

GOVERNMENT OF THE DISTRICT OF COLUMBIA OFFICE OF THE CHIEF FINANCIAL OFFICER OFFICE OF REVENUE ANALYSIS

District of Columbia Economic and Revenue Trends: April 2017

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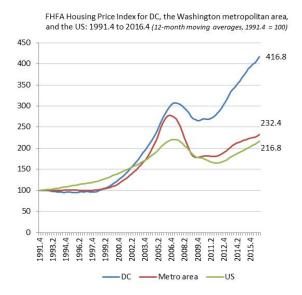
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Single-family housing values in DC have risen much more over 25 years than in the metro area or the US

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. 21)*

Wage and salary employment

Slowing DC job growth

- February wage and salary employment in DC was up by 6,600 (0.8%) from a year earlier as measured by the 3-month moving average.
- Federal government employment in DC for February was up by 233 (0.1%). The private sector gained 5,633 (1.0%).
- •Total year-over-year DC metropolitan area employment increased by 52,300 (1.6%) in February as measured by the 3-month moving average.
- •Suburban Washington employment in February increased by 1.9% from a year earlier.
- •Seasonally adjusted DC jobs fell by 2,300 in February from the prior month and are 1,800 above the level of 5 months ago.

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



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

					3-mo	
Jurisdiction	FY 2014	FY 2015	FY 2016	12-mo avg	average	This month
District of Columbia	751,592	764,583	780,033	783,392	783,567	782,200
1 year change	6,375	12,992	15,450	11,483	6,600	5,500
% change	0.9	1.7	2.0	1.5	0.8	0.7
Washington metro area	3,107,792	3,143,100	3,218,833	3,239,267	3,241,500	3,236,500
1 year change	12,558	36,800	63,167	55,700	52,300	62,400
% change	0.4	1.2	2.0	1.7	1.6	2.0
Washington suburbs (% ch)	0.3	1.5	2.0	1.8	1.9	2.4
US (% ch)	1.8	2.1	1.8	1.7	1.6	1.7

Not seasonally adjusted. Suburban employment is the difference between the metro area total and the DC portion. Source: BLS. February is preliminary.

Federal gov. and private sector wage and salary employment in DC: Feb. 2012 to Feb. 2017 (Change from prior year in 3-month moving average)

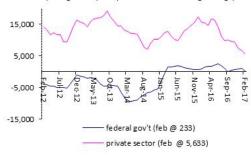


Table 2. Federal government and private sector wage and salary employment in DC: February 2017

					3-month	
Sector	FY 2014	FY 2015	FY 2016	12-mo avg	average	This month
Federal government	198,367	198,025	199,125	199,325	199,267	198,000
1 year ch.	-7,533	-342	1,100	933	233	-1,200
% change	-3.7	-0.2	0.6	0.5	0.1	-0.6
Private sector	515,558	527,033	540,992	543,842	544,400	544,200
1 year ch.	11,442	11,475	13,958	10,192	5,633	5,600
% change	2.3	2.2	2.6	1.9	1.0	1.0

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

Table 3. Seasonally adjusted DC Employment: September 2016 to February 2017

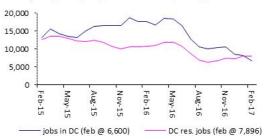
Indicator	September	October	November	December	January	February
D.C. Wage and Salary employment	783,400	786,400	785,900	787,600	787,500	785,200
change from prior month	2,100	3,000	-500	1,700	-100	-2,300
% change from prior month	0.3	0.4	-0.1	0.2	0.0	-0.3

Source: BLS seasonally adjusted. February is preliminary

Rise in new unemployment benefit claims

- •In February DC resident employment was up 7,896 (2.2%) from a year earlier (3-mo. moving average). The labor force grew by 5,976 (1.5%).
- •The seasonally adjusted unemployment rate held steady at 5.7% in February. DC's unemployment rate has been below 6% for 6 months in a row. Rates are about where they were before the Great Recession.
- February initial unemployment insurance claims were up 11.8% from last year (3-month moving average).

Jobs located in DC and DC resident employment: February 2015 to February 2017 (Change from prior year in 3-mo. moving average)



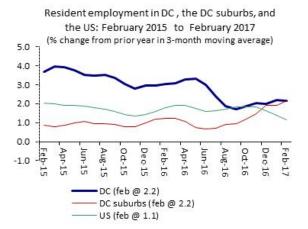


Table 4. Unemployment rates for DC, metro area, and US: February 2017

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

(percent of labor force) Not seasonally adj. Seasonally adj. Feb. 2016 Feb. 2017 Jurisdiction Feb. 2016 Feb. 2017 US 4.7 4.9 4.9 5.2 DC 6.5 6.1 6.2 5.7 DC metro area 4.1 3.9 na na 3.8 DC suburbs 3.6 na na

Table 5. Resident employment and unemployment: February 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	370,292	373,115	374,547
1 year change	3,562	12,376	9,599	8,493	7,896	7,730
% change	1.0	3.6	2.7	2.3	2.2	2.1
Labor Force	374,726	385,038	391,310	393,634	396,286	399,074
1 year change	904	10,311	6,272	5,862	5,976	6,607
% change	0.2	2.8	1.6	1.5	1.5	1.7
Unemployed	29,665	27,601	24,274	23,342	23,171	24,527
1 year change	-2,659	-2,065	-3,327	-2,631	-1,919	-1,123
% change	-8.2	-7.0	-12.1	-10.1	-7.6	-4.4
Unemployment rate	7.9	7.2	6.2	5.9	5.8	6.1
DC Unemployment insurance (state	program)					
Initial claims (monthly avg.)	1,851	1,596	1,472	1,521	1,493	1,248
1 year change	-64	-255	-123	15	157	84
% change	-3.3	-13.8	-7.7	1.0	11.8	7.2
Weeks compensated (mo. avg.)	42,133	32,811	30,261	30,606	32,228	29,831
1 year change	-729	-9,322	-2,550	-744	78	301
% change	-1.7	-22.1	-7.8	-2.4	0.2	1.0
% change	-1.7	-22.1	-7.0	-2.4	0.2	1.0

