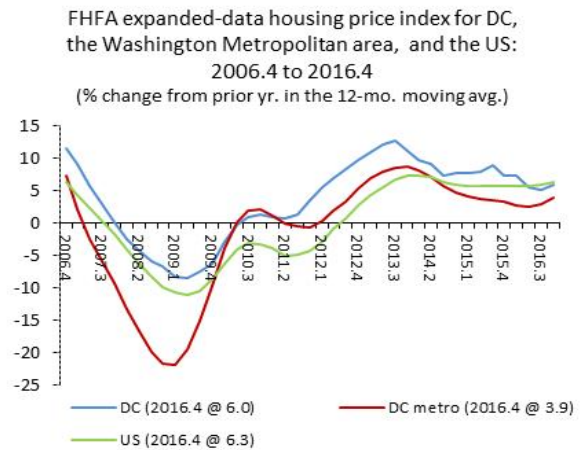
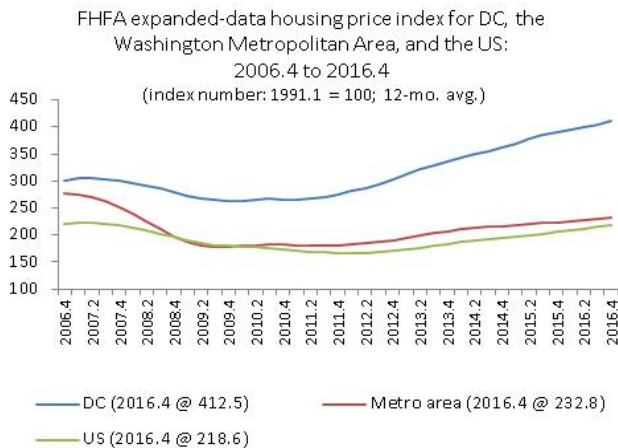
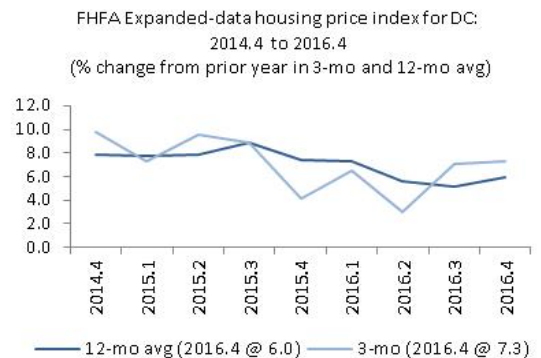


Table 14. D.C. Single family and condominium home sales at prices of \$1 million or more: April 2017

Category	FY 2014	FY 2015	FY 2016	12-mo	3-mo	This month
				moving total	moving total	
Single family homes	734	765	936	998	225	73
1 year change	45	31	171	168	39	-9
% change	6.5	4.2	22.4	20.2	21.0	-11.0
percent of all single family sales	18.2	18.7	21.3	22.4	22.4	22.9
Condominiums	128	160	167	195	57	18
1 year change	16	32	7	49	22	5
% change	14.3	25.0	4.4	33.6	62.9	38.5
percent of all condominium sales	3.6	4.2	4.2	4.8	5.7	4.9

Source: Metropolitan Regional Information Systems (MRIS). Sales are ones closed (settled) during period shown.

Table 15. Single family housing permits and sales of new condo. units in DC: FY 2012 to 2017.1

FY	Condo.	
	Permits	Sales
FY 2012	236	479
FY 2013	368	442
FY 2014	267	516
FY 2015	293	483
FY 2016	283	680
12-mo. ending:		
2017.1	336	618
1 yr ch	81	74
% ch.	31.8	13.6

Source: Census Bureau (permits), and Delta Associates (condo sales)

Apartments

Compared to a year ago, inventory grew more than occupancy in the March quarter, the vacancy rate was up, and construction increased

- According to CoStar, in March occupied apartment units increased 3,649 (2.1%) from a year earlier; inventory was up by 5,040 (2.8%).
- The vacancy rate was 5.1% in March, up from 4.5% a year earlier. Rents rose 2.4% over the prior year.
- 14,335 apartment units were under construction in March, up by 2,615 from the prior year.
- Class A units account for 6.6% of all apartment buildings, 19.2% of all units, 18.4% of the occupied units, and 85.9% of new construction.
- Class A vacancy rate was 8.7% in December, up from 7.5% a year earlier. Average rent was up 0.1% from the prior year.

DC Apartment units: 12-month change in inventory and occupancy, and number under construction (all classes): 2015.1 to 2017.1

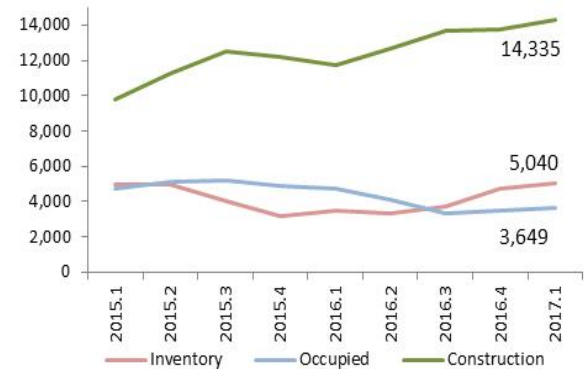


Table 17. Market rate apartment units in DC: 2011 to 2017.1

CY	Inventory Units					Occupied units			Effective monthly rent \$ per month		Under Construction		
	Buildings	Number	1 yr ch	% ch.	% vacant	Number	1 yr ch	% ch	per unit	1 yr % ch	Buildings	Units	Avg units per bldg.
2011	3,378	163,233	1,539	1.0	4.8	155,475	909	0.6	\$1,484	2.5	21	4,784	228
2012	3,387	165,306	2,073	1.3	4.7	157,569	2,094	1.3	\$1,529	3.0	35	8,020	229
2013	3,402	169,108	3,802	2.3	5.5	159,755	2,186	1.4	\$1,576	3.1	50	7,755	155
2014	3,430	174,523	5,415	3.2	5.6	164,744	4,989	3.1	\$1,634	3.7	84	8,269	98
2015	3,483	177,676	3,153	1.8	4.5	169,648	4,904	3.0	\$1,680	2.8	98	12,221	125
2016	3,533	182,375	4,699	2.6	5.1	173,133	3,485	2.1	\$1,724	2.6	91	13,765	151
2016.4	3,533	182,375	4,699	2.6	5.1	173,133	3,485	2.1	\$1,724	2.6	91	13,765	151
2017.1	3,543	183,394	5,040	2.8	5.1	174,020	3,649	2.1	\$1,738	2.4	93	14,335	154
1 Q ch.	10	1,019				887			14		2	570	

Source: CoStar. Includes units in private buildings with 5 or more units. CY amounts are last quarter of the year. Includes some affordable units in market rate buildings. Vacancy rate is unoccupied units as % of inventory

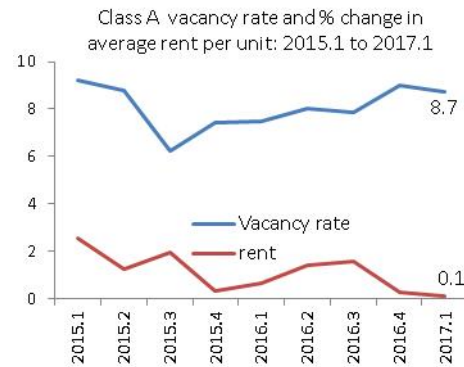
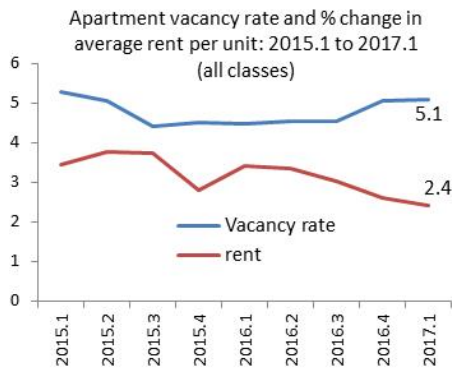


Table 18. Market rate apartment units in DC, Classes A, B, and C: 2017.1

Class	Inventory Units					Occupied units			Effective monthly rent		Under construction		
	Buildings	Number	1 yr ch	% ch	% vacant	Number	1 yr ch	% ch	\$ per month	1 yr % ch	Buildings	Units	Avg. size
Class A	234	35,144	4,309	14.0	8.7	32,076	3,549	12.4	\$2,435	0.1	71	12,307	173
Class B	1,158	78,672	954	0.6	4.1	75,427	267	0.4	\$1,765	1.1	22	2,028	92
Class C	2,138	69,374	-223	-0.3	4.4	66,322	-181	-0.3	\$1,279	2.2	0		

Source: CoStar. Includes units in private sector buildings with 5 or more units. CY amounts are last quarter of the year. Includes some affordable units in market rate buildings. Vacancy rate is unoccupied units as % of inventory.

