



## District of Columbia Economic and Revenue Trends: November 2016

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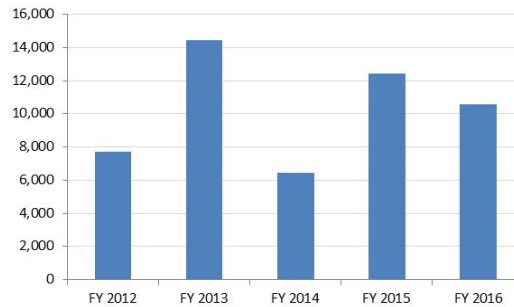
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## DC's private sector job growth weakened again in FY 2016

***The private sector job increase in FY 2016 was just 60% of its average annual gain for the last 5 years***

According to the US Bureau of Labor Statistics, DC added 10,583 jobs in FY 2016 compared to 12,408 the year before. Although the FY 2016 job gains were 1,825 less than in FY 2015, FY 2016's gain was considerably more than in FY 2014, and it was just a shade above the 10,320 average for the past five fiscal years.

Increase from the prior fiscal year in total DC wage and salary employment: FY 2012 to FY 2016:

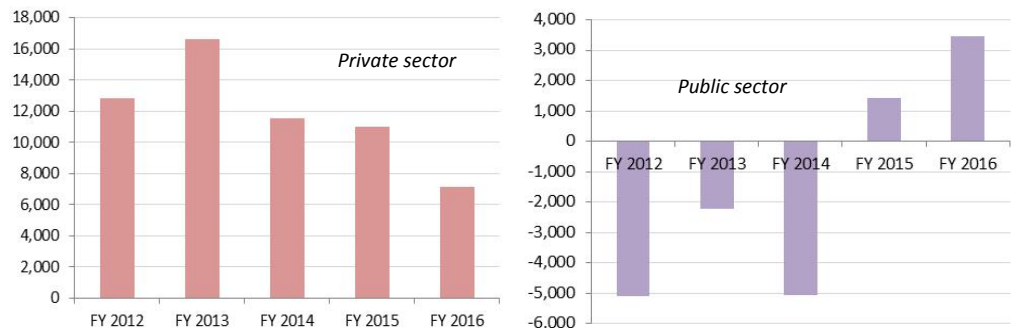


Source: BLS

While total employment gains in FY 2016 were close to the average for the past 5 years, those for the private and public sectors were not. The private sector increase of 7,142 in FY 2016 was just 60% of the sector's five year average of 11,817. Conversely, the public sector gain in FY 2016 of 3,442 was almost 5,000 above its five-years average (which was actually an average annual loss of 1,497 jobs). Private sector job gains have been smaller each year since FY 2013, while public sector gains (both federal and local governments) have increased sharply the last two years.

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Increase from the prior fiscal year in DC private sector and public sector jobs: FY 2012 to FY 2016



## Wage and salary employment

### DC job growth tops the US average

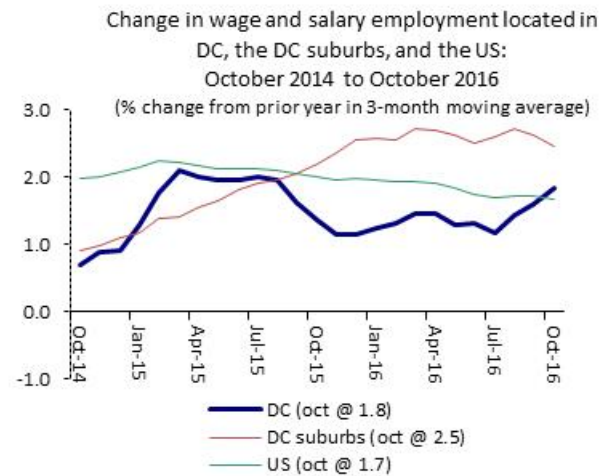
●October wage and salary employment in DC was up by 14,033 (1.8%) from a year earlier as measured by the 3-month moving average.

●Federal government employment in DC for October was up by 4,067 (2.1%). The private sector gained 8,633 (1.6%).

●Total year-over-year DC metropolitan area employment increased by 73,700 (2.3%) in October as measured by the 3-month moving average.

●Suburban Washington employment in October increased by 2.5% from a year earlier.

●Seasonally adjusted DC jobs fell by 1,000 in October from the prior month and is just 600 above the level of 5 months ago.

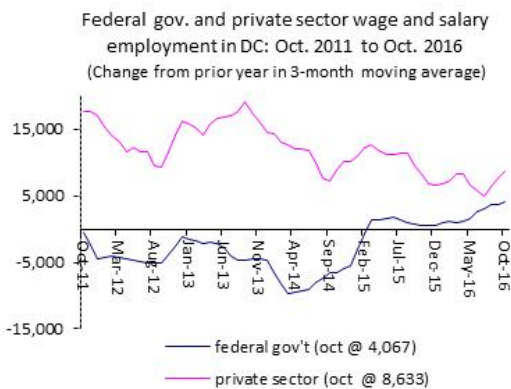


**Table 1. Wage and salary employment in DC, Washington Metro area, and the US: October 2016**

Jurisdiction	FY 2014	FY 2015	FY 2016	12-mo avg	3-mo	
					average	This month
District of Columbia	751,842	764,250	774,833	775,967	779,933	785,600
1 year change	6,467	12,408	10,583	10,925	14,033	13,600
% change	0.9	1.7	1.4	1.4	1.8	1.8
Washington metro area	3,103,833	3,138,300	3,226,633	3,232,483	3,259,133	3,276,800
1 year change	12,767	36,000	72,733	72,892	73,700	70,200
% change	0.4	1.2	2.3	2.3	2.3	2.2
Washington suburbs (% ch)	0.3	1.6	2.6	2.6	2.5	2.3
US (% ch)	1.8	2.1	1.8	1.8	1.7	1.6

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

Source: BLS. October is preliminary.



**Table 2. Federal government and private sector wage and salary employment in DC: October 2016**

Sector	FY 2014	FY 2015	FY 2016	12-mo avg	3-month	
					average	This month
Federal government	198,367	197,950	199,933	200,292	202,067	202,300
1 year ch.	-7,533	-417	1,983	2,317	4,067	4,300
% change	-3.7	-0.2	1.0	1.2	2.1	2.2
Private sector	515,808	526,775	533,917	534,625	537,467	542,600
1 year ch.	11,533	10,967	7,142	7,183	8,633	8,500
% change	2.3	2.1	1.4	1.4	1.6	1.6

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

**Table 3. Seasonally adjusted DC Employment: May 2016 to October 2016**

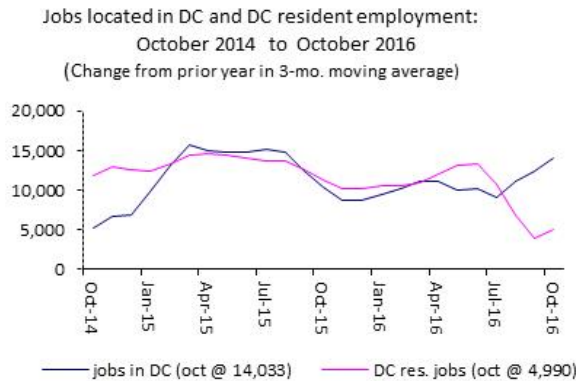
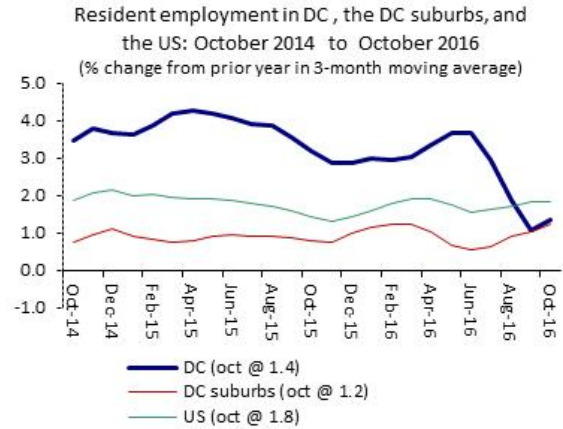
Indicator	May	June	July	August	September	October
D.C. Wage and Salary employment	781,200	775,200	773,000	779,200	782,800	781,800
change from prior month	3,300	-6,000	-2,200	6,200	3,600	-1,000
% change from prior month	0.4	-0.8	-0.3	0.8	0.5	-0.1