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

Table 6. Seasonally adjusted DC Resident employment and unemployment: Sep. 2016 to Feb. 2017

Indicator	September	October	November	December	January	February				
DC Resident employment	369,178	369,920	370,653	371,329	373,223	374,131				
change from prior month	596	742	733	676	1,894	908				
% change from prior month	0.2	0.2	0.2	0.2	0.5	0.2				
DC Unemployment rate (%)	5.9	5.8	5.8	5.7	5.7	5.7				
Source: BLS seasonally adjusted. February is preliminary.										

Jobs by sectors of the economy

Food services top job growth in DC

- ullet In February the food services sector 2,533 increase in jobs over the prior year was more than in any other sector. (3-month moving average.)
- •In the private sector, other business services (2,133), other professional services (1,867), education (1,800), and amusement and recreation (1,000) were other sectors that grew by 1,000 or more jobs in February.
- •Private sector industries losing jobs included constuction, health, retail trade, and information.
- •Local government rose by by 733 (1.9%).
- •The federal government accounted for 25.4% of all DC jobs in February. 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:
February 2015 to February 2017
(% change from prior year in 3-month moving average)



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

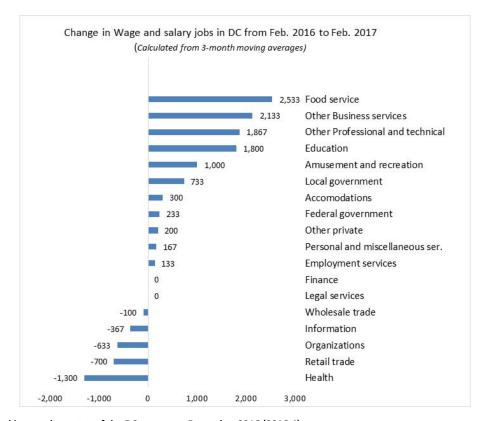
	3-month moving average		ange	12-mo. moving Sector % of avg: all DC jobs,		DC share (%) in Feb 2017 of all sector jobs in:		Change from Feb 2016 to Feb 2017 in DC share of sector jobs in:		
Industry sector	Feb 2016	Feb 2017	Amount	%	% change	Feb 2017	metro area	US	metro area	US
Federal government	199,033	199,267	233	0.1	0.5	25.4	54.0	7.08	-0.4	-0.11
Local government	39,167	39,900	733	1.9	0.9	5.1	12.0	0.20	0.0	0.00
Legal services	28,233	28,233	0	0.0	0.2	3.6		2.51		-0.01
Other Professional and technical	85,233	87,100	1,867	2.2	2.4	11.1	22.8	1.10	-0.1	-0.02
Employment services	14,767	14,900	133	0.9	1.1	1.9	34.6	0.42	0.8	-0.01
Other Business services	34,967	37,100	2,133	6.1	4.3	4.7	19.1	0.49	0.3	0.02
Information	17,200	16,833	-367	-2.1	-1.8	2.1	23.5	0.61	0.7	-0.01
Finance	29,500	29,500	0	0.0	0.8	3.8	19.0	0.35	-0.1	-0.01
Organizations	63,600	62,967	-633	-1.0	1.2	8.0	36.4	2.15	-0.7	-0.03
Education	67,200	69,000	1,800	2.7	3.7	8.8	53.3	1.89	-0.9	0.01
Health	68,767	67,467	-1,300	-1.9	0.9	8.6	21.7	0.35	-0.6	-0.02
Food service	49,967	52,500	2,533	5.1	3.3	6.7	22.3	0.46	0.1	0.01
Accomodations	14,533	14,833	300	2.1	-0.1	1.9	33.9	0.80	-1.6	0.01
Amusement and recreation	7,500	8,500	1,000	13.3	10.5	1.1	20.4	0.42	0.8	0.04
Retail trade	23,067	22,367	-700	-3.0	0.0	2.9	7.9	0.18	-0.3	0.03
Wholesale trade	4,967	4,867	-100	-2.0	2.2	0.6	7.9	0.08	-0.2	0.00
Construction	15,733	14,333	-1,400	-8.9	0.0	1.8	9.4	0.22	-0.9	-0.03
Personal and miscellaneous ser.	7,700	7,867	167	2.2	1.1	1.0		0.29		0.00
Other private	5,833	6,033	200	3.4	2.5	0.8	5.1	0.03	0.2	0.00
Total	776,967	783,567	6,600	0.8	1.5	100.0	24.2	0.54	-0.2	0.00
Public sector	238,200	239,167	967	0.4	0.5	30.5	34.1	1.06	-0.3	0.00
Private sector	538,767	544,400	5,633	1.0	1.9	69.5	21.4	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.



	Wage and salary employment			Wages and	salaries ear	ned in DC	Percentage Distributions			
	DC in the De	ec. 2016 d	uarter	in the D	in the Dec. 2016 quarter Employment		ment	Wages		
		Change			Ch. from		Change			Change
Sector	Level	from Dec. 2015	% change	Level (\$B)	Dec. 2015 (\$B)	% change	Dec. 2016	from Dec. 2015	Dec. 2016	from Dec. 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
Private sector	551,200	7,133	1.3	45.83	2.24	5.15	69.8	84.2	63.5	60.1
Government	239,000	1,333	0.6	26.37	1.49	5.99	30.2	15.7	36.5	39.9

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.
- \bullet 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%).
- \bullet 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.