Note: Percentages are for 2017.1

Commercial office space

Compared to a year ago, occupied space, rents, and construction all increased in the March quarter, and the vacancy rate decreased

- According to CoStar, for the the 12-month period ending March occupied office space increased by 0.62 million sq. ft. from the prior year. Base rent rose 3.6%, and the vacancy rate fell to 11.0% (including sublet).

- The vacancy rate for class A space was 12.5%, down from 13.2% a year ago. Class A rent rose 3.4% over the past year.

- Space under construction in March 2016 (5.47 million square feet in 18 buildings) was 2.77 msf (102%) more than a year earlier.

- For Class B and Class C properties, inventory and occupancy have declined over the past year while rents have increased.

DC commercial office space: 1 yr change in inventory and occupied space, and under construction: 2015.1 to 2017.1 (all classes, msf)

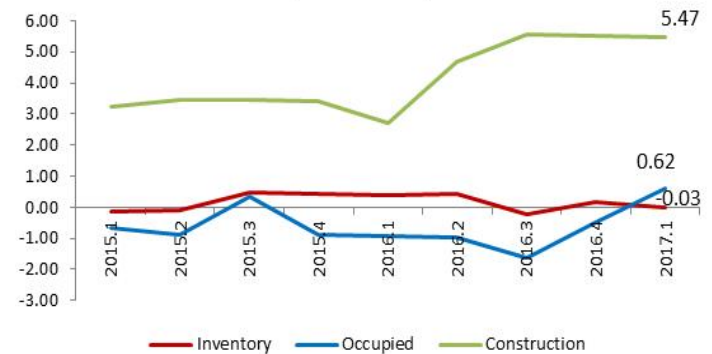
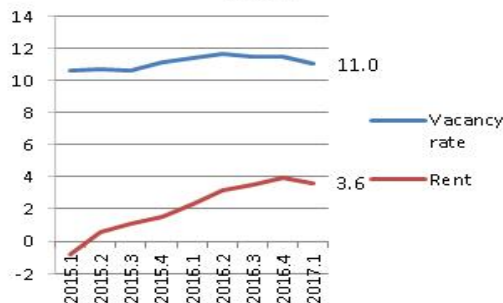


Table 19. DC commercial office space: 2011 to 2017.1

CY (year end)	Buildings	Inventory			Occupied space			Vacancy %		Base rent (direct)		Under constr.		
		Level (msf)	1 yr ch (msf)	1 yr % ch	Level (msf)	1 yr ch (msf)	% ch	Direct	Total	\$ per sq ft.	1 yr % ch	Buildings	msf	Avg. sf per bldg
2011	2,373	152.89	0.90	0.6	136.73	0.90	0.7	9.9	10.6	\$46.13	1.2	9	2.04	226,833
2012	2,363	152.64	-0.26	-0.2	138.14	1.42	1.0	8.9	9.5	\$46.56	0.9	8	2.21	276,436
2013	2,360	153.41	0.78	0.5	138.62	0.48	0.3	9.1	9.6	\$46.63	0.2	12	2.13	177,131
2014	2,354	153.91	0.49	0.3	138.08	-0.54	-0.4	9.8	10.3	\$47.22	1.3	13	2.44	187,402
2015	2,347	154.35	0.44	0.3	137.17	-0.91	-0.7	10.7	11.1	\$47.93	1.5	17	3.41	200,421
2016	2,343	154.51	0.16	0.1	136.69	-0.49	-0.4	10.9	11.5	\$49.80	3.9	19	5.50	289,663
2016.4	2,343	154.51	0.16	0.1	136.69	-0.49	-0.4	10.9	11.5	\$49.80	3.9	19	5.50	289,663
2017.1	2,341	154.42	-0.03	0.0	137.47	0.62	0.5	10.2	11.0	\$49.86	3.6	18	5.47	304,126
1 Q ch	-2		-0.09			0.78		-0.7	-0.5	\$0.06		-1	-0.03	

All DC commercial office space: vacancy rate (with sublet) and annual change in base rent (direct) from: 2015.1 to 2017.1



DC Class A office space: vacancy rate (with sublet) and annual increase in base rent (direct) from 2015.1 to 2017.1

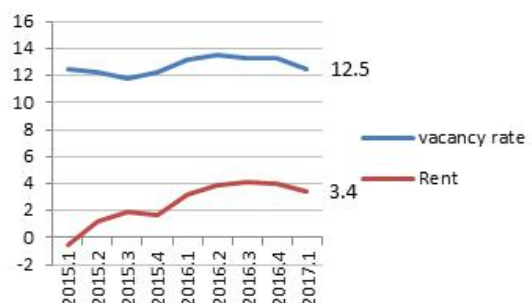


Table 20. DC Class A, B, and C commercial office space: 2017.1

CY (year end)	Buildings	Inventory			Occupied space			Vacancy %		Base rent (direct)		Under constr.	
		Level (msf)	1 yr ch (msf)	1 yr % ch	Level (msf)	1 yr ch (msf)	% ch	Direct	Total	\$ per sq ft.	1 yr % ch	buildings	msf
Class A	335	90.81	0.59	0.6	79.48	1.17	1.5	11.6	12.5	\$53.84	3.4	16	5.45
Class B	887	53.13	-0.47	-0.9	47.97	-0.38	-0.8	9.1	9.7	\$43.96	3.9	2	0.03
Class C	1,115	10.43	-0.14		10.00	-0.17	-1.6	3.7	4.1	\$34.27	7.6	0	0.00

Source: CoStar.

Trends and outlook for housing and office space

Housing occupancy gains for the year ending in March appears to be similar to the pace for FY 2016

- An indicator of increased housing occupancy over the past 12 months rose by 4,500 units in the March quarter, about the same pace as the FY 2016 total.
- Class A office space occupancy has been gaining relative to job growth over the past 2 quarters.
- Delta Associates: (1) demand for apartments in the next 3 years to be less than in the prior 3 years and less than new supply, and (2) demand for office space in the next 2 years to be more than in the 2 prior yrs. and about equal to new supply.

Table 21. Estimated DC households, housing permits, and indicators of newly occupied housing units: 2011 to 2017.1

date	Estimated DC households				Measures of newly occupied housing units					
	CY	Population	pop/hh ratio	Estimated households	1 yr ch	Housing permits (year total)	1 yr. ch. In occupied apt. units	1 yr. new condo sales	1 yr. single family permits	Total 1 yr. new occupancy
2011		620,477	2.258	274,846	6,625	3,853	909	371	135	1,415
2012		635,327	2.259	281,267	6,421	4,120	2,094	468	104	2,666
2013		649,165	2.260	287,233	5,966	3,256	2,186	514	267	2,967
2014		659,005	2.261	291,424	4,191	4,187	4,989	476	236	5,701
2015		670,377	2.263	296,286	4,862	4,956	4,904	497	368	5,769
2016		681,170	2.267	300,470	4,184	4,668	3,485	667	288	4,440
2017.1						4,648	3,649	618	232	4,499

Source: 1) Population: US Census Bureau 2) population/household ratio based on Office of Planning estimates for 2010, 2015, and 2020 3) households: calculated from population using the pop/hh ratio; 4) Housing permits: US Census Bureau; 5) occupied apt. units: CoStar (see table 17 of this report); 6) new condo sales: Delta (see table 15 of this report); and 7) single family housing permits: Census Bureau, with 2 year lag (see table 15 of this report).

Note: Housing units can be rented or purchased by entities not considered resident households for Census purposes--for example a unit can be leased or purchased by a company. Also units in the existing housing stock can be subdivided, combined, or destroyed.