Source: BLS seasonally adjusted. October is preliminary

## Resident employment and unemployment

### DC resident employment growth now below the US average

- In October DC resident employment was up 4,990 (1.4%) from a year earlier (3-mo. moving average). The labor force grew by 3,681 (0.9%).
- The seasonally adjusted unemployment rate stayed at 6.1% in October. Until last June (when it was 5.9%) the unemployment rate had been 6.0% or higher every month since April 2008.
- October initial unemployment insurance claims were down 3.1% from last year (3-month moving average).



**Table 4. Unemployment rates for DC, metro area, and US: October 2016**

Jurisdiction	Not seasonally adj.		Seasonally adj.	
	Oct. 2015	Oct. 2016	Oct. 2015	Oct. 2016
US	4.8	4.7	5.0	4.9
DC	6.7	6.2	6.6	6.1
DC metro area	4.2	3.9	na	na
DC suburbs	3.9	3.6	na	na

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

**Table 5. Resident employment and unemployment: October 2016**

Indicator	FY 2014	FY 2015	FY 2016	12-mo avg	3-mo. avg.	This month
<b>DC Labor force summary</b>						
Resident employment	345,573	358,984	368,583	369,425	367,905	374,537
1 year change	3,846	13,410	9,599	9,603	4,990	10,111
% change	1.1	3.9	2.7	2.7	1.4	2.8
Labor Force	375,222	386,668	393,312	394,040	393,043	399,144
1 year change	1,177	11,447	6,643	6,825	3,681	8,735
% change	0.3	3.1	1.7	1.8	0.9	2.2
Unemployed	29,648	27,685	24,729	24,614	25,138	24,607
1 year change	-2,669	-1,963	-2,956	-2,778	-1,309	-1,376
% change	-8.3	-6.6	-10.7	-10.1	-4.9	-5.3
Unemployment rate	7.9	7.2	6.3	6.2	6.4	6.2
<b>DC Unemployment insurance (state program)</b>						
Initial claims (monthly avg.)	1,851	1,596	1,472	1,468	1,487	1,662
1 year change	-64	-255	-123	-116	-48	-57
% change	-3.3	-13.8	-7.7	-7.3	-3.1	-3.3
Weeks compensated (mo. avg.)	42,133	32,811	30,261	30,145	30,676	27,084
1 year change	-729	-9,322	-2,550	-2,242	-1,341	-1,390
% change	-1.7	-22.1	-7.8	-6.9	-4.2	-4.9

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

**Table 6. Seasonally adjusted DC Resident employment and unemployment: May 2016 to Oct. 2016**

Indicator	May	June	July	August	September	October
DC Resident employment	373,304	374,319	373,470	371,231	368,849	369,915
change from prior month	1,943	1,015	-849	-2,239	-2,382	1,066
% change from prior month	0.5	0.3	-0.2	-0.6	-0.6	0.3
DC Unemployment rate (%)	6.1	5.9	5.9	6.0	6.1	6.1

Source: BLS seasonally adjusted. October is preliminary.

## Jobs by sectors of the economy

### The federal government still tops job growth in DC

- In October the federal government's 4,067 increase in jobs over the prior year was more than in any other sector. (3-month moving average.)
- In the private sector, legal services (2,000), education (1,233), retail (1,133), food services (1,133), and health (1,000) were other sectors that grew by more than 1,000 jobs in October.
- Private sector industries losing jobs included information, employment services, and construction.
- Local government rose by 1,333 (3.4%).
- The federal government accounted for 25.9 % of all DC jobs in October. Over the past year, DC's share of US federal employment increased in the metro area and the US.

Change in private sector wage and salary jobs located in DC, the DC suburbs, and the US: October 2014 to October 2016 (% change from prior year in 3-month moving average)