Wages earned in DC, wages earned by DC residents, and wages earned in the US: 2014.4 to 2016.4

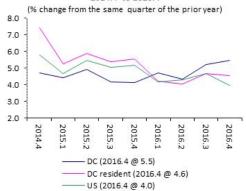


Table 9. DC Wages and Personal Income: December 2016 (2016.4)

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

• •		•				
					4-qtr. moving	Latest qtr.
Indicator	FY 2013	FY 2014	FY 2015	FY 2016	avg.	(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.

Source: BEA; date released March 28, 2017

^{**}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).

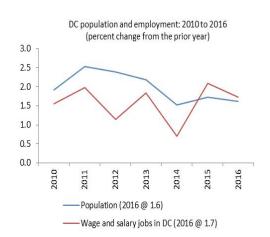
Since this is a negative number, the larger the increase (or faster the rate of growth), the less growth for income earned by DC residents.

^{****}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 invididuals.

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.
- $\bullet In$ the December quarter, wages per job in DC grew faster than wages per job in the US (4.3% v 2.4%).



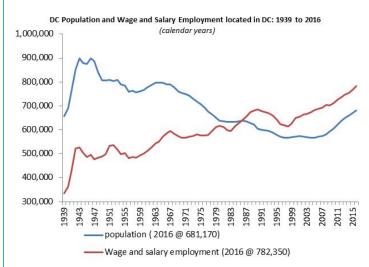


Table 10. DC Population and wage and salary employment located in DC: 2010 to 2016

		Population		Wage and salary employment					
Calendar		Change from	n prior yr.		Change from	hange from prior yr.			
year	Number	Number	%	Number	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			
Ch. from 201	1 to 2016	60,693	9.8		56,058	7.7			
Avg. anı	nual ch.	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

•		D	C		US					
	FY 2014	14 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

Table 117 ii Trages and Salaries pe	table 117. Trages and salaries per job in De and the Corr / Louis to December 2010									
		D	C		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: REA for wages and salaries and RLS for wage and salary employment. Note: % changes are from the same period of										

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

A very strong March for both single family and condominium sales and prices

- •The 3-month moving total of single family home sales in March was up 18.0% from a year earlier, and the average selling price was 12.2% higher. The year-to-date median sales price (\$630,000) was 1.3% higher than the prior year.
- •March condominium sales were up 19.4% from last year as measured by the 3-month moving total, and the average selling price was 9.4% higher. The year-to-date median sales price (\$459,250) was up 6.8% from last year.
- •The total value of all home sales in March rose 31.7% from last year as measured by the 3-month moving total.







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

					12-mo moving	3-mo moving	
					total or	total or	
Indicator	FY 2013	FY 2014	FY 2015	FY 2016	average	average	This month
Number of sales (settled contracts)							
Single family	3,979	4,024	4,097	4,385	4,516	976	421
1 year change	416	45	73	288	352	149	75
% change	11.7	1.1	1.8	7.0	8.5	18.0	21.7
Condo	3,487	3,592	3,832	3,955	4,066	888	357
1 year change	703	105	240	123	188	144	50
% change	25.3	3.0	6.7	3.2	4.8	19.4	16.3
Total	7,466	7,616	7,929	8,340	8,582	1,864	778
1 year change	1,119	150	313	411	540	293	125
% change	17.6	2.0	4.1	5.2	6.7	18.7	19.1
Average prices of units that sold							
Single family (\$)	712,799	736,362	767,870	794,668	812,184	817,982	794,844
1 year change	82,690	23,563	31,508	26,798	23,048	88,869	73,257
% change	13.1	3.3	4.3	3.5	2.9	12.2	10.2
Condo (\$)	447,827	472,419	499,650	500,824	509,669	528,637	514,015
1 year change	18,216	24,592	27,232	1,173	19,146	45,546	25,545
% change	4.2	5.5	5.8	0.2	3.9	9.4	5.2
Total value of all sales (\$ million)	4,397.8	4,660.0	5,060.6	5,465.4	5,740.1	1,267.8	518.1
1 year change	956.7	262.2	400.6	404.8	551.9	305.4	118.5
% change	27.8	6.0	8.6	8.0	10.6	31.7	29.7
Ratio: active inventory to sales							
Single family	1.6	1.6	1.5	1.6	1.4	1.6	1.4
Condo	1.7	1.9	1.7	1.8	1.6	1.6	1.3

Median contract prices, CY to date in March 2017: single family \$630,000 (1.3% 1 yr ch); condo \$459,250 (6.8% 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

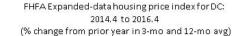
DC home prices have been growing faster in DC than in the US or the metropolitan area

- •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%.
- •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)

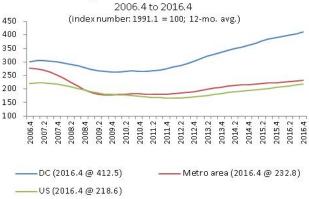
		Fiscal yea	Last 2	2 Q's		
Indicator	FY 2013	FY 2014	FY 2015	FY 2016	2016.3	2016.4
% change from prior year						
DC	12.7	7.2	8.9	5.2	7.1	7.3
DC metro area	8.5	5.8	3.6	2.9	4.3	6.5
US	6.8	6.4	5.8	5.9	6.5	7.1

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 DataQuick.





FHFA expanded-data housing price index for DC, the Washington Metropolitan Area, and the US:



FHFA expanded-data housing price index for DC, the Washington Metropolitan area, and the US: 2006.4 to 2016.4

(% change from prior yr. in the 12-mo. moving avg.)