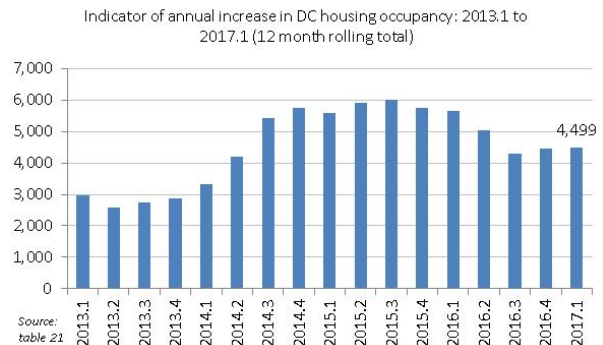
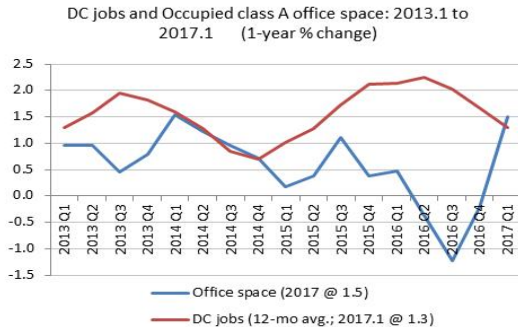


Table 22. Delta Associates outlook for Class A apartments in DC and the surrounding metro area: Mar. 2017 to Mar. 2020

Indicator	DC	No VA	Sub MD	Total	DC % of total
Inventory March 2017					
Inventory (msf)	22,703	66,690	35,281	124,674	18.2
Estimated net activity to March 2020					
new supply (msf)	14,205	11,882	9,876	35,963	39.5
new demand (msf)	8,130	11,111	7,859	27,100	30.0

Source: Delta Associates

Table 23. Delta Associates outlook for commercial office space in DC and the surrounding metro area: March 2017 to March 2019

Indicator	DC	No VA	Sub MD	Total	DC % of total
Inventory March 2017					
Inventory (msf)	142.3	179.9	85.9	408.1	34.9
Estimated net activity to March 2019					
new supply (msf)	4.2	3.7	0.1	8.0	52.5
new demand (msf)	4.0	2.7	0.8	7.5	53.3

Source: Delta Associates msf = million square feet

Table 22A Delta 3-year estimate of new supply and demand for apartment units in DC: 2017.1 to 2020.1

	Actual: 2014.1 to 2017.1 (CoStar)	Forecast: 2017.1 to 2020.1
New supply	11,668	14,205
New demand	10,996	8,130

Source: CoStar for actual, Delta Associates for forecast. The sources are not strictly comparable.

Table 23A. Delta 2-year estimate of new supply and demand for Class A office space in DC: 2017.1 to 2019.1 (msf)

	Actual: 2015.1 to 2017.1 (CoStar)	Forecast: 2017.1 to 2019.1
New supply	1.7	4.2
New demand	1.5	4.0

Source: CoStar for actual, Delta Associates for forecast. The sources are not strictly comparable.

Housing permits and value of all property transfers

The value of property transferred continues to outpace last year's level.

● For the 12-month period ending March, 4,648 housing permits were issued, down 4.9% from a year ago. The 3-month total was 2.9% below last year.

● The value of April property transfers rose by 20.38% from last year as measured by the 3-month moving total. The 12-month moving total (\$13.95billion) was 758% higher than last year.

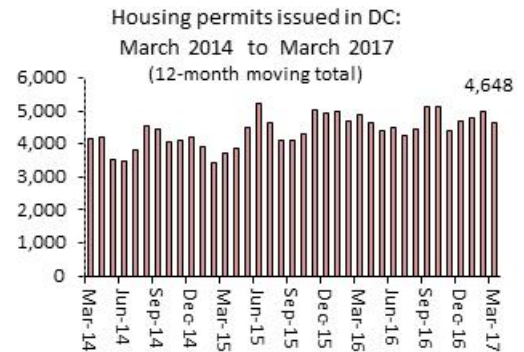


Table 25. Housing unit building permits issued in DC: March 2017

	FY 2014	FY 2015	FY 2016	12-mo. moving total	3-month moving total	This month
Total units	4,467	4,131	5,129	4,648	677	277
change from 1 yr ago	612	-336	998	-237	-20	-340
% change from 1 year	15.9	-7.5	24.2	-4.9	-2.9	-55.1
Multi-family projects with 5 or more units						
number	32	37	40	38	12	7
average size	140	112	128	122	56	29

Source: Census Bureau (permits for privately owned units issued during period).

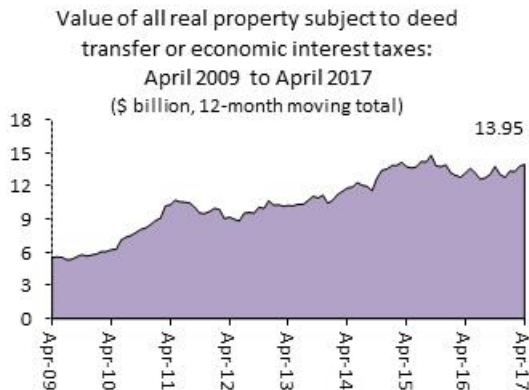


Table 26. Market Value of Real Property transfers subject to the Deed Transfer or Economic Interest tax: April 2017

	FY 2013	FY 2014	FY 2015	FY 2016	12-mo moving total	3-month moving total	This month
All property transfers (\$ million)	11,063.9	11,569.8	14,766.3	13,035.9	13,951.2	3,566.5	1,217.9
change from one year ago (\$M)	1,530.6	505.8	3,196.5	-1,730.3	769.4	614.3	167.1
% change from 1 year ago	16.1	4.6	27.6	-11.7	5.8	20.8	15.9

Note: represents value of property or economic interest transferred as of date deed noted by the Recorder of Deeds.

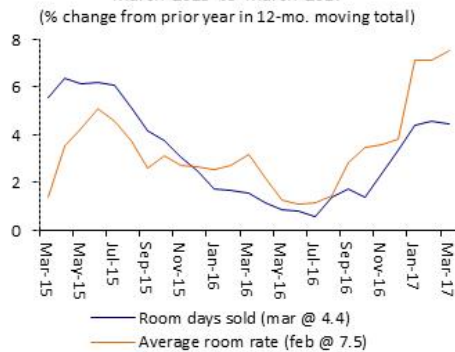
Source: OCFO/Recorder of Deeds and OCFO/DRA (calculated from tax collections and deposits adjusted for tax rate changes).

Hospitality

Hotel revenues for the month of March were the highest month ever—\$218.6 million

- Hotel revenues for March as measured by the 3-month moving total were up by 27.4% over the prior year, reflecting the impact of the Inauguration.
- In March the 3-month moving total for hotel room-days sold was 6.8% above a year earlier. The average room rate was 19.3% higher. For the past 12 months, hotel revenue was up 12.3%.
- Employment in food services was 5.8% more in March than a year earlier as measured by the 3-month moving average. Hotel employment was up 1.8%.
- February airline traffic into the DC area was up 6.2% compared to a year earlier as measured by the 3-month moving total. Reagan National was up 6.1%. For the past 12-months, total traffic into the DC area was 3.6% higher.

DC hotel room days sold and average room rate:
March 2015 to March 2017
(% change from prior year in 12-mo. moving total)



Hotel room sales revenue: Mar. 2016 to Mar. 2017
(percent change in 3-month and 12-month moving average from same period of prior year)



Table 27. Hospitality Industry: March 2017

Indicator	Units	date	FY 2014	FY 2015	FY 2016	12-month moving total or average*	3-month moving total or average*	This month
Hotel stays								
Hotel room-days sold	('M)	mar	7.869	8.197	8.338	8.598	1.981	0.800
			0.189	0.328	0.141	0.366	0.126	0.022
			2.5	4.2	1.7	4.4	6.8	2.8
Average room rate	\$	mar	209.87	215.34	221.48	233.16	252.41	273.30
			2.56	5.46	6.14	16.29	40.80	22.50
			1.2	2.6	2.9	7.5	19.3	9.0
Occupancy rate (average)	%	mar	76.6	77.5	78.0	78.6	72.7	84.9
			0.8	0.9	0.5	0.8	1.0	-2.4
			1.0	1.2	0.6	1.0	1.5	-2.7
Room revenue	(\$M)	mar	1,651.4	1,765.1	1,846.6	2,004.8	499.9	218.6
			59.4	113.6	81.5	219.4	107.4	23.5
			3.7	6.9	4.6	12.3	27.4	12.1
Airline passengers								
DCA	1 yr % ch	feb	0.0	10.3	2.8	2.8	6.1	2.7
IAD	1 yr % ch	feb	-1.9	0.3	-0.1	2.7	6.3	1.5
BWI	1 yr % ch	feb	-0.5	4.1	6.0	5.1	6.2	2.5
Total	1 yr % ch	feb	-0.8	4.8	3.0	3.6	6.2	2.3
Employment								
Accommodations	level ('000)	feb	15.2	15.2	14.9	15.0	14.8	14.9
	1 yr ch		0.0	0.0	-0.3	0.0	0.3	0.1
	1 yr % ch		-0.2	-0.2	-1.9	0.1	1.8	0.7
Food and bev	level ('000)	feb	47.1	49.7	51.4	52.6	52.7	53.5
	1 yr ch		2.0	2.7	1.6	1.8	2.9	2.7
	1 yr % ch		4.3	5.6	3.3	3.5	5.8	5.3

* Total for hotel rooms sold and room revenue.