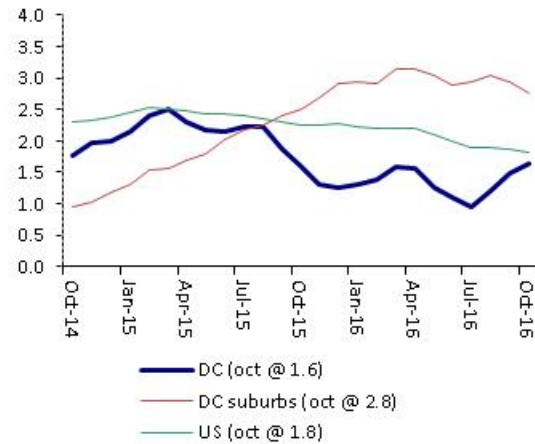


Table 7. Wage and salary employment located in DC: October 2016

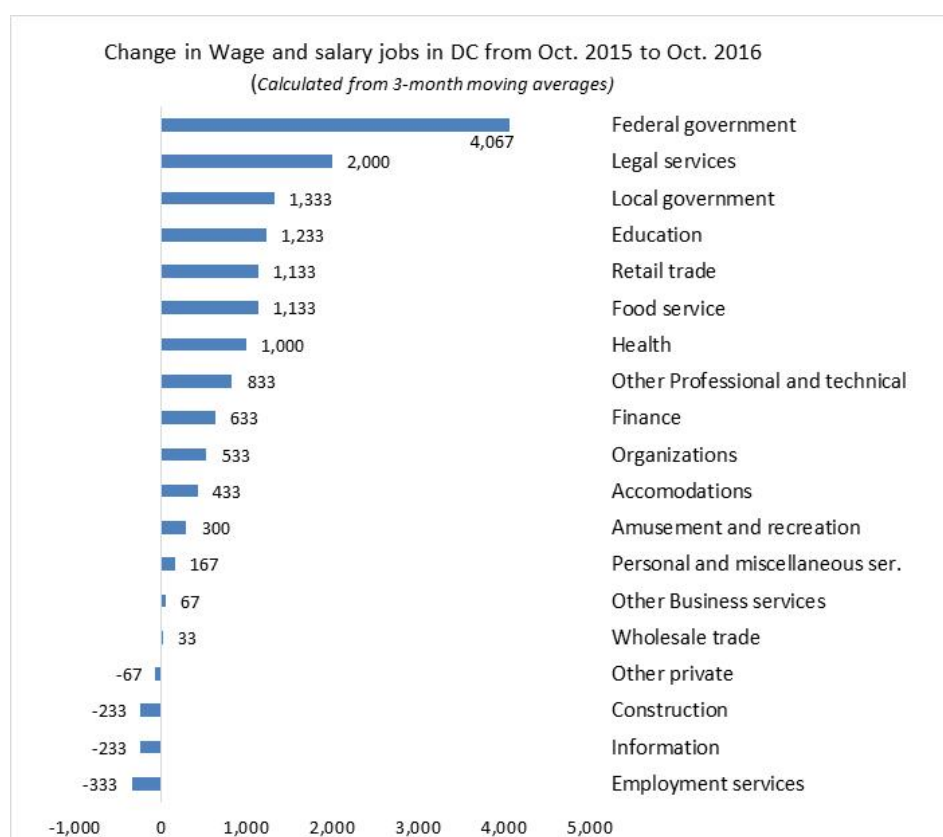
Industry sector	3-month moving average				12-mo. moving avg: % change	Sector % of all DC jobs, Oct 2016	DC share (%) in Oct 2016 of all sector jobs in:		Change from Oct 2015 to Oct 2016 in DC share of sector jobs in:	
	Oct 2015	Oct 2016	Amount	%			metro area	US	metro area	US
Federal government	198,000	202,067	4,067	2.1	1.2	25.9	54.5	7.21	0.3	0.03
Local government	39,067	40,400	1,333	3.4	3.6	5.2	12.3	0.21	0.2	0.01
Legal services	28,167	30,167	2,000	7.1	4.2	3.9		2.68		0.17
Other Professional and technical	84,100	84,933	833	1.0	1.7	10.9	22.7	1.09	-0.3	-0.03
Employment services	15,333	15,000	-333	-2.2	0.9	1.9	32.8	0.41	-1.8	-0.02
Other Business services	34,767	34,833	67	0.2	-0.6	4.5	17.8	0.44	-0.2	-0.01
Information	17,100	16,867	-233	-1.4	-0.4	2.2	22.5	0.61	0.0	-0.01
Finance	30,267	30,900	633	2.1	0.9	4.0	20.0	0.37	0.4	0.00
Organizations	63,133	63,667	533	0.8	-0.2	8.2	35.5	2.13	-0.2	-0.01
Education	59,533	60,767	1,233	2.1	0.0	7.8	49.7	1.74	-3.3	-0.01
Health	66,567	67,567	1,000	1.5	1.0	8.7	22.1	0.35	-0.1	0.00
Food service	50,867	52,000	1,133	2.2	3.3	6.7	22.1	0.45	-0.2	0.00
Accommodations	15,100	15,533	433	2.9	2.3	2.0	37.6	0.78	2.4	0.02
Amusement and recreation	7,633	7,933	300	3.9	1.7	1.0	16.3	0.34	0.0	0.00
Retail trade	22,667	23,800	1,133	5.0	7.2	3.1	8.3	0.15	0.2	0.00
Wholesale trade	4,867	4,900	33	0.7	-1.4	0.6	7.6	0.08	-0.2	0.00
Construction	14,700	14,467	-233	-1.6	0.2	1.9	9.1	0.21	-0.4	-0.01
Personal and miscellaneous ser.	7,933	8,100	167	2.1	-0.7	1.0		0.30		0.00
Other private	6,100	6,033	-67	-1.1	4.3	0.8	5.1	0.03	-0.2	0.00
<b>Total</b>	<b>765,900</b>	<b>779,933</b>	<b>14,033</b>	<b>1.8</b>	<b>1.4</b>	<b>100.0</b>	<b>23.9</b>	<b>0.54</b>	<b>-0.1</b>	<b>0.00</b>
Public sector	237,067	242,467	5,400	2.3	1.6	31.1	34.7	1.10	0.2	0.02
Private sector	528,833	537,467	8,633	1.6	1.4	68.9	21.0	0.44	-0.2	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 June quarter, federal government and business and professional services accounted for 48% of last year's job growth and 65% of the growth in wages and salaries**

- In the June quarter, the federal government accounted for 26% of the jobs and a 33% of the wages and salaries paid in DC. The federal share of growth over the past year remained at 26%, but for wage growth it fell to 29%.
- Professional and business services accounted for about 26% of wages paid in DC in June, but 36% of the increase in wages paid in DC over the past year.
- Hospitality and trade accounted for 35% of the increase in jobs over the past year and 7% of the increase in wages.



**Table 8. Employment and income by sector of the DC economy: June 2016 (2016.2)**

Sector	Wage and salary employment in DC in the June 2016 quarter			Wages and salaries earned in DC in the June 2016 quarter			Percentage Distributions			
	Level	Change from June 2015		Level (\$B)	Ch. from June 2015 (\$B)		Employment		Wages	
		2015	% change		(\$B)	% change	June 2016	June 2015	June 2016	June 2015
Total	777,367	10,167	1.3	70.01	2.55	3.8	100.0	100.0	100.0	100.0
Federal government	200,567	2,600	1.3	22.79	0.74	3.4	25.8	25.6	32.5	29.1
Local government	40,400	1,767	4.6	3.14	0.18	6.2	5.2	17.4	4.5	7.2
Business and professional services	164,400	2,367	1.5	18.57	0.92	5.2	21.1	23.3	26.5	36.0
Information and financial services	47,333	33	0.1	4.78	0.17	3.6	6.1	0.3	6.8	6.5
Education and health services	128,600	300	0.2	6.99	0.17	2.4	16.5	3.0	10.0	6.5
Trade and hospitality services	104,900	3,533	3.5	6.54	0.18	2.9	13.5	34.8	9.3	7.2
Organizations and personal services	70,667	-667	-0.9	4.30	0.10	2.5	9.1	-6.6	6.1	4.1
Other private	20,500	233	1.2	2.89	0.09	3.1	2.6	2.3	4.1	3.4
<i>Private sector</i>	<i>536,400</i>	<i>5,800</i>	<i>1.1</i>	<i>44.08</i>	<i>1.63</i>	<i>3.8</i>	<i>69.0</i>	<i>57.0</i>	<i>63.0</i>	<i>63.7</i>
<i>Government</i>	<i>240,967</i>	<i>4,367</i>	<i>1.8</i>	<i>25.93</i>	<i>0.93</i>	<i>3.7</i>	<i>31.0</i>	<i>42.9</i>	<i>37.0</i>	<i>36.3</i>

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

## Wages and income

### Wage growth in DC, for DC residents, and for the US are all below 4% for the June quarter

- Wages and salaries earned in the District of Columbia were 3.8% higher in the June quarter compared to the same quarter of 2015.
- Wages earned by DC residents grew by 3.5% in the June quarter compared to last year.
- In the June quarter, DC Personal Income grew 4.0%, above the US increase (3.2%).
- The growth rate of proprietors' income slowed to 4.7% in June. It had been growing at double digit rates for 2 years.
- Pensions and other transfers grew 8.0% over last year in the June quarter.

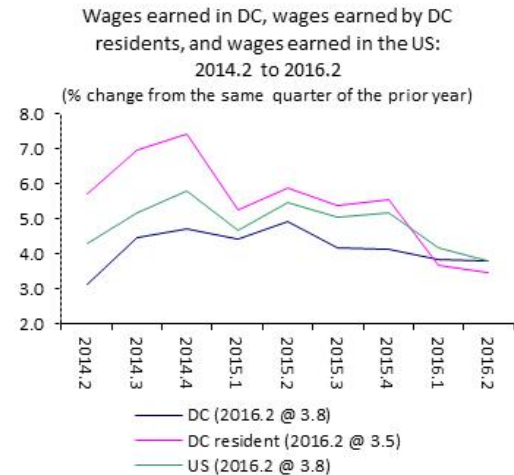


Table 9. **DC Wages and Personal Income: June 2016 (2016.2)**  
 (\$ billion at seasonally adjusted annual rates unless otherwise noted)