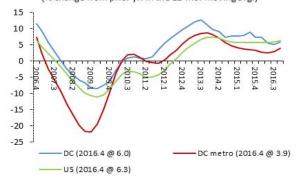


Table 14. D.C. Single family and condominium home sales at prices of \$1 million or more: March 2017

			12-mo	3-mo	
			moving	moving	This
FY 2014	FY 2015	FY 2016	total	total	month
734	765	936	1,007	211	97
45	31	171	184	72	35
6.5	4.2	22.4	22.4	51.8	56.5
18.2	18.7	21.3	22.3	21.6	23.0
128	160	167	190	53	17
16	32	7	45	27	5
14.3	25.0	4.4	31.0	103.8	41.7
3.6	4.2	4.2	4.7	6.0	4.8
	734 45 6.5 18.2 128 16 14.3	734 765 45 31 6.5 4.2 18.2 18.7 128 160 16 32 14.3 25.0	734 765 936 45 31 171 6.5 4.2 22.4 18.2 18.7 21.3 128 160 167 16 32 7 14.3 25.0 4.4	FY 2014 FY 2015 FY 2016 total 734 765 936 1,007 45 31 171 184 6.5 4.2 22.4 22.4 18.2 18.7 21.3 22.3 128 160 167 190 16 32 7 45 14.3 25.0 4.4 31.0	FY 2014 FY 2015 FY 2016 total total 734 765 936 1,007 211 45 31 171 184 72 6.5 4.2 22.4 22.4 51.8 18.2 18.7 21.3 22.3 21.6 128 160 167 190 53 16 32 7 45 27 14.3 25.0 4.4 31.0 103.8

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

		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	Rureau (ner	mits) and

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 rents rose 2.4% over the prior year.
- $\bullet 14{,}335$ apartment units were under construction in March,up by 2,615 from the prior year.
- \bullet 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

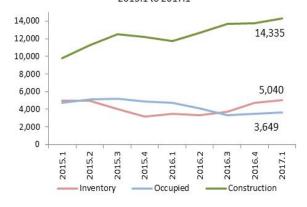


Table 17. Market rate apartment units in DC: 2011 to 2017.1

	Inventory CY Units					Occupied units			Effective monthly rent		Under Construction		
CY	_		Unit	ts					\$ per month				Avg units
	Buildings	Number	1 yr ch	% ch.	% vacant	Number	1 yr ch	% ch	per unit	1 yr % ch	Buildings	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

Inventory					Occupied units			Effective monthly rent		Under construction			
Class			Un	its									
	Buildings N	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 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.

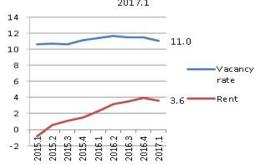
DC commercial office space: 1 yr change in inventory and occupied space, and under construction: 2015.1 to 2017.1 (all classes, msf)



Table 19. DC commercial office space: 2011 to 2017.1

		1.			0	<u> </u>		1/	0/		d:\			
	_	ır	nventory		000	cupied spa	ace	Vacan	cy %	Base rent (airect)		Jnder coi	istr.
CY (year	Build-	Level	1 yr ch	1 yr %	Level	1 yr ch				\$	1 yr	Build-		Avg. sf per
end)	ings	(msf)	(msf)	ch	(msf)	(msf)	% ch	Direct	Total	per sq ft.	% ch	ings	msf	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	2 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	3 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	1 -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	L -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	2 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



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

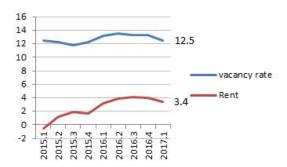


Table 20. DC Class A, B, and C commercial office space: 2017.1

Inventory			Occupied space		Vacancy %		Base rent (direct)		Under constr.				
CY (year	Build-	Level	1 yr ch		Level	1 yr ch				\$	1 yr	build-	
end)	ings	(msf)	(msf)	1 yr % ch	(msf)	(msf)	% ch	Direct	Total	per sq ft.	% ch	ings	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: Co	Star.												

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

Estimated DC households						Measures of newly occupied housing unit				
date		pop/hh	Estimated		Housing permits (year	l yr. ch. In occupied	1 yr. new condo	1 yr. single family	Total 1 yr. new	
CY	Population	ratio	households	1 yr ch	total)	apt. units	sales	permits	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

Juli Dullallig Illeti O al	Surrounding metro area. War. 2017 to War. 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	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									

Indicator of annual increase in DC housing occupancy: 2013.1 to 2017.1 (12 month rolling total)



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

	Actual: 2014.1	Forecast:
	to 2017.1	2017.1 to
	(CoStar)	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)

		Forecast:				
	Actual: 2015.1 to	2017.1 to				
	2017.1 (CoStar)	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 increased sharply in the past 3 months

- •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 March property transfers rose by 43.3% from last year as measured by the 3-month moving total. The 12-month moving total (\$13.78 billion) was 7.8% higher than last year.

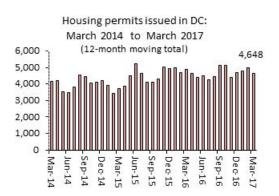


Table 25. Housing unit building permits issued in DC: March 2017

				12-mo.	3-month	
				moving	moving	This
	FY 2014	FY 2015	FY 2016	total	total	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	<i>-7.5</i>	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).