Source: STR (hotel data); BLS (employment); Airport authorities (airline passengers).

US economy and the federal government sector

First quarter US nominal GDP was 4.0% above last year

- US real GDP growth in the March (2017.1) quarter was estimated at 1.9% above a year earlier; nominal growth was 4.0%.
- Federal government consumption and investment for all activities was 2.1% higher in the 2017.1 quarter than a year earlier, about half the growth rate for nominal GDP for the entire US economy.
- US employment (seas. adj.) increased by 211,000 in April from the month before.
- The US unemployment rate (seas. adj.) fell to 4.4% in April.
- In March the average S&P 500 index rose 1.6% from February; it was 17.1% above a year earlier.

Quarterly change in US Real and Nominal GDP:
2015.1 to 2017.1

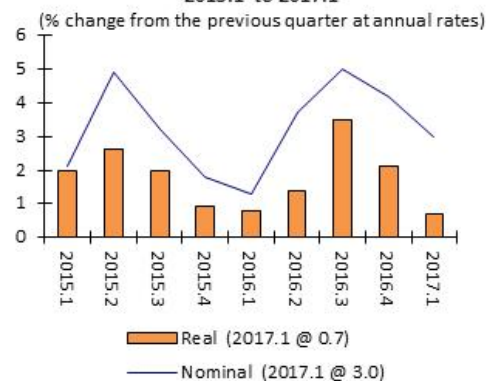


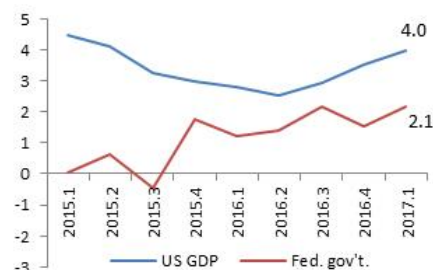
Table 29. Federal government sector, US GDP accounts: 2017.1

(percent change from same period of prior year)

Indicator	FY 2014	FY 2015	FY 2016	12-mo	
				avg	2017.1
Non-defense					
Compensation of employees	1.7	4.1	3.7	4.9	5.7
Purchases of goods and services	-1.7	8.0	7.7	7.8	6.3
Gross investment	-0.4	3.0	1.4	2.5	4.3
Defense					
Compensation of employees	-0.6	-0.8	1.1	2.3	3.3
Purchases of goods and services	-7.2	-5.2	-0.9	-2.8	-3.9
Gross investment	-4.2	-4.5	2.3	2.1	2.6
All federal consumption and investment	-1.8	-0.1	1.6	1.8	2.1

Source: BEA (April 28, 2017). Nominal values.

Federal government consumption and investment and US GDP: 2015.1 to 2017.1 (1 yr % ch)



Federal government consumption and investment, by defense and non-defense: 2014.4 to 2016.4 (1 yr % ch)

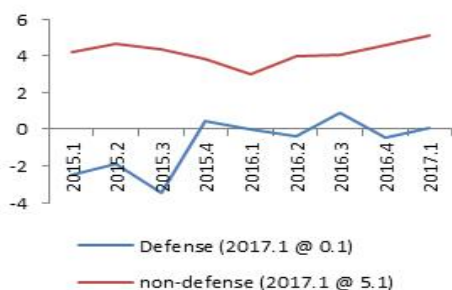


Table 30. Qtr. to Qtr. ch. in US GDP: 2016.1 to 2017.1

(% ch. from previous quarter at seasonally adj. annual rates)

Indicator	2016.1	2016.2	2016.3	2016.4	2017.1
US GDP real	0.8	1.4	3.5	2.1	0.7
US GDP nominal	1.3	3.7	5.0	4.2	3.0
Wages and salaries	-0.7	6.6	5.9	3.8	4.0
Personal income	1.3	4.8	4.6	3.8	4.0

Note: GDP=Gross Domestic Product Source: BEA, updated Apr. 28, 2017.

Table 28. US GDP, income, and inflation: 2017.1

(percent change from same period of prior year)

Indicator	FY 2014	FY 2015	FY 2016	12-mo avg	2017.1
US GDP real	2.4	2.8	1.6	1.7	1.9
US GDP nominal	4.3	4.0	2.8	3.2	4.0
US Personal income	3.5	4.9	3.6	3.8	4.4
US wages	4.0	5.2	4.6	4.5	5.2
Corporate profits*	5.4	-1.6	3.7	na	na
S and P stock index	20.3	9.7	0.4	7.6	19.3
US CPI	1.6	0.3	0.9	1.6	2.5

Source: BEA (April 28, 2017), BLS, Yahoo. na = not available

*Before tax, with IVA and CCAAdj.

Table 31. Monthly selected US Indicators: January 2017 to April 2017

Indicator	January	February	March	April
S and P stock index (level)	2275	2330	2367	2359
% change from prior month	1.3	2.4	1.6	-0.3
% change from 1 year ago	18.6	22.3	17.1	13.7
10 yr. Treasury Interest rate (level)	2.40	2.42	2.48	2.29
CPI % ch from prior month (seasonally adjusted)	0.55	0.12	-0.29	0.17
CPI % ch from prior year (seasonally adjusted)	2.54	2.80	2.38	2.20
Jobs (seasonally adjusted level, in millions)	145.541	145.773	145.852	146.063
change from prior month (thousands)	216	232	79	211
% change from prior month	0.1	0.2	0.1	0.1
Resident employment (season. adj. level, in mil.)	152.081	152.528	153.000	153.153
change from prior month (thousands)	-30	447	472	153
% change from prior month	0.0	0.3	0.3	0.1
Unemployment rate (seasonally adj.)	4.8	4.7	4.5	4.4

Source: BLS and Yahoo! Finance.

DC tax collections

**Total DC tax collections (before earmarking):
April 2012 to April 2017**
(12-month moving total in April 2017 is \$7,290 million)

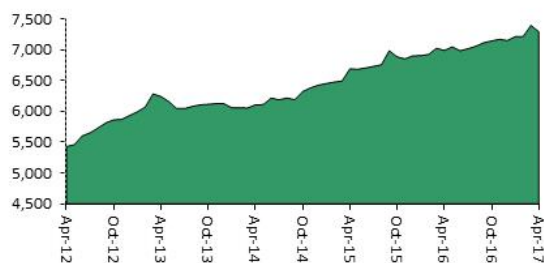


Table 32. Tax Collections (before earmarking): April 2017 (Preliminary)