Indicator	FY 2012	FY 2013	FY 2014	FY 2015	4-qr. moving avg.	Latest qtr. (June)
Wages and salaries earned in DC	60.65	62.08	63.97	66.88	68.84	70.01
1 year change	1.13	1.43	1.89	2.91	2.64	2.55
% change	1.9	2.4	3.0	4.5	4.0	3.8
Supplements to wages & salaries	16.46	16.44	17.22	17.91	18.51	18.93
% change	0.9	-0.1	4.7	4.0	4.2	5.3
Income earned in DC**	73.86	74.25	77.01	81.21	83.86	84.35
% change	1.7	0.5	3.7	5.5	4.5	4.4
Net resident adjustment***	-45.72	-45.54	-46.28	-47.93	-49.31	-49.62
% change	0.5	-0.4	1.6	3.6	3.7	3.9
Income earned by DC residents**	28.14	28.71	30.74	33.29	34.55	35.08
% change	3.8	2.1	7.0	8.3	5.6	4.0
Wages and salaries of DC residents****	20.81	21.66	22.85	24.21	24.97	25.31
change from one year ago	0.95	0.85	1.18	1.36	1.08	0.85
% change	4.8	4.1	5.5	6.0	4.5	3.5
Proprietors' income earned by DC residents*	4.26	4.31	5.03	6.10	6.48	6.58
% change	-1.5	1.3	16.6	21.3	10.7	4.7
Property income of DC residents	8.01	8.44	8.77	9.12	9.25	9.33
% change	11.1	5.3	3.9	4.1	2.3	1.4
Pensions and other transfers for DC residents	5.73	5.92	6.03	6.18	6.45	6.70
% change	-0.3	3.3	1.8	2.5	5.2	8.0
DC Personal Income	41.89	43.08	45.53	48.59	50.25	51.11
1 year change	1.82	1.19	2.46	3.06	2.37	1.96
% change	4.5	2.8	5.7	6.7	4.9	4.0
US Personal income (% change from prior year)	4.6	3.0	3.5	5.0	3.8	3.2
US Wages and salaries(% change from prior year)	3.4	4.0	4.1	5.2	4.5	3.8
<b>Addendum:</b>						
DC res. wages as % of wages earned in DC	34.3	34.9	35.7	36.2	36.3	36.2

\* 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 September 28, 2016

# Population, jobs, and per capita income

## Population growth has been outpacing employment growth in DC for most of the past 5 years

- For the year ending 2016.2, population increased 12,451 and wage and salary employment grew 10,167. In percentage terms, population also grew faster: 1.9% v. 1.3%.
- In the past year population and jobs both grew slightly below the 5 year average from 2010 to 2015
- In the June quarter, DC's per capita income 1 yr. rate of growth was less than in the US, but DC's total Personal Income grew faster because of faster population growth.
- In the June quarter there was no growth in wages earned per DC resident.

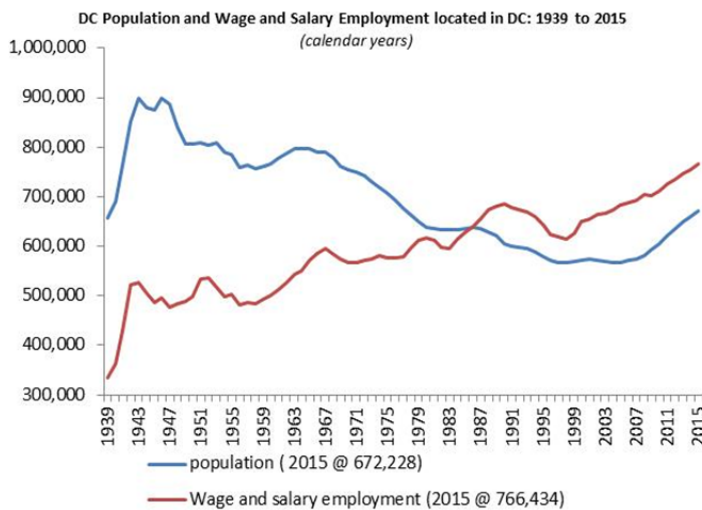
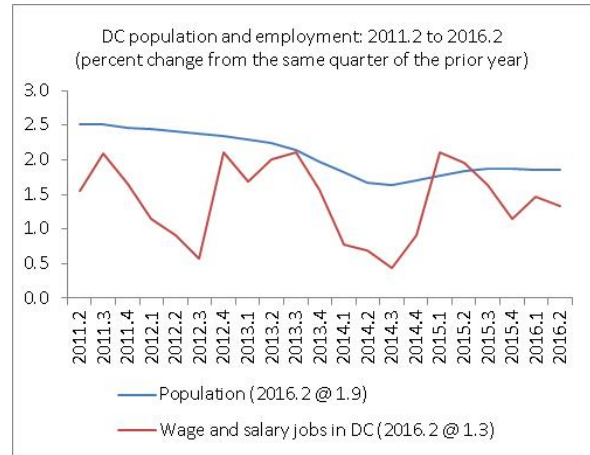


Table 10. DC Population and wage and salary employment located in DC: 2010 to 2015

Calendar year	Population			Wage and salary employment		
	Number	Change from prior yr. Number	%	Number	Change from prior yr. Number	%
2010	605,126	11,326	1.9	712,242	10,859	1.5
2011	620,472	15,346	2.5	726,233	13,991	2.0
2012	635,342	14,870	2.4	734,792	8,558	1.2
2013	649,540	14,198	2.2	748,325	13,533	1.8
2014	659,836	10,296	1.6	753,567	5,242	0.7
2015	672,228	12,392	1.9	766,434	12,867	1.7
2016.2	683,124	12,451	1.9	777,367	10,167	1.3
Ch. from 2010 to 2015	67,102	11.1		54,192	7.6	
Avg. annual ch.	13,420			10,838		

Source: U.S. Bureau of the Census, BLS, and BEA (2016.2 population)

Table 11. Per capita income in DC and the US: FY 2013 to 2016.2

	DC				US			
	FY 2013	FY 2014	FY 2015	2016.2	FY 2013	FY 2014	FY 2015	2016.2
Per capita income	66,688	69,253	72,602	74,820	44,591	45,816	47,732	49,142
% ch in per cap. inc.	0.6	3.8	4.8	2.1	2.3	2.7	4.2	2.4
% ch in population	2.3	1.8	1.8	1.9	0.8	0.8	0.8	0.8
% ch in Personal Inc.	2.8	5.7	6.7	4.0	3.0	3.5	5.0	3.2
Consumer price index	1.3	1.9	0.1	0.9	1.6	1.6	0.3	1.0

Source: BEA for per capita income, pop. and Personal Income. BLS for US CPI, Global Insight for DC CPI

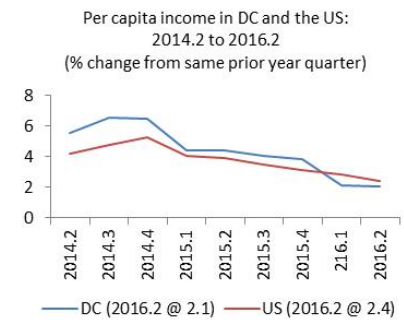


Table 11A. Wages per job located in DC: FY 2013 to 2016.2		FY 2013	FY 2014	FY 2015	2016.2
Wages per DC job		83,288	85,083	87,507	89,972
1 yr % ch in:					
Wages per DC job		0.4	2.2	2.8	2.2
DC jobs		2.0	0.9	1.7	1.5
Total wages earned in DC		2.4	3.0	4.5	3.8

Source: BEA (for wages) and BLS for wage and salary employment located in DC.

Table 11B. Wages per DC resident job: FY 2013 to 2016.2		FY 2013	FY 2014	FY 2015	2016.2
Wages per employed DC resident		63,389	66,108	67,436	67,868
1 yr % ch in:					
Wages per DC res. job		-0.8	4.3	2.0	0.0
Employed DC residents		4.9	1.1	3.9	3.5
All wages earned by DC res.		4.1	5.5	6.0	3.5

Source: Resident wages estimated by DC Office of Revenue Analysis from BEA data and BLS for DC resident employment.