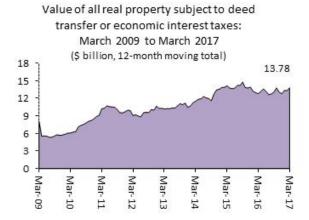




Table 26. Market Value of Real Property transfers subject to the Deed Transfer or Economic Interest tax: March 2017

					12-mo moving	3-month	
	FY 2013	FY 2014	FY 2015	FY 2016	total	moving total	This month
All property transfers (\$ million)	11,063.9	11,569.8	14,766.3	13,035.9	13,784.1	3,369.8	1,568.1
change from one year ago (\$M)	1,530.6	505.8	3,196.5	-1,730.3	996.2	1,018.7	490.2
% change from 1 year ago	16.1	4.6	27.6	-11.7	7.8	43.3	45.5

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

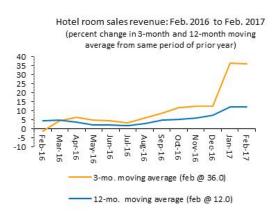
Source: OCFO/Recorder of Deeds and OCFO/ORA (calculated from tax collections and deposits adjusted for tax rate changes).

Hospitality

Hotel demand and room rates remain strong

- •Hotel revenues for February as measured by the 3-month moving total were up by 36.0% over the prior year, reflecting the impact of the Inauguration.
- •In February the 3-month moving total for hotel room-days sold was 10.9% above a year earlier. The average room rate was 22.6% higher. For the past 12 months, hotel revenue was up 12.0%.
- •Employment in food services was 4.9% more in February than a year earlier as measured by the 3-month moving average. Hotel employment was up 2.1%.
- •January airline traffic into the DC area was up 6.7% compared to a year earlier as measured by the 3-month moving total. Reagan National was up 5.7%. For the past 12-months, total traffic into the DC area was 4.0% higher.





12-month

3-month

Table 27. Hospitality Industry: February 2017

						moving	moving	
						total or	total or	
Indicator	Units	date	FY 2014	FY 2015	FY 2016	average*	average*	This month
Hotel stays								
Hotel room-days sold	('M)	feb	7.869	8.197	8.339	8.578	1.766	0.615
	1 yr ch		0.189	0.328	0.143	0.378	0.174	0.033
	1 yr % ch		2.5	4.2	1.7	4.6	10.9	5.6
Average room rate	\$	feb	209.87	215.34	221.50	231.04	217.04	203.34
	1 yr ch		2.56	5.46	6.16	15.34	40.03	4.85
	1 yr % ch		1.2	2.6	2.9	7.1	22.6	2.4
Occupancy rate	%	feb	76.6	77.5	77.9	78.7	65.0	72.7
(average)	1 yr ch		0.8	0.9	0.4	1.2	3.6	0.3
	1 yr % ch		1.0	1.2	0.6	1.5	5.8	0.4
Room revenue	(\$M)	feb	1,651.4	1,765.1	1,847.2	1,981.9	383.3	125.1
	1 yr ch		59.4	113.6	82.1	213.1	101.4	9.4
	1 yr % ch		3.7	6.9	4.7	12.0	36.0	8.2
Airline passengers		_						
DCA	1 yr % ch	jan	0.0	10.3	2.8	3.2	5.7	14.5
IAD	1 yr % ch	jan	-1.9	0.3	-0.1	2.8	7.4	12.7
BWI	1 yr % ch	jan	-0.5	4.1	6.0	5.8	7.1	12.4
Total	1 yr % ch	jan	-0.8	4.8	3.0	4.0	6.7	13.2
Employment		_						
Accommodations	level ('000)	feb	15.2	15.2	14.9	15.0	14.8	14.8
	1 yr ch		0.0	0.0	-0.3	0.0	0.3	0.3
	1 yr % ch		-0.2	-0.2	-1.9	-0.1	2.1	2.1
Food and bev	level ('000)	feb	47.1	49.7	51.4	52.3	52.4	52.2
	1 yr ch		2.0	2.7	1.6	1.7	2.4	2.3
	1 yr % ch		4.3	5.6	3.3	3.3	4.9	4.6
* Total for hotel rooms sold a	and room revenue.							

^{*} Total for hotel rooms sold and room revenue.

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

Fourth quarter annualized growth rate for US nominal GDP was 4.2%

- •US annualized real GDP growth in the December quarter was estimated at 2.1%; nominal growth was 4.2% (seasonally adjusted).
- Federal government consumption and investment for all activities was 1.6% higher in the 2016.4 quarter than a year earlier, less than half of the growth rate for nominal GDP for the entire US economy.
- $\bullet \mathrm{US}$ employment (seas. adj.) increased by $98{,}000$ in March from the month before.
- •The US unemployment rate (seas. adj.) fell to 4.5% in March.
- $\bullet In$ March the average S&P 500 index rose 1.6% from February; it was 17.1% above a year earlier.

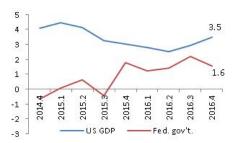


Table 29. Federal government sector, US GDP accounts: 2016.4

(percent change from same period of prior year)

				12-mo	
Indicator	FY 2014	FY 2015	FY 2016	avg	2016.4
Non-defense					
Compensation of employees	1.7	4.1	3.7	4.2	5.4
Purchases of goods and services	-1.7	8.0	7.7	7.8	7.7
Gross investment	-0.4	3.0	1.4	1.6	2.5
Defense					
Compensation of employees	-0.6	-0.8	1.1	1.7	2.3
Purchases of goods and services	-7.2	-5.2	-0.9	-2.3	-3.5
Gross investment	-4.2	-4.5	2.3	2.3	0.3
All federal consumption and investment Source: BEA (March 30, 2017). Nominal values.	-1.8	-0.1	1.6	1.6	1.6

Federal government consumption and investment and US GDP: 2014.4 to 2016.4



Federal government consumption and investment , by defense and non-defense: $2014.4\ to\ 2016.4$