Tax	Revenue (from CAFR)				Tax collections			
	FY 2013	FY 2014	FY 2015	FY 2016	12-month moving total	FY 2017 to date	3-month moving total	This month
Total taxes	6,100.5	6,290.0	6,916.8	7,241.0	7,290.3	4,043.9	2,418.2	876.1
1 year change	247.2	189.5	656.9	324.2	302.5	177.6	77.4	-105.5
% change	4.2	3.1	10.0	4.7	4.3	4.6	3.3	-10.7
Real property	1,914.8	2,015.6	2,194.5	2,357.5	2,416.6	1,246.6	1,218.3	304.8
1 year change	92.8	100.7	178.9	163.0	130.8	69.2	68.3	-128.2
% change	5.1	5.3	8.9	7.4	5.7	5.9	5.9	-29.6
General sales	1,137.9	1,172.1	1,315.3	1,343.1	1,382.2	830.3	341.1	133.7
1 year change	26.8	34.2	143.2	27.8	83.0	81.5	34.9	6.7
% change	2.4	3.0	12.2	2.1	6.4	10.9	11.4	5.3
Individual income	1,640.9	1,679.2	1,868.0	1,907.9	1,854.1	1,077.6	398.7	240.3
1 year change	150.2	38.3	188.9	39.8	-1.2	-19.9	-20.0	-20.4
% change	10.1	2.3	11.2	2.1	-0.1	-1.8	-4.8	-7.8
withholding	1,391.2	1,472.9	1,553.2	1,627.6	1,703.7	1,054.4	487.6	176.3
1 year change	69.6	81.7	80.3	74.4	109.2	80.1	59.4	29.8
% change	5.3	5.9	5.4	4.8	6.8	8.2	13.9	20.3
non-withholding	249.6	206.2	314.8	280.3	150.4	23.1	-88.8	64.0
1 year change	80.6	-43.4	108.6	-34.5	-110.4	-100.0	-79.4	-50.2
% change	47.7	-17.4	52.6	-11.0	-42.3	-81.2	na	-43.9
Corporate income	299.0	280.2	308.0	387.1	394.4	257.1	134.6	82.8
1 year change	-3.9	-18.8	27.8	79.1	42.4	38.1	5.5	52.1
% change	-1.3	-6.3	9.9	25.7	12.0	17.4	4.3	169.6
Unincorporated Bus.	154.3	135.4	139.8	169.4	168.9	111.5	74.6	56.0
1 year change	-8.7	-18.9	4.4	29.6	17.9	10.7	10.0	1.6
% change	-5.3	-12.3	3.2	21.2	11.8	10.6	15.5	3.0
Deed taxes*	372.8	391.2	480.6	445.2	462.1	254.0	107.1	30.1
1 year change	60.3	18.4	89.4	-35.4	26.3	17.9	1.7	-12.6
% change	19.3	4.9	22.8	-7.4	6.0	7.6	1.6	-29.5
Other taxes	580.8	616.4	610.6	630.9	612.0	266.9	143.8	28.5
1 year change	-70.4	35.6	-5.8	20.3	3.4	-19.8	-23.1	-4.7
% change	-10.8	6.1	-0.9	3.3	0.6	-6.9	-13.8	-14.2

*Deed taxes include deed recordation, deed transfer, and economic interest taxes on real property transactions.

Note: (1) Revenues for the fiscal years shown are based on the CAFR for those years.

(2) Tax collections data subject to accounting adjustments.

(3) This table and the graphs on the next page may include adjustments to the timing and consistency of collection reporting intended to make comparisons with prior year periods more meaningful. The data may therefore vary from other OCFO reports.

Source: OCFO/ORA

Individual income tax collections running behind last year despite strong withholding

• For the 12 month period ending April total tax collections (before earmarking) were \$302.5million (4.3%) more than in the prior year. For the last 3 months they were 3.3% above last year.

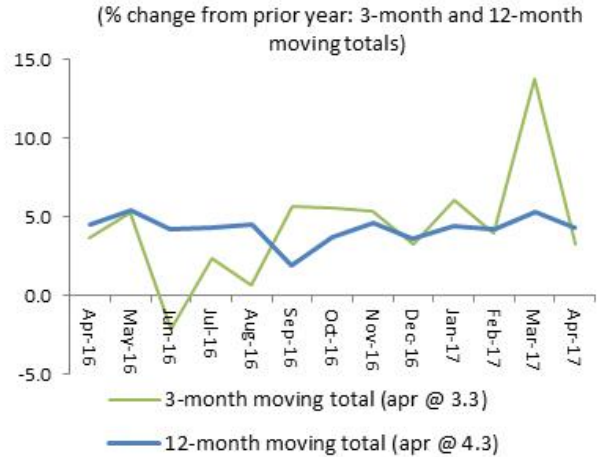
• Individual income tax collections were 0.1% below last year for the 12-months ending April, but withholding was 6.8% higher. For the past 3 months, withholding was up 13.9% but all income tax collections were down 4.8%

• General sales tax collections were 6.4% above last year for the 12-months ending April. For the past 3 months, they were 11.4% above last year.

• Deed tax collections for the 12-months ending April were up 6.0% from last year; for the past 3 months they were up 1.6%.

• Corporate income taxes in April were up 12.0% and unincorporated business income taxes rose 11.8% from last year (12-mo. total).

**Total tax collections (before earmarks):
April 2016 to April 2017**



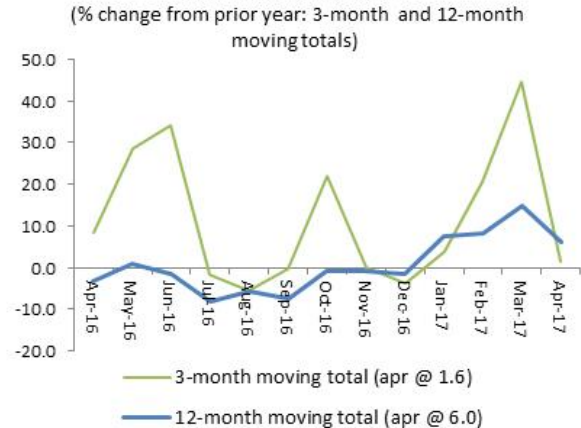
**Withholding for the Individual Income tax:
April 2016 to April 2017**



**General Sales tax collections (before earmarks):
April 2016 to April 2017**



**Deed tax collections (before earmarks):
April 2016 to April 2017**



**General Sales tax and Withholding for the Individual Income tax:
April 2016 to April 2017**



US economic forecasts

April Blue Chip forecast: little change from moderate growth estimates of prior months

- The April Blue Chip Indicators kept GDP growth in FY 2017 at 2.2%, with growth to continue at 2.4% in FY 2018. Nominal growth is 4.1% for FY 2017 and 4.6% for FY 2018.
- CBO's January economic and budget outlook: real growth rates of 2.2% in FY 2017 and 2.1% in FY 2018.
- The Blue Chip Indicators April forecast for inflation (CPI): 2.4% for FY 2017 and 2.3% for FY 2018.
- Global Insight and Moody's Analytics April forecasts for US Personal Income: 4.2% and 4.4%, respectively, in FY 2017; 5.0% and 5.3% in FY 2018.
- S&P 500 March baseline forecasts: Global Insight's outlook to the end of FY 2018 is more optimistic than Moody's. Global insight has an 11.4% annual gain in the 4th quarter of 2017, Moody's Analytics' gain is 5.4%.

Table 33. Forecasts for US nominal and real GDP: FY 2014 through FY 2018
(% change from prior fiscal year)

Fiscal year and date of forecast	real			nominal		
	Blue Chip	IHS		Blue Chip	IHS	
		Moody's Analytics	Global Insight		Moody's Analytics	Global Insight
FY 2014 Actual	2.4	2.4	2.4	4.3	4.3	4.3
FY 2015 Actual	2.8	2.8	2.8	4.0	4.0	4.0
FY 2016 Actual	1.6	1.6	1.6	2.8	2.8	2.8
FY 2017						
January	2.3	2.5	2.1	4.2	4.3	4.7
February	2.2	2.4	2.6	4.1	4.3	4.2
March	2.2	2.2	2.1	4.1	4.1	4.2
April	2.2	2.1	2.3	4.1	4.1	4.4
FY 2018						
January	2.3	3.0	2.5	4.5	5.5	6.0
February	2.4	2.9	2.5	4.6	5.4	4.7
March	2.4	2.9	2.6	4.6	5.5	4.9
April	2.4	2.5	2.6	4.6	4.9	5.0

Sources: BEA, Blue Chip Indicators, Moody's Economy.com, and IHS Global Insight.