## Single family and condominium housing

### October single family and condominium home sales were above last year's levels

- The 3-month moving total of single family home sales in October was up 10.4% from a year earlier, and the average selling price was 3.9% higher. The year-to-date median sales price (\$675,000) was up 2.5% from the prior year.
- October condominium sales were up 3.5% from last year as measured by the 3-month moving total, and the average selling price was 3.0% higher. The year-to-date median sales price (\$449,000) was up 3.2% from last year.
- The total value of all home sales in October rose 11.7% above last year as measured by the 3-month moving total.
- The percentage change in DC home prices picked up in the September quarter, according to the Federal Housing Finance Agency Index of single-family same-property transactions. DC's gain over the prior year was 5.0%. The US index was up 6.4%, and the Washington metropolitan area gain was 4.3%.

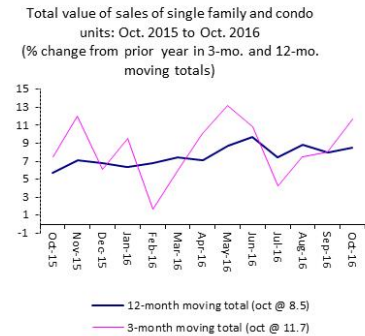
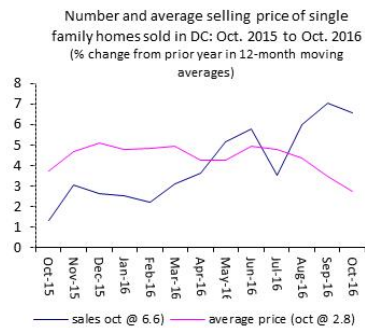


Table 12. D.C. Residential Real Estate Indicators: October 2016

Indicator	FY 2013	FY 2014	FY 2015	FY 2016	12-mo moving total or average	3-mo moving total or average	This month
<b>Number of sales (settled contracts)</b>							
Single family	3,979	4,024	4,097	4,385	4,350	1,111	319
1 year change	416	45	73	288	269	105	-35
% change	11.7	1.1	1.8	7.0	6.6	10.4	-9.9
Condo	3,487	3,592	3,832	3,955	3,976	1,009	311
1 year change	703	105	240	123	227	34	21
% change	25.3	3.0	6.7	3.2	6.1	3.5	7.2
Total	7,466	7,616	7,929	8,340	8,326	2,120	630
1 year change	1,119	150	313	411	496	139	-14
% change	17.6	2.0	4.1	5.2	6.3	7.0	-2.2
<b>Average prices of units that sold</b>							
Single family (\$)	712,799	736,362	767,870	794,668	795,106	822,934	812,824
1 year change	82,690	23,563	31,508	26,798	21,341	30,834	7,178
% change	13.1	3.3	4.3	3.5	2.8	3.9	0.9
Condo (\$)	447,827	472,419	499,650	500,824	501,068	498,936	481,527
1 year change	18,216	24,592	27,232	1,173	3,211	14,465	4,744
% change	4.2	5.5	5.8	0.2	0.6	3.0	1.0
<b>Total value of all sales (\$ million)</b>							
	4,397.8	4,660.0	5,060.6	5,465.4	5,451.0	1,417.7	409.0
1 year change	956.7	262.2	400.6	404.8	426.8	148.5	-14.4
% change	27.8	6.0	8.6	8.0	8.5	11.7	-3.4
<b>Ratio: active inventory to sales</b>							
Single family	1.6	1.6	1.5	1.6	1.5	1.6	1.5
Condo	1.7	1.9	1.7	1.8	1.8	2.0	2.1

**Median contract prices, CY to date in October 2016** : single family \$675,000 (2.5% 1 yr ch); condo \$449,000 (3.2% 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.



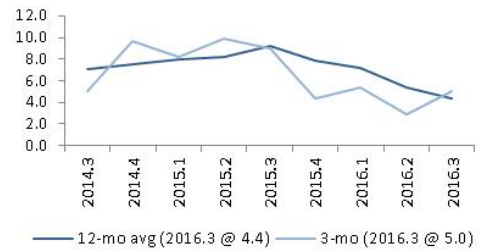
## Single family and condominium housing

**Table 13. Federal Housing Finance Agency Price Index for single family property in DC, DC metro area, and US: September 2016 (2016.3)**

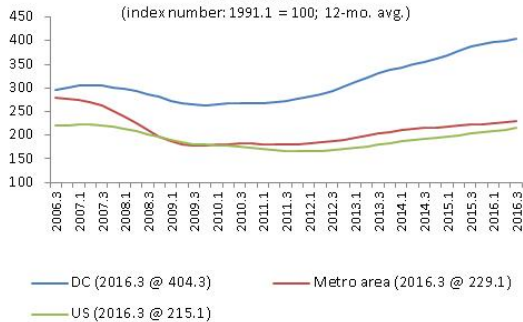
Indicator	Fiscal year average				Last 2 Q's	
	FY 2012	FY 2013	FY 2014	FY 2015	2016.2	2016.3
<b>% change from prior year in value of index</b>						
DC	8.2	12.8	7.0	9.2	2.9	5.0
DC metro area	3.4	8.5	5.8	3.6	2.8	4.3
US	0.7	6.8	6.4	5.8	5.6	6.4

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.

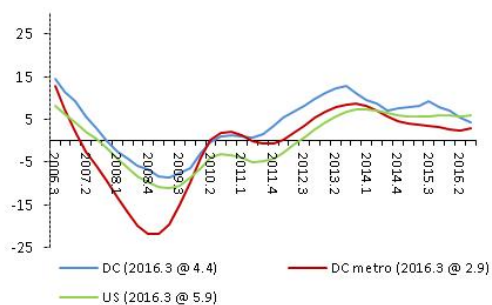
FHFA Expanded-data housing price index for DC: 2014.3 to 2016.3  
(% change from prior year in 3-mo and 12-mo avg)



FHFA expanded-data housing price index for DC, the Washington Metropolitan Area, and the US: 2006.3 to 2016.3  
(index number: 1991.1 = 100; 12-mo. avg.)



FHFA expanded-data housing price index for DC, the Washington Metropolitan Area, and the US: 2006.3 to 2016.3  
(% 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: October 2016**

Category	FY 2014	FY 2015	FY 2016	12-mo	3-mo	This month
				moving total	moving total	
Single family homes	734	765	936	925	237	65
1 year change	45	31	171	146	44	-11
% change	6.5	4.2	22.4	18.7	22.8	-14.5
percent of all single family sales	18.2	18.7	21.3	21.3	21.3	20.4
Condominiums	128	160	167	166	38	6
1 year change	16	32	7	12	7	-1
% change	14.3	25.0	4.4	7.8	22.6	-14.3
percent of all condominium sales	3.6	4.2	4.2	4.2	3.8	1.9

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

**Table 15. Single family housing permits in DC and sales of new DC condominium units: FY 2012 to 2016.3 (FY 2016)**

	Single family housing permits	Sales of new condo units
FY 2012	236	479
FY 2013	368	442
FY 2014	267	516
FY 2015	293	483
12-mo. ending:		
2016.3	283	680
1 yr ch	-10	197
% ch.	-3.4	40.8

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

**Table 16. Condominium units (1) currently being marketed or under construction, or (2) planned: 2016.3**

item	projects	units	Avg. units per project
Unsold units in projects currently marketing or under construction	42	1,192	
Planned with probable sales within 36 months	20	1,190	60
<b>subtotal</b>	<b>62</b>	<b>2,382</b>	
Proposed/rumored with long term delivery	19	1,256	66

Note: an additional 12,184 units in 22 projects are planned as either condominium or rental

Source: Delta Associates. See p.13 For definition of planned and proposed.

# Apartments

## In the 2016.3 quarter occupied apartments increased less than inventory. Construction was up slightly

- In September occupied apartment units increased 3,393 (2.0%) from a year earlier; inventory was up 3,829.
- The vacancy rate was 4.1% in September, up from 4.0% in June; rents rose 4.2% over the prior year.
- 11,963 apartment units were under construction in September, up by 330 from the prior quarter.
- Class A units account for 23% of all apartment units, 22% of the occupied units, and 95% of new construction in September.
- Class A vacancy rate of 7.2% in September up from 6.5% a year earlier. Average rent per unit was up 3.4% from the prior year.