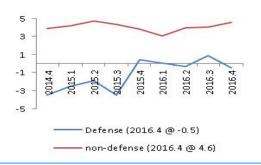


Table 30. Qtr. to Qtr. ch. in US GDP: 2015.4 to 2016.4

(% ch. from previous qua	arter at seaso	nally adi	annual ra	ites)	
Indicator	2015.4	2016.1	2016.2	2016.3	2016.4
US GDP real	0.9	0.8	1.4	3.5	2.1
US GDP nominal	1.8	1.3	3.7	5.0	4.2
Wages and salaries	6.6	-0.7	6.6	5.9	3.8
Personal income	3.4	1.3	4.8	4.6	3.8
Note: GDP=Gross Domestic	Product Sour	re RFA ur	dated Mar	30 2017	

Table 28. US GDP, income, and inflation: 2016.4

	(percent change from sa	me period	of prior ye	ear)	_	
	Indicator	FY 2014	FY 2015	FY 2016	12-mo avg	2016.4
	US GDP real	2.4	2.8	1.6	1.6	2.0
'	US GDP nominal	4.3	4.0	2.8	3.0	3.5
	US Personal income	3.5	4.9	3.6	3.6	3.7
	US wages	4.0	5.2	4.6	4.3	3.9
	Corporate profits*	5.4	-1.6	3.7	2.7	14.1
	S and P stock index	20.3	9.7	0.4	1.5	6.5
	US CPI	1.6	0.3	0.9	0.9	1.8

Source: BEA (March 30, 2017), BLS, Yahoo. *Before tax, with IVA and CCAdj.

Table 31. Monthly selected US Indicators: December 2016 to March 2017

·				
Indicator	December	January	February	March
S and P stock index (level)	2247	2275	2330	2367
% change from prior month	3.8	1.3	2.4	1.6
% change from 1 year ago	9.4	18.6	22.3	17.1
10 yr. Treasury Interest rate (level)	2.46	2.40	2.42	2.48
CPI % ch from prior month (seasonally adjusted)	0.26	0.55	0.12	-0.29
CPI % ch from prior year (seasonally adjusted)	2.09	2.54	2.80	2.38
Jobs (seasonally adjusted level, in millions)	145.325	145.541	145.760	145.858
change from prior month (thousands)	155	216	219	98
% change from prior month	0.1	0.1	0.2	0.1
Resident employment (season. adj. level, in mil.)	152.111	152.081	152.528	153.000
change from prior month (thousands)	63	-30	447	472
% change from prior month	0.0	0.0	0.3	0.3
Unemployment rate (seasonally adj.)	4.7	4.8	4.7	4.5
Source: BLS and Yahoo! Finance.				

Total DC tax collections (before earmarking): March 2012 to March 2017

(12-month moving total in March 2017 is \$7,396 million)

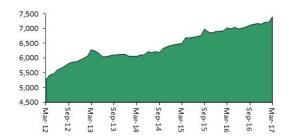


Table 32. Tax Collections (before earmarking): March 2017(Preliminary)

(\$ million)		Revenue (fro	JIII CAFK)			Tax coll	ections	
					12-month	FY 2017	3-month	
Tax	FY 2013	FY 2014	FY 2015	FY 2016	moving total	to date	moving total	This month
Total taxes	6,100.5	6,290.0	6,916.8	7,241.0	7,395.9	3,167.8	2,037.4	1,271.9
1 year change	247.2	189.5	656.9	324.2	371.7	283.2	247.2	181.8
% change	4.2	3.1	10.0	4.7	5.3	9.8	13.8	16.7
Real property	1,914.8	2,015.6	2,194.5	2,357.5	2,544.9	941.9	911.6	910.3
1 year change	92.8	100.7	178.9	163.0	216.4	197.4	195.6	193.3
% change	5.1	5.3	8.9	7.4	9.3	26.5	27.3	27.0
General sales	1,137.9	1,172.1	1,315.3	1,343.1	1,375.6	696.5	336.9	98.7
1 year change	26.8	34.2	143.2	27.8	90.0	74.8	48.5	3.2
% change	2.4	3.0	12.2	2.1	7.0	12.0	16.8	3.4
Individual income	1,640.9	1,679.2	1,868.0	1,907.9	1,874.5	837.2	425.9	83.4
1 year change	150.2	38.3	188.9	39.8	-11.5	0.5	2.3	4.3
% change	10.1	2.3	11.2	2.1	-0.6	0.1	0.5	5.5
withholding	1,391.2	1,472.9	1,553.2	1,627.6	1,673.9	878.1	484.0	152.9
1 year change	69.6	81.7	80.3	74.4	82.9	50.3	28.7	9.2
% change	5.3	5.9	5.4	4.8	5.2	6.1	6.3	6.4
non-withholding	249.6	206.2	314.8	280.3	200.6	-40.9	-58.1	-69.4
1 year change	80.6	-43.4	108.6	-34.5	-94.4	-49.8	-26.5	-4.9
% change	47.7	-17.4	52.6	-11.0	-32.0	na	na	na
Corporate income	299.0	280.2	308.0	387.1	342.3	174.3	78.6	46.2
1 year change	-3.9	-18.8	27.8	79.1	-9.1	-13.9	-28.7	-41.1
% change	-1.3	-6.3	9.9	25.7	-2.6	-7.4	-26.8	-47.1
Unincorporated Bus.	154.3	135.4	139.8	169.4	167.2	55.5	22.6	17.3
1 year change	-8.7	-18.9	4.4	29.6	22.2	9.0	5.4	8.9
% change	-5.3	-12.3	3.2	21.2	15.3	19.4	31.1	106.4
Deed taxes*	372.8	391.2	480.6	445.2	474.7	223.9	112.7	48.1
1 year change	60.3	18.4	89.4	-35.4	61.6	30.5	34.7	13.8
% change	19.3	4.9	22.8	-7.4	14.9	15.8	44.6	40.3
Other taxes	580.8	616.4	610.6	630.9	616.8	238.4	149.1	67.7
1 year change	-70.4	35.6	-5.8	20.3	2.3	-15.1	-10.4	-0.8
% change	-10.8	6.1	-0.9	3.3	0.4	-6.0	-6.5	-1.1