Blue Chip Indicators estimate of US Nominal and Real GDP: FY 2011 to FY 2018
(% change from the prior year; Apr. 2017 estimate)

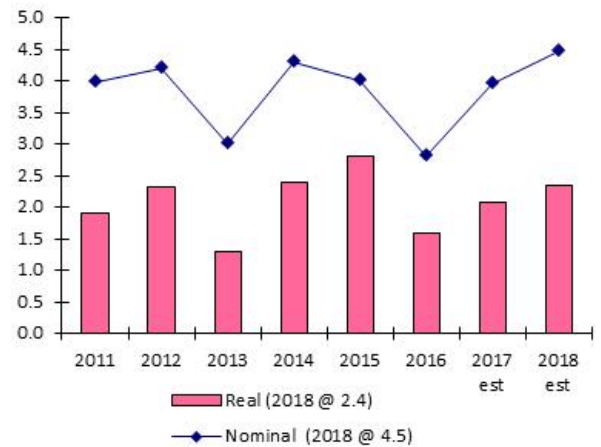


Table 34. CBO estimates of GDP and other indicators: FY 2016 to FY 2019

Indicator	FY 2016	FY 2017	FY 2018	FY 2019
Real GDP (% ch from prior yr.)	1.6	2.2	2.1	1.8
Nominal GDP (% ch from prior yr.)	2.8	4.1	4.0	3.7
CPI (% ch from prior yr.)	0.9	2.2	2.3	2.3
10 yr. Treasury bond rate	1.9	2.2	2.5	2.7
Unemployment rate	4.9	4.7	4.5	4.5

Source: Congressional Budget Office, *The Budget and Economic Outlook: 2017 to 2027*, January 2017

Table 35. Forecasts for US Personal Income: FY 2016 to FY 2019

Forecast date	% change from prior fiscal year				% change from prior fiscal year			
	2016		2017		2018		2019	
	Global Insight		Moody's Analytics		Global Insight		Moody's Analytics	
Jan	3.6	4.3	5.1	5.3	3.6	4.3	5.4	5.5
Feb	3.6	4.1	5.0	5.3	3.6	4.3	5.4	5.4
Mar	3.6	4.2	5.0	5.2	3.6	4.3	5.4	5.3
Apr	3.6	4.2	5.0	5.4	3.6	4.4	5.3	5.2

Source: IHS Global Insight, Moody's Analytics. Baseline forecasts

Table 36. Forecasts for S and P 500: 2016.4 to 2018.4

Forecast date	% change from prior year			% change from prior year		
	2016.4		2018.4	2016.4		2018.4
	Global Insight			Moody's Analytics		
January	6.4	5.4	3.6	6.4	-1.0	-1.7
February	6.4	8.9	3.6	6.4	1.8	-2.1
March	6.4	11.4	3.6	6.4	4.8	-2.4
April	6.4	11.1	3.6	6.4	5.4	-2.4

Source: IHS Global Insight, Moody's Analytics. Baseline forecasts

Table 37. Blue Chip forecasts for CPI and 10 year Treasury interest rate: FY 2016 to FY 2018
(% change from prior fiscal year)

Forecast date	CPI			10 yr Treasury rate		
	2016		2018	2016		2018
	2016	2017	2018	2016	2017	2018
Jan	0.9	2.3	2.3	1.9	2.5	3.0
Feb	0.9	2.4	2.4	1.9	2.5	3.0
Mar	0.9	2.4	2.3	1.9	2.5	3.1
Apr	0.9	2.4	2.3	1.9	2.5	3.1

Global Insight and Moody's Analytics forecast slower population and job growth

• Both expect DC job growth in FY 2018 to be only about 1/4 of what it was in FY 2016, and expect population growth to exceed job growth.

• **Global Insight:** Gradual slowdown in annual population growth. FY 2018 Personal Income estimate of 4.5% growth in FY 2018 is slightly less than its estimate for the US.

• **Moody's Analytics:** Sharper drop in population growth than Global Insight. Personal Income growth falls to 1.5% in FY 2018, well below the estimate for the US.

Table 38. Forecasts of DC jobs and population to FY 2019

		FY 2015	FY 2016	Global Insight			Moody's Analytics		
		actual	actual	FY 2017	FY 2018	FY 2019	FY 2017	FY 2018	FY 2019
Jobs in DC	Level	764,508	780,000	786,767	790,675	795,858	788,975	792,500	796,900
	1 yr, ch	12,908	15,492	6,767	3,908	5,182	9,000	3,525	4,400
	1 yr % ch.	1.7	2.0	0.9	0.5	0.7	1.2	0.4	0.6
Population	Level	668,919	679,804	690,072	699,362	707,546	687,025	692,500	697,125
	1 yr, ch	11,048	10,885	10,267	9,291	8,183	7,250	5,475	4,625
	1 yr % ch.	1.7	1.6	1.5	1.3	1.2	1.1	0.8	0.7

Source: April 2017 baseline forecasts from Global Insight and Moody's Analytics

Table 39. Forecasts of DC resident employment, households, and housing starts to FY 2019

		FY 2015	FY 2016	Global Insight			Moody's Analytics		
		actual	actual	FY 2017	FY 2018	FY 2019	FY 2017	FY 2018	FY 2019
DC resident jobs	1 yr, ch	12,323	9,709	7,265	8,269	7,519	6,625	3,925	3,900
Households	1 yr, ch	4,656	4,253	2,893	3,040	3,915	2,525	2,300	2,650
Housing starts		3,926	4,450	4,560	3,322	2,933	3,465	3,224	3,440

Source: April 2017 baseline forecasts from Global Insight and Moody's Analytics

Table 40. Forecasts of DC Personal Income to FY 2019

Date of estimate	FY 2015	FY 2016	Global Insight			Moody's Analytics			
	actual	actual	FY 2017	FY 2018	FY 2019	FY 2016	FY 2017	FY 2018	FY 2019
January	6.7	4.7	5.7	5.3	6.5	4.7	2.3	1.7	3.5
February	6.7	4.7	5.5	4.8	6.2	4.7	2.6	1.6	3.5
March	6.7	4.7	5.5	4.9	6.2	4.7	2.6	1.6	3.5
April	6.7	4.7	4.7	4.5	5.8	4.7	3.1	1.5	3.4

Source: Baseline forecasts from Global Insight and Moody's Analytics

Table 41. April forecasts for employment and Personal Income for DC, the metro area, and the US: FY 2016 to FY 2019

(percent change from prior year)

Indicator	Global Insight				Moody's Analytics			
	2016	2017	2018	2019	2016	2017	2018	2019
Wage and salary jobs								
DC	2.0	0.9	0.5	0.7	2.0	1.2	0.4	0.6
Metro area					2.0	1.5	1.4	1.1
US	1.8	1.6	1.4	1.2	1.8	1.6	1.3	1.1
Personal Income								
DC	4.7	4.7	4.5	5.8	4.7	3.1	1.5	3.4
Metro area					4.0	4.9	5.0	4.5
US	3.6	4.2	5.0	5.4	3.6	4.4	5.3	5.2

Source: IHS Global Insight and Moody's Analytics. Baseline forecasts

Table 42. April DC forecasts for wages and unemployment: FY 2016 to FY 2019 (% change from prior year)

	Global Insight				Moody's Analytics			
	2016	2017	2018	2019	2016	2017	2018	2019
Wages and salaries earned in DC	4.6	4.7	4.2	4.7	4.6	4.3	3.4	4.4
DC resident wages and salaries	4.6	4.3	4.4	6.4	4.6	1.6	-0.3	3.2
DC Unemployment rate (level)	6.2	5.7	5.4	5.1	6.2	5.8	6.3	6.6

Source: IHS Global Insight and Moody's Analytics. Baseline forecasts.

DC revenue estimate

The February estimate for tax revenue (before implementation of scheduled tax cuts); \$127 million more in FY 2017 than in FY 2016, followed by a \$196 million increase in FY 2018

- Anticipated tax revenue increase (before earmarks) is 1.8% in FY 2017, followed by a 2.7% increase in FY 2018. The estimates reflect growth in the DC economy and the effects of past scheduled tax cuts—but not new ones set for FY 2018 and beyond.

- Real property tax growth of \$133 million in FY 2017 offsets net decreases in other taxes in that year. Real property and individual income are the leading source of revenue gain in FY 2018. Individual income tax revenue is estimated to grow 1.6% in FY 2017 and 3.8% in FY 2018.

- The General sales tax is estimated to grow 5.0% in FY 2017 and 3.3% in FY 2018.

- Deed taxes are estimated to decline 8.5% in FY 2017 and increase 1.5% in FY 2018.

- As a share of DC Personal Income, tax revenue in FY 2017 is expected to fall to 13.8% from 14.2% in FY 2016.