DC Apartment units: 12-month change in inventory and occupancy, and number under construction (all classes): 2014.3 to 2016.3

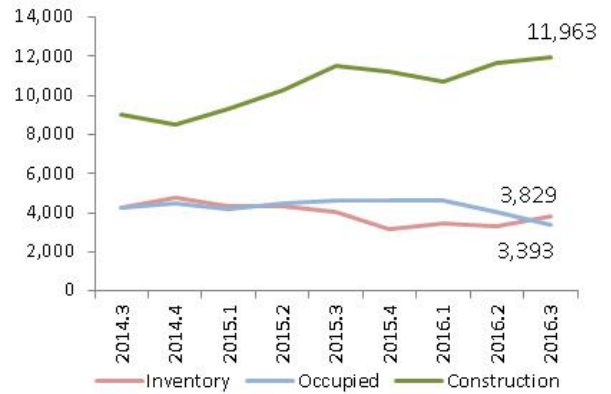


Table 17. Market rate apartment units in DC: 2010 to 2015 (2016.3)

CY	Inventory				Occupied units			Effective monthly rent		Under Construction	
	Buildings	Number	1 yr ch	% vacant	Number	1 yr ch	% ch	\$ per month	1 yr % ch	Buildings	Units
2010	3,329	159,279	1,104	3.8	153,172	2,344	1.6	\$1,448	6.9	18	2,432
2011	3,338	160,818	1,539	4.0	154,318	1,146	0.7	\$1,480	2.2	23	4,957
2012	3,347	162,891	2,073	4.0	156,321	2,003	1.3	\$1,525	3.0	36	8,090
2013	3,362	166,686	3,795	4.9	158,522	2,201	1.4	\$1,573	3.1	49	7,132
2014	3,389	171,429	4,743	4.9	162,975	4,453	2.8	\$1,635	3.9	83	8,494
2015	3,441	174,578	3,149	4.0	167,590	4,615	2.8	\$1,701	4.0	94	11,213
2016.2	3,458	176,197	3,326	4.0	169,178	4,027	2.4	\$1,752	4.2	102	11,633
2016.3	3,471	177,505	3,829	4.1	170,172	3,393	2.0	\$1,769	4.2	98	11,963
1 Q change	13	1,308			994			17		-4	330

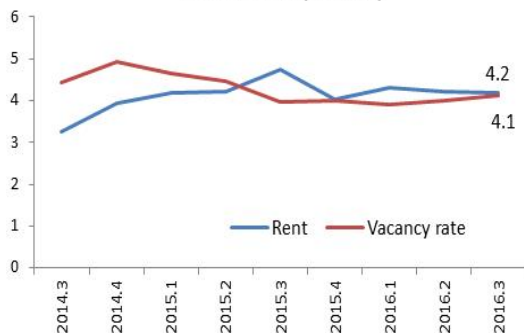
Source: CoStar. Includes units in private buildings with 5 or more units. CY amounts are last quarter of the year. Includes some affordable units in market rate buildings. Vacancy rate is unoccupied units as % of inventory

Table 18. Market rate apartment units in DC, Classes A, B, and C: 2016.3

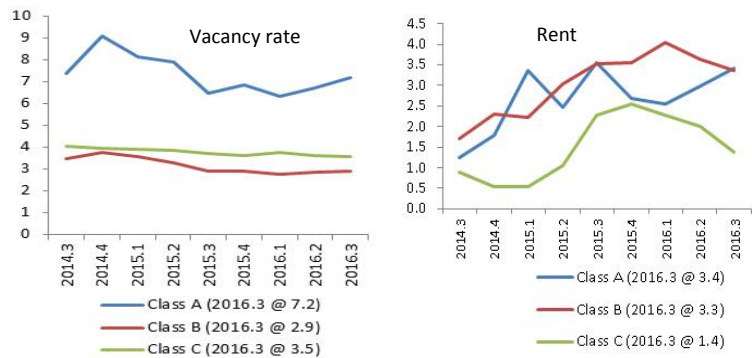
Class	Inventory				Occupied units			Effective monthly rent		Under construction		
	Buildings	Number	1 yr ch	% vacant	Number	1 yr ch	% ch	\$ per month	1 yr % ch	Buildings	Units	Avg. size
Class A	262	40,742	3,631	7.2	37,824	3,110	9.0	\$2,486	3.4	74	11,308	153
Class B	1,060	75,882	384	2.9	73,665	370	0.5	\$1,666	3.3	24	655	27
Class C	2,135	60,641	-186	3.5	58,467	-87	-0.1	\$1,181	1.4	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.

Apartment vacancy rate and % change in average rent per unit: 2014.3 to 2016.3 (all classes)



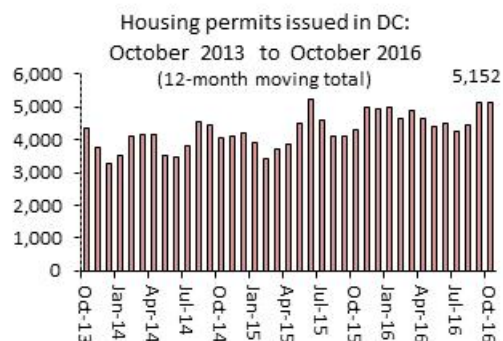
Vacancy rate and 1 year % change in rent per unit for Class A, Class B, and Class C Apartment units: 2014.3 to 2016.3



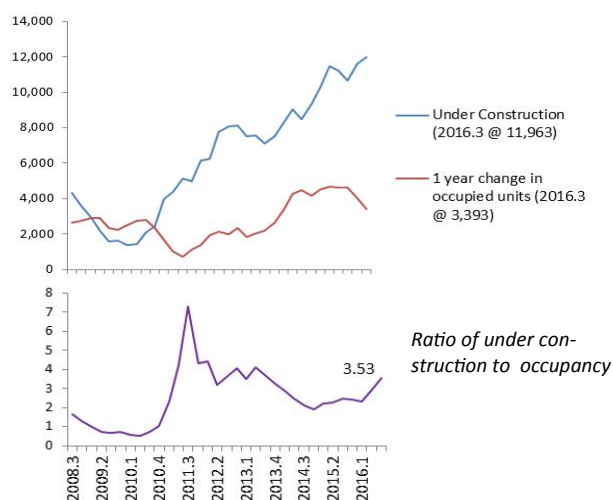
## Apartments and housing permits

### Housing permit pace remains above 5,000 per year

- For the the 12-month period ending October 5, 1,512 housing permits were issued, up 20.3 from a year ago; the 3-month total was 66.1% higher than last year.
- The ratio of new apartment construction to 1 year change in occupied units rose to 3.53 in the September quarter.
- A measure of newly occupied housing units has moved in the past 2 years to closely match the estimated increase in DC households.



### DC apartments under construction, annual change in occupied units, and their ratio: 2008.3 to 2016.3



**Table 19. Housing unit building permits issued in DC: October 2016**

	FY 2014	FY 2015	FY 2016	12-mo. moving total	3-month moving total	This month
Total units	4,467	4,131	5,129	5,152	2,221	679
change from 1 yr ago	612	-336	998	868	884	23
% change from 1 year	15.9	-7.5	24.2	20.3	66.1	3.5
Multi-family projects with 5 or more units						
number	32	37	40	39	11	6
average size	140	112	128	132	146	179

Source: Census Bureau (permits issued during period).