^{*}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

Strong collections for sales taxes, withholding, and deed taxes

- For the 12 month period ending March total tax collections (before earmarking) were \$371.7 million (5.3%) more than in the prior year. For the last 3 months they were 13.8% above last year.
- •Individual income tax collections were 0.6% below last year for the 12-months ending March, but withholding was 5.2% higher. For the past 3 months, withholding was up 6.3% and all income tax collections were up 0.5%
- •General sales tax collections were 7.0% above last year for the 12-months ending March. For the past 3 months, they were 16.8% above last year.
- •Deed tax collections for the 12-months ending March were up 14.9% from last year; for the past 3 months they were up 44.6 %.
- •Corporate income taxes in March were down 2.6% and unincorporated business income taxes rose 15.3% from last year (12-mo. total).

Total tax collections (before earmarks): March 2016 to March 2017

(% change from prior year: 3-month and 12-month



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

(% change from prior year: 3-months and 12-month



General Sales tax and Withholding for the Individual

Income tax:

March 2016 to March 2017



Withholding for the Individual Income tax: March 2016 to March 2017

(% change from prior year: 3-month and 12month moving totals)



Deed tax collections (before earmarks): February 2016 to February 2017

(% change from prior year: 3-month and 12-month



US economic forecasts

February Blue Chip 2017 forecast: slightly lower GDP and slightly higher prices

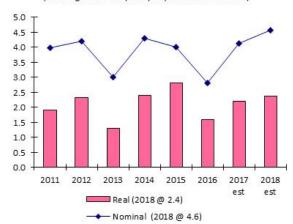
- •The February Blue Chip Indicators lowered slightly its forecast for real GDP growth in FY 2017 to 2.2%, with growth to continue at 2.4% in FY 2018. Both years are lower than the actuals for 2014 and 2015 (2.4% and 2.8%, respectively).
- •CBO's January economic and budget outlook: real growth rates of 2.2% in FY 2017 and 2.1% in FY 2018.
- •The Blue Chip Indicators February forecast for inflation (CPI): 2.4% for FY 2017 and also for FY 2018.
- •S&P 500 March baseline forecasts for the end of 2017 are more optimistic: Global Insight's forecast: 11.4% annual gain in the 4th quarter of 2017, Moody's Analytics is a 4.8% gain.
- •Global Insight and Moody's Analytics March forecasts for US Personal Income are a little above 4.0% in FY 2017 and 5.0% to 5.4% for FY 2018.

Table 33. Forecasts for US nominal and real GDP: FY 2014 through FY 2018

(% change from prior fiscal year)

		real			nominal	
			IHS			IHS
Fiscal year and		Moody's	Global		Moody's	Global
date of forecast	Blue Chip	Analytics	Insight	Blue Chip	Analytics	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						
December	2.2	2.6	2.2	4.1	4.3	4.3
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	2.1		4.1	4.2
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		2.9	2.6		5.5	4.9

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



 $Sources: \textit{BEA}, \ \textit{Blue Chip Indicators, Moody's Economy.com, and IHS Global Insight}.$

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.) 10 yr. Treasury bond rate	0.9 1.9	2.2 2.2	2.3 2.5	2.3 2.7
•				
Unemployment rate	4.9	4.7	4.5	4.5

Source: Congressional Budget Office, <u>The Budget and Economic Outlook: 2017</u> to 2027, January 2017

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

Forecast	% chan	ge from	prior fisca	al year	% char	% change from prior fisc			
date	2016	2017	2018	2019	2016	2017	2018	2019	
	Glo	bal Insig	ht		Moody's Analytics				
Dec	3.6	4.6	5.1	5.3	3.6	4.6	5.5	5.5	
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	

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

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

	% chang prior		% change from prior year					
Forecast date	2016.4	2017.4	2018.4	2016.4	2017.4	2018.4		
	GI	obal Insigl	nt	Мо	Moody's Analytics			
December	5.9	5.4	3.6	6.0	0.8	-1.5		
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		

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		CPI		10 yr Treasury rate							
date	2016	2017	2018	2016	2017	2018					
Nov	1.0	2.1		1.9	2.0						
Dec	1.0	2.2		1.9	2.4						
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					

Source: Blue Chip Indicators

Global Insight and Moody's Analytics expect FY 2107 job growth about equal to FY 2016, falling to half that in FY 2018

- *Global Insight:* Gradual slowdown in annual population growth. Personal Income growth of 5.5% in FY 2017 is above the US forecast, but the 4.9% estimate for FY 2018 is a little below its US estimate.
- *Moody's Analytics*: Less population growth than Global Insight. Personal Income growth falls to 2.6% in FY 2017 and 1.6% in FY 2018.