Table 43. DC Tax Revenue (before earmarks and triggered tax cuts) for FY 2016 through FY 2019: February 2017 revenue estimate

Tax	FY level (\$ million)				Change from prior year (\$ M)				% change from prior year			
	2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019
Real property	2,357.5	2,490.1	2,560.1	2,654.9	163.0	132.6	70.1	94.7	7.4	5.6	2.8	3.7
Deed taxes	445.2	407.3	413.6	424.1	-35.4	-37.9	6.3	10.6	-7.4	-8.5	1.5	2.6
General sales	1,343.1	1,410.6	1,457.0	1,509.4	27.8	67.5	46.4	52.4	2.1	5.0	3.3	3.6
Individual income	1,907.9	1,938.9	2,012.7	2,096.6	39.8	31.0	73.8	84.0	2.1	1.6	3.8	4.2
<i>Withholding</i>	1,627.6	1,687.4	1,760.6	1,844.1	74.4	59.8	73.3	83.5	4.8	3.7	4.3	4.7
<i>non-withholding</i>	280.3	251.5	252.0	252.5	-34.5	-28.8	0.5	0.5	-11.0	-10.3	0.2	0.2
Business income	556.5	523.9	529.6	546.0	108.7	-32.6	5.8	16.4	24.3	-5.9	1.1	3.1
Other	630.9	597.8	591.2	598.8	20.3	-33.1	-6.5	7.6	3.3	-5.3	-1.1	1.3
Total	7,241.0	7,368.4	7,564.2	7,829.9	324.2	127.4	195.8	265.6	4.7	1.8	2.7	3.5

Source: ORA. February 28, 2017 revenue estimate under existing legislation before triggered tax cuts. Deed taxes include economic interest. The table includes tax revenue only, before all earmarks, and excludes all non-tax revenues, lottery, and "O-type" earmarked revenues. FY 2015 is from the CAFR.

Table 44. DC population and employment: FY 2016 to FY 2019

item	2016	2017	2018	2019
Wage and salary employment	774,817	782,650	787,221	791,827
1 year change	10,458	7,833	4,572	4,606
% change	1.4	1.0	0.6	0.6
DC population	679,804	688,797	696,209	702,655
1 year change	10,885	8,992	7,412	6,446
% change	1.6	1.3	1.1	0.9
Unemployment rate	6.3	6.0	6.0	5.9

Source: ORA February 2017 revenue estimate.

Table 45. DC Income and stock market assumptions: FY 2016 to FY 2019 (% change from prior year)

item	2016	2017	2018	2019
Wages and salaries earned in DC	4.6	4.0	4.6	4.5
Wages and salaries earned by DC residents	4.6	4.7	5.1	4.9
DC Personal income	4.7	5.0	5.0	5.0
S and P 500 stock index	6.4	2.2	1.0	1.7

Source: ORA February 2017 revenue estimate. Stock index, on a CY basis, represents the % ch. from the December quarter of the prior yr.

Table 46. DC tax revenue (before earmarks) and DC Personal Income: FY 2010 to FY 2019

item	2010	2011	2012	2013	2014	2015	2016	2017 est	2018 est	2019 est
Tax revenue (\$ million)										
Level	5,005	5,325	5,853	6,100	6,290	6,917	7,241	7,368	7,564	7,830
Change from prior year	-47	320	528	247	189	627	324	127	196	266
Percent change from prior year										
Tax revenue	-0.9	6.4	9.9	4.2	3.1	10.0	4.7	1.8	2.7	3.5
Personal Income	3.0	9.1	4.5	2.8	5.7	6.7	4.7	5.0	5.0	5.0
Tax revenue as percent of Personal Income										
	13.6	13.3	14.0	14.2	13.8	14.2	14.2	13.8	13.5	13.3

Source: ORA. February 28, 2017 revenue estimate before tax cut triggers under existing legislation. The table includes tax revenue only, before all earmarks, and excludes all non-tax revenues, lottery, and "O-type" earmarked revenues.

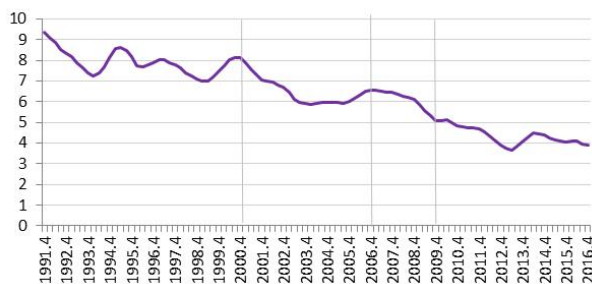
The Affordability Index. As noted earlier, the National Association of Realtors’ Affordability Index compares median family income with the income needed to purchase a median-priced home. The income needed to afford the median house is calculated by assuming (1) 20% down, (2) a 30-year mortgage to finance the balance, and (3) household income at 4 times the amount needed to pay the mortgage. An index over 100 means median income exceeds the amount needed to purchase the median-priced single family or condominium home; an index less than 100 means income is less than what is needed. (An index of 110, for example, means that median family income is 110% of the amount needed to afford the median home.)

The Affordability Index for DC is estimated by Moody’s Analytics. The index was 115.1 for DC in 1991 and fell sharply as housing prices rose after 2000. The index has been close to 100 for most the 7 years since the recovery from the US recession began in 2009, and was 105.4 in the last quarter of 2016.

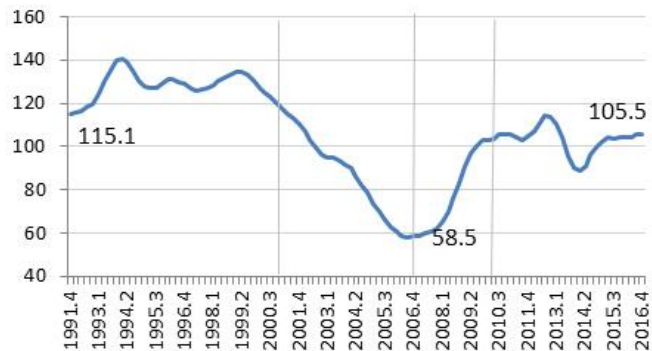
Given that DC’s median home price increased proportionately much more than family income over the past 25 years, it might seem surprising that the 2016 index of 105.5 is not that much lower than the 115.1 index in 1991. The reason these indices are so close is that interest rates for 30 year mortgages have fallen substantially over the past 25 years. In 1991, the rate was 9.3%; in 2016 it was less than half that—3.9%.

The way the Affordability Index works, a rise in mortgage interest rates, should this occur, would lower the Affordability Index. For example, if the interest rate were to rise by a percentage point (to 4.9%), DC’s index would drop to about 95 if the median house price and median family income remained the same. It should be noted, however, that housing prices can also be affected by interest rates. Low interest rates also enable families to pay more for houses, helping to drive up prices. If rates rise and people can’t afford to borrow as much, prices cannot be bid up as high.

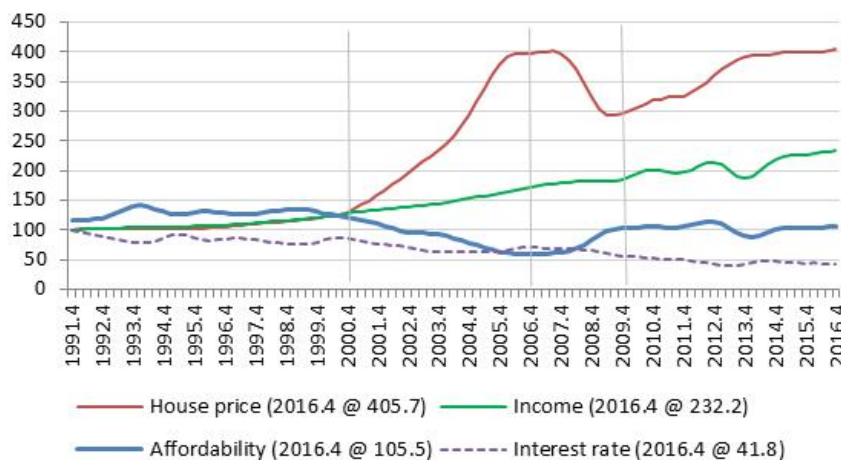
Interest rate on a 30-year, fixed-rate mortgage: 1991 to 2016