**Table 20. Estimated change in DC households and in measures of newly occupied market rate housing units: 2011.4 to 2016.2**

date	Change in the number of households					Measures of newly occupied housing units			
	Population	1 yr ch	pop/hh ratio	Households	1 yr ch	Ch. In occupied apt. units	New condo sales	Single family permits	Total new occupancy
2011.4	626,210	15,097	2.258	277,387	6,537	1,525	371	135	2,031
2012.4	640,929	14,719	2.259	283,749	6,363	1,894	468	104	2,466
2013.4	653,596	12,667	2.260	289,197	5,448	2,773	514	267	3,554
2014.4	664,751	11,155	2.261	293,970	4,773	4,975	476	236	5,687
2015.4	677,144	12,393	2.263	299,285	5,315	4,107	483	368	4,958
2016.2	683,124	12,451	2.267	301,338	4,913	3,856	569	351	4,776

Source: 1) Population: BEA; 2) population/household ratio based on Office of Planning estimates for 5 intervals; 3) households: calculated from population using the pop/hh ratio; 4) occupied apartment units: CoStar; 5) new condo sales: Delta Associates; 6) Single family permits: Census, with a 2 year lag.

Note: all occupants of newly occupied housing units are not necessarily DC resident households for Census purposes.

**Table 21. Delta Associates outlook for Class A apt. units: 2016.3**

item	projects	units	Avg. units per project
Under construction/and or marketing	56	10,509	222
Planned with probable sales within 36 mo.	33	7,320	222
Proposed/rumored with long term delivery	63	16,538	263
Planned as either apartment or condo	25	13,006	520

**Addendum: estimated supply and demand for the next 3 years**

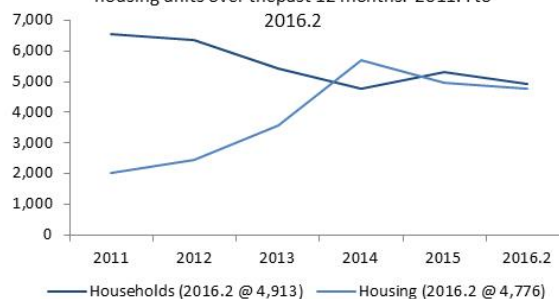
supply**	11,501
demand	8,410

\*Average based on all units in projects, including 1,527 already rented.

\*\*Supply available by Sept. 2019 is vacant units, units under construction and marketing, and 21% (1,830) of planned units.

Source: Delta Associates. For definitions of planned and proposed see p. 13.

Estimated increase in DC households and occupied housing units over the past 12 months: 2011.4 to 2016.2



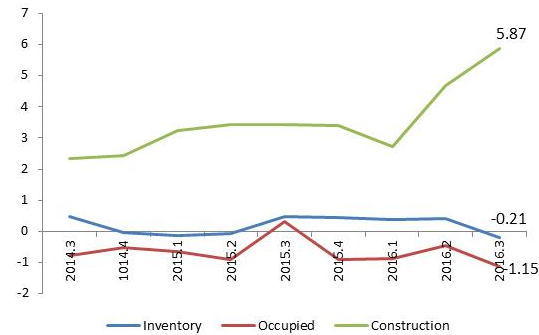
## Commercial office space

***In the September quarter, occupied commercial office space was less than last year, the vacancy rate increased, and new construction also increased***

- According to CoStar, for the the 12-month period ending September occupied office space decreased by 1.15 million sq. ft. from the prior year. Occupied space still remains below the levels of 2012, 2013, and 2014. Base rent rose 3.5%. A total of 5.87 million square feet of construction was underway in September.

- Class A office space accounted for 14% of all office buildings, 58% of office space, 57% of occupied space, and 99% of new construction. The vacancy rate for class A space was 12.7%, up from 11.7% a year ago. Class A rent rose 4.1% over the past year.

DC Commercial office space: 1 year change in inventory and occupancy, and under construction: 2014.3 to 2016.3 (all classes, msf):



**Table 22. DC commercial office space: 2010 to 2016.3**

CY (year end)	Buildings	Inventory		Occupied space			Vacancy %		Base rent (direct)		Under constr.	
		Level (msf)	1 yr ch (msf)	Level (msf)	1 yr ch (msf)	% ch	Direct	Total	\$ per sq ft.	1 yr % ch	buildings	msf
2010	2,373	151.74	2.56	135.13	3.26	2.5	10.0	10.9	\$45.61	1.6	6	1.56
2011	2,368	152.64	0.90	136.02	0.90	0.7	10.2	10.9	\$46.15	1.2	9	2.04
2012	2,358	152.38	-0.26	137.52	1.49	1.1	9.1	9.8	\$45.18	-2.1	8	2.21
2013	2,355	153.15	0.78	137.88	0.36	0.3	9.4	10.0	\$46.08	2.0	12	2.13
2014	2,348	153.10	-0.05	137.35	-0.52	-0.4	9.8	10.3	\$47.24	2.5	13	2.43
2015	2,341	153.55	0.44	136.44	-0.91	-0.7	10.7	11.1	\$47.95	1.5	18	3.41
2016.2	2,338	153.60	0.40	136.27	-0.47	-0.3	10.7	11.3	\$49.34	3.2	17	4.70
2016.3	2,337	153.45	-0.21	136.22	-1.15	-0.6	10.5	11.2	\$48.14	3.5	22	5.87
1 Q ch	-1	-0.15		-0.05			-0.2	-0.1	-1.20		5	1.17

Source: CoStar, all classes and sizes.

Vacancy rate and 1 year % change in base direct rent for all commercial office space and for Class A office space: 2014.3 to 2016.3



**Table 23. DC Class A, B, and C commercial office space: 2016.3**

CY (year end)	Buildings	Inventory		Occupied space			Vacancy %		Base rent (direct)		Under constr.	
		Level (msf)	1 yr ch (msf)	Level (msf)	1 yr ch (msf)	% ch	Direct	Total	\$ per sq ft.	1 yr % ch	buildings	msf
Class A	330	89.55	0.42	78.19	-0.50	-0.6	11.9	12.7	\$53.47	4.1	17	5.79
Class B	884	53.25	-0.53	47.81	-0.49	-1.0	9.6	10.2	\$42.99	1.5	5	0.08
Class C	1,119	10.61	-0.12	10.20	-0.15	-1.4	3.8	3.8	\$32.17	0.4	0	0.00

Source: CoStar.

## Office outlook and value of all property transfers

***In Oct. the pace of property transfers increased, and the value over the past 12 months was about the same as the prior year total***

- Delta Associates expects the supply of new office space in DC to exceed the new demand over the next two years. DC's share of regional office new supply is estimated at 64.4% and the share of demand at 52.9%.

- The value of October property transfers was up 37.8% from last year as measured by the 3-month moving total. The 12-month moving total (\$13.76 billion) was 0.4% lower than last year.

Table 24. **Delta Associates outlook for commercial office space: September 2016** (million square feet)

item	2016.2	2016.3
Vacant	9.60	9.54
New supply, next 2 years:*		
Under construction	4.32	5.46
Part of planned for delivery in 2 yr.		0.14
Total	4.32	5.60
Demand, next 2 years	4.60	4.60
Planned	6.39	4.76
Proposed/rumored with long term delivery	14.87	15.31

\*Supply for next two years represents office buildings currently under construction and a portion of those planned that could deliver by September 2018.

For definitions of planned and proposed, see box.

Source: Delta Associates.

Table 25. **Delta Associates outlook for commercial office space in DC and the surrounding metro area: Sep. 2016 to Sep. 2018**

Indicator	DC	No VA	Sub MD	Total	DC % of total
<b>Inventory September 2016</b>					
Inventory (msf)	141.9	179.9	86.1	407.9	34.8
<b>Estimated net activity to September 2018</b>					
new supply (msf)	5.6	2.9	0.2	8.7	64.4
new demand (msf)	4.6	3.1	0.9	8.7	52.9

Source: Delta Associates msf = million square feet

**Note: Planned and proposed projects**

**Planned projects:** Permits are filed, a ground-break date is established, size and location is determined, and the project is in one of many phases of the planning process (site plan review, design review, environmental compliance review, zoning, etc.).