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

		FY 2015	FY 2016	C	ilobal Insig	ht	N	Moody's Analytics			
	_	actual	actual	FY 2017	FY 2018	FY 2019	FY 2017	FY 2018	FY 2019		
Jobs in DC	Level	764,359	774,817	786,365	791,261	796,221	785,55	0 790,050	795,500		
	1 yr, ch	12,534	10,458	11,548	4,896	4,961	10,72	5 4,500	5,450		
	1 yr % ch.	1.7	1.4	1.5	0.6	0.6	1	4 0.6	0.7		
Population	Level	668,919	679,804	690,071	699,362	707,544	687,02	5 692,500	697,125		
	1 yr, ch	11,048	10,885	10,267	9,290	8,182	7,25	0 5,475	4,625		
	1 yr % ch.	1.7	1.6	1.5	1.3	1.2	1	.1 0.8	0.7		

Source: March 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 2	2016	(Global Insig	ht	Мо	Moody's Analytics			
		actual actual		FY 2017	FY 2018	FY 2019	FY 2017	FY 2018	FY 2019		
DC resident jobs	1 yr, ch	13,307	10,152	5,238	7,464	7,187	4,575	4,350	5,025		
Households	1 yr, ch	4,656	4,254	2,934	3,104	3,943	3,050	2,300	2,625		
Housing starts		3,959	4,485	4,171	3,322	2,933	3,482	3,229	3,438		

Source: March 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	
December	6.7	4.4	5.3	5.4	6.5	4.0	0.5	1.7	3.5	
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	

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

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

(percent change from prior year)										
		Global	Insight		ľ	Noody's	Analytic	S		
Indicator	2016	2017	2018	2019	2016	2017	2018	2019		
Wage and salary jobs										
DC	1.4	1.5	0.6	0.6	1.4	1.4	0.6	0.7		
Metro area					2.3	1.8	1.3	1.3		
US	1.8	1.6	1.4	1.1	1.8	1.6	1.4	1.2		
Personal Income										
DC	4.7	5.5	4.9	6.2	4.7	2.6	1.6	3.5		
Metro area					4.0	5.0	5.0	4.7		
US	3.6	4.2	5.0	5.2	3.6	4.3	5.4	5.3		
Source: IHS Global Insight and Moody's Analytics. Baseline forecasts										

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

	Global I	nsight			Moody's A	nalytics					
2016	2017	2018	2019	2016	2017	2018	2019				
Wages ar	nd salarie	s earned	in DC								
4.6	4.8	4.4	4.6	4.6	3.9	3.8	4.8				
DC reside	DC resident wages and salaries										
4.6	5.6	4.9	7.1	4.6	1.5	0.0	3.5				
DC Unem	ploymen	t rate (le	vel)								
6.3	5.9	5.6	5.4	6.3	6.2	6.5	6.5				
Source: IH.	ource: 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)		Chan	ge from pr	ior year (\$ I	M)	% с	hange froi	n prior ye	ar
	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
Withholding	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
non-withholding	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 estimat	e.		

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 reven	ue estimate	Stock inde	v on a CV has	cic						

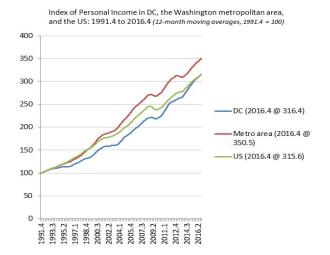
Source: ORA February 2017 revenue estimate. Stock index, on a CY basis, represents the % ch. from the December quarter of the prior yr.

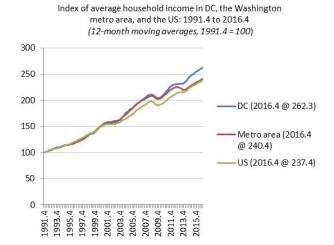
Table 46. DC tax revenue (before earmarks) and DC Personal Income: FY 2010 to FY 2019

Table 10: De tax revenue (belo		15, and De								
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.

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.



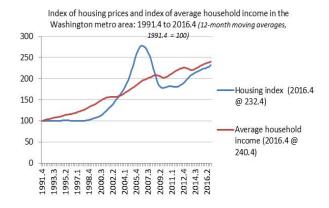


The major differences between DC and both the region and the US lie in the dynamics of the housing markets that go beyond general measures of income. Since 2002 DC's housing price index has increased at a much faster pace than average household income. By contrast, recovery in house prices from the recession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

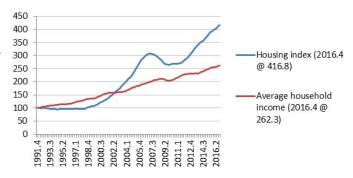
Housing market dynamics involve both supply and demand factors. Without trying to fully explain these, it should be noted that DC's household growth since 2002 has been at a pace comparable to that in the Washington metropolitan area and faster than in the US as a whole. DC's supply of single family 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.

—Stephen Swaim, DC Office of Revenue Analysis

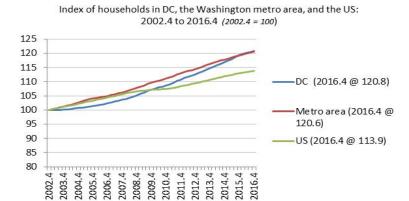


Index of housing prices and index of average household income in DC: 1991.4 to 2016.4 (12-month moving averages, 1991.4 = 100)



Index of housing prices and index of average household income in the 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 a	evel of housing and income measures % change:			hange:
				1991.4 to	2002.4 to
	1991.4	2002.4	2016.4	2002.4	2016.4
DC					
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
Washington metro area					
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
US					
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 Mood	ly'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).

Indicator	Source	Period covered in this report	Next release
D.C. Jobs and Labor Force information	BLS	February	April 21
D.C. Personal Income	BEA	2016.4	June 27
D.C. Tax Collections	OTR/ORA	March	c. May 15
D.C. Housing Sales	MRIS*	March	c. May 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	February	c. April 20
Consumer Price Index	BLS	March	May 12
U.S. Jobs and Labor Force	BLS	February/March	May 5
U.S. GDP and Personal Income	BEA	2016.4	April 28
S and P 500 Stock Index	Financial press	March	May 1
Interest rate on 10-Year Treasury Securities	Financial press	March	May 1
IHS Global Insight D.C. forecast	Global Insight	March	c. April 15
Moody's Analytics D.C. forecast	Moody's Analytics	March	c. April 25
Blue Chip Economic Indicators for the U.S.	Aspen Publishers	February	c. May 10

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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