DC Housing Affordability Index: 1991 to 2016

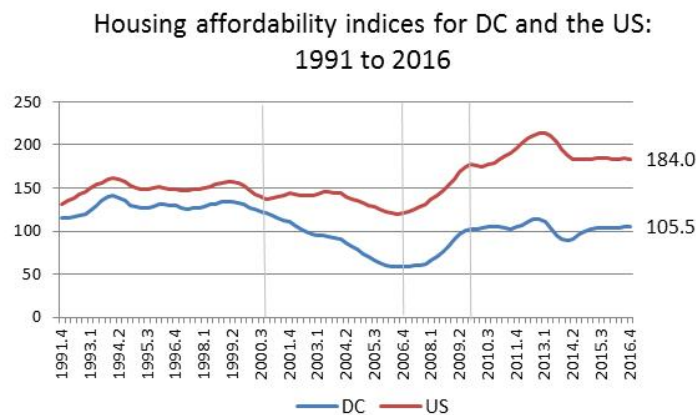
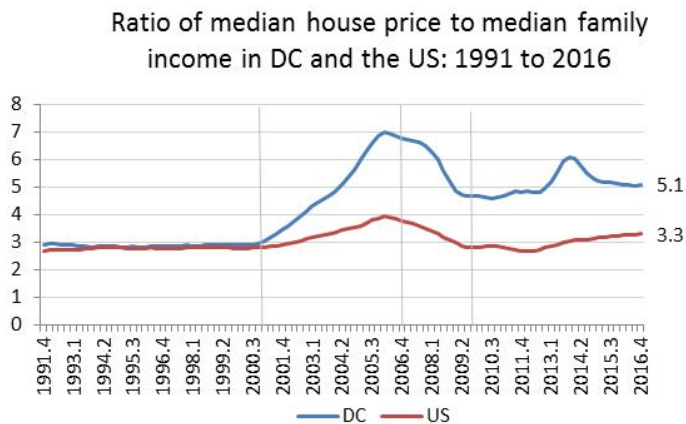
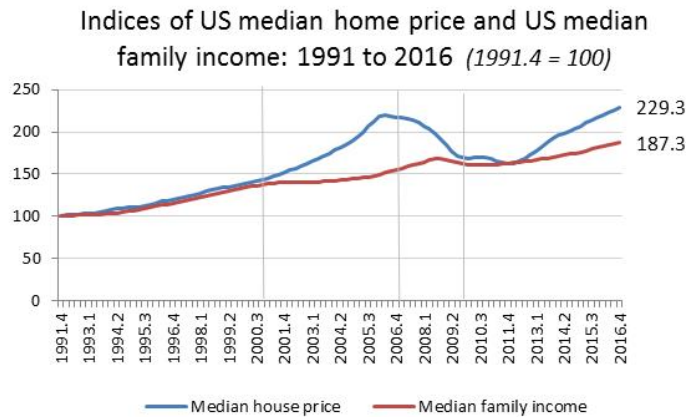


DC housing affordability index and indices (1991.4 = 100) of median housing price, median family income, and mortgage interest rates: 1991 to 2016



Comparison with the US. In the US as a whole, housing prices and incomes were affected by developments that started in 2000, but the changes were less dramatic than in DC. Prices did not rise as sharply before the recession, and the spread between median home price and median family income never got as large. The result is that deterioration of housing affordability seen in DC has not occurred to nearly the same extent in the US.

- The ratio of median home price to median family income in the US rose only to about 4 before the recession compared to 7 in DC. The ratio in the US has now fallen back to 3.3, compared to 5.1 in DC.
- Just before the recession, the Affordability Index in the US was about 120, not too far below what it was in 1991, whereas DC's fell to 58. The current index in the US (184) is more than 50 points above what it was in 1991, whereas DC's is now about 10 points less than 1991.



About this data. Data for median housing prices, median family incomes, and the Affordability Indices for DC and the US are from Moody's Analytics. Quarterly data for the period from the first quarter of 1991 to the last quarter of 2016 have been used to calculate 12-month moving average values for the years 1991 to 2016. Similarly, quarterly data on the interest rates for 30-year fixed-rate mortgages has been used to calculate 12-month average rates. All index numbers have been calculated using the 12-month average value for the 4th quarter of 1991 as the base value of 100. The National Association of Realtors calculates the Affordability Index for the US and regions of the country. The values of the index for DC were calculated by Moody's Analytics.

The following tables show values and percent changes over the 1991 to 2016 period for median home prices, and median family income for DC and the US, along with the Affordability Index and the ratio of median house price to median family income.

—Stephen Swaim, DC Office of Revenue Analysis

Median housing price and median family income in DC and the US: 1991 to 2016 at selected intervals

	1991.4	2000.4	2006.4	2009.4	2016.4
DC					
Median home price (\$)	113,050	198,550	447,850	335,350	458,625
Median family income (\$)	38,483	49,085	66,027	71,208	89,964
ratio	2.94	4.04	6.78	4.71	5.10
Affordability index	115.1	120.6	58.5	102.9	105.5
US					
Median price (\$)	101,925	154,450	221,925	172,500	233,675
Median family income (\$)	37,690	51,815	58,526	61,082	70,604
ratio	2.70	2.98	3.79	2.82	3.31
Affordability index	131.9	137.0	120.8	178.0	184.0

Source: Moody's Analytics. Data are 12-month averages for dates shown.

Percent change in DC and US median home price and median family income: 1991 to 2016

	% change during selected periods				% change from 1991.4 to 2016.4
	1991.4 to 2000.4	2000.4 to 2006.4	2006.4 to 2009.4	2009.4 to 2016.4	
DC					
Median home price	75.6	125.6	-25.1	36.8	305.7
Median family income	27.5	34.5	7.8	26.3	133.8
US					
Median price	51.5	43.7	-22.3	35.5	129.3
Median family income	37.5	13.0	4.4	15.6	87.3

Source: Moody's Analytics

ORA reports and documents. From time to time the Office of Revenue Analysis prepares revenue estimates, fiscal impact statements on pending legislation, reports, and other documents on subjects related to DC 's economy and taxes. These documents are posted on the OCFO web site (www.cfo.dc.gov) under subcategories of "Reports and Publications" and "Budget and Revenue."

District, Measured. Information on the economic and demographic trends taking shape in the city can be found on the ORA Blog, District, Measured (districtmeasured.com). You can sign up at the blog page to receive updates as new articles are posted.

Recent ORA reports:

Revised revenue estimate, February 28, 2017.

DC Tax Facts, 2016. Details on all DC taxes.

Tax Rates and Tax Burdens 2015 Nationwide. This annual publication compares DC tax rates and estimated DC tax burdens for households of different income levels with the rates and burdens of state and local taxes in the principal cities in all 50 states.

Tax Rates and Tax Burdens 2015 Washington Metropolitan Area. This annual publication compares DC tax rates and estimated DC tax burdens for households of different income levels with the rates and burdens of the surrounding jurisdictions in the DC metropolitan area.

Briefing documents. A series with information related to DC's economy and taxes.

Tax expenditure report. May 2014. Comprehensive description of all DC tax expenditures.

About this report. *District of Columbia Economic and Revenue Trends* is generally issued toward the end of every month. Employment and most other DC information reported on a monthly basis is from one to two months prior to the *Trends* date. Lags can be greater with quarterly data such as Personal Income and commercial real estate. Data in the tables are believed to be reliable, but original sources are definitive. All data are subject to revision by the information source. The *Trends* report is available at the DC Chief Financial Officer web-site: www.cfo.dc.gov (click on *Budget and Revenue/Economy/ Economic and Revenue Trends*).

Table 47. Information sources

Indicator	Source	Period covered in this report	Next release
D.C. Jobs and Labor Force information	BLS	March	May 19
D.C. Personal Income	BEA	2016.4	June 27
D.C. Tax Collections	OTR/ORA	April	c. June 15
D.C. Housing Sales	MRIS*	April	c. June 10
D.C. Commercial Office Building data	CoStar and Delta	2017.1	c. July 10
DC Apartment data	CoStar and Delta	2017.1	c. July 10
D.C. Hotel stay information	Smith Travel Research	March	c. May 20
Consumer Price Index	BLS	April	June 14
U.S. Jobs and Labor Force	BLS	March/April	June 2
U.S. GDP and Personal Income	BEA	2017.1	May 26
S and P 500 Stock Index	Financial press	April	June 1
Interest rate on 10-Year Treasury Securities	Financial press	April	June 1
IHS Global Insight D.C. forecast	Global Insight	April	c. May 15
Moody's Analytics D.C. forecast	Moody's Analytics	April	c. May 25
Blue Chip Economic Indicators for the U.S.	Aspen Publishers	April	c. May 10

*Metropolitan Regional Information Systems; listings and contract data accessed through the Greater Capital Area Association of Realtors.

For further information or to comment on this report, contact: Stephen Swaim (202-727-7775) or stephen.swaim@dc.gov. See also the *Economic Indicators* issued monthly by the D.C. Office of the Chief Financial Officer (www.cfo.dc.gov).

District of Columbia Economic and Revenue Trends is prepared by the Office of Revenue Analysis, which is part of the Office of the Chief Financial Officer of the District of Columbia government.

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