**Proposed projects:** a developer has proposed to build a project (either formally or informally) but has not submitted any plans for review and permits have not yet been filed.

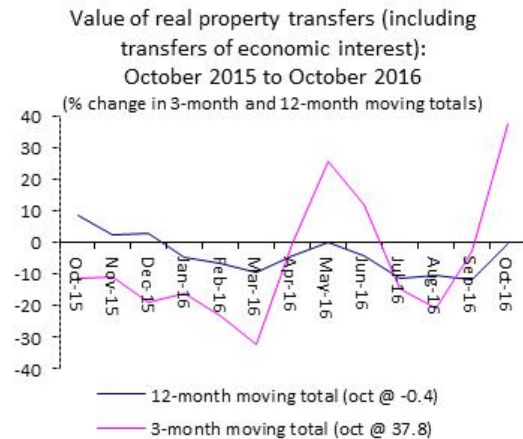
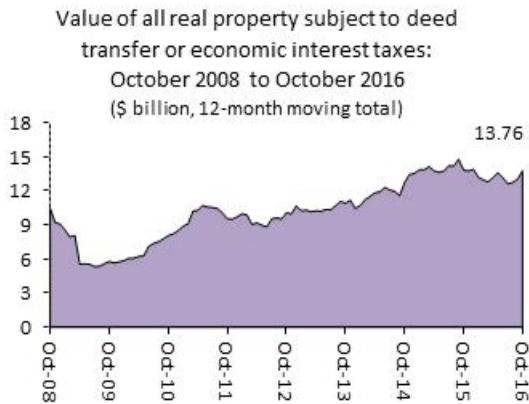


Table 26. **Market Value of Real Property transfers subject to the Deed Transfer or Economic Interest tax: October 2016**

	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	13,759.8	4,182.4	1,634.2
change from one year ago (\$M)	1,530.6	505.8	3,196.5	-1,730.3	-61.4	1,147.6	723.8
% change from 1 year ago	16.1	4.6	27.6	-11.7	-0.4	37.8	79.5

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/ORR (calculated from tax collections and deposits adjusted for tax rate changes).

# Hospitality

## Hotel demand and average room rates are increasing

● In October the 3-month moving total for hotel room-days sold was 3.5% above a year earlier. The average room rate was 7.9% higher, and revenue was up 11.7%. For the past 12 months, hotel revenue was up 5.0%.

● Employment in food services was 2.2% more in October than a year earlier as measured by the 3-month moving average. Hotel employment was up 2.9%.

● September airline traffic into the DC area was up 2.4% compared to a year earlier as measured by the 3-month moving total. Reagan National was up 0.9%. For the past 12-months, total traffic into the DC area was 3.0% higher.

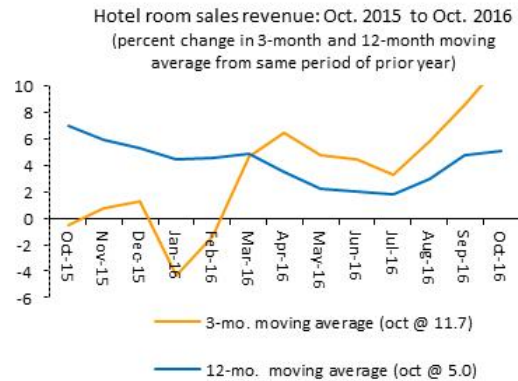
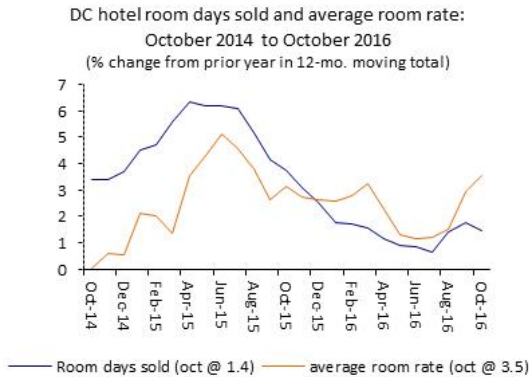


Table 27. Hospitality Industry: October 2016

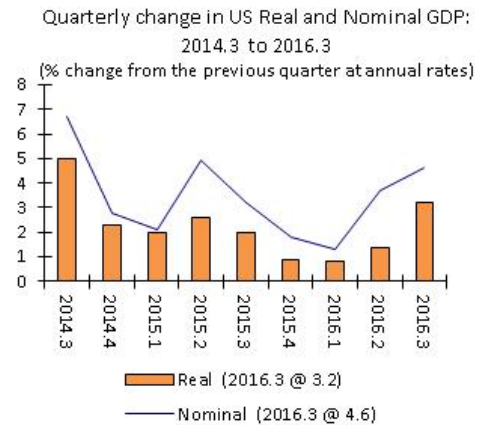
Indicator	Units	date	FY 2014	FY 2015	FY 2016	12-month moving total or average*	3-month moving total or average*	This month	
<b>Hotel stays</b>									
Hotel room-days sold	('M)	oct	7.869	8.197	8.341	8.351	2.256	0.793	
			1 yr ch	0.189	0.328	0.144	0.119	0.076	0.010
			1 yr % ch	2.5	4.2	1.8	1.4	3.5	1.2
Average room rate	\$	oct	209.87	215.34	221.63	223.53	229.43	268.18	
			1 yr ch	2.56	5.46	6.29	7.63	16.87	19.78
			1 yr % ch	1.2	2.6	2.9	3.5	7.9	8.0
Occupancy rate (average)	%	oct	76.6	77.5	77.9	77.7	81.3	84.6	
			1 yr ch	0.8	0.9	0.4	-0.1	-0.3	-2.4
			1 yr % ch	1.0	1.2	0.5	-0.2	-0.4	-2.8
Room revenue	(\$M)	oct	1,651.4	1,765.1	1,848.6	1,866.6	517.7	212.6	
			1 yr ch	59.4	113.6	83.5	89.3	54.2	18.1
			1 yr % ch	3.7	6.9	4.7	5.0	11.7	9.3
<b>Airline passengers</b>									
DCA	1 yr % ch	sep	0.0	10.3	2.8	2.8	0.9	-2.7	
IAD	1 yr % ch	sep	-1.9	0.3	-0.1	-0.1	1.2	3.9	
BWI	1 yr % ch	sep	-0.5	4.1	6.0	6.0	5.1	1.4	
Total	1 yr % ch	sep	-0.8	4.8	3.0	3.0	2.4	0.9	
<b>Employment</b>									
Accommodations	level ('000)	oct	15.2	15.1	15.4	15.5	15.5	15.5	
			1 yr ch	0.0	-0.1	0.3	0.4	0.4	0.3
			1 yr % ch	-0.2	-0.3	2.0	2.3	2.9	2.0
Food and bev	level ('000)	oct	47.1	49.7	51.4	51.5	52.0	52.6	
			1 yr ch	2.0	2.6	1.7	1.6	1.1	1.5
			1 yr % ch	4.3	5.5	3.4	3.3	2.2	2.9

\* Total for hotel rooms sold and room revenue. 12 month moving average or total is the same as FY 2016.

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

## Third quarter annualized growth rate for US nominal GDP increases to 4.6%

- US annualized real GDP growth in the September quarter was estimated at 3.2%; nominal growth was 4.6% (seasonally adjusted).
- Federal government consumption and investment for all activities was 2.2% higher in the 2016.3 quarter than a year earlier, below the 2.8% rate for nominal GDP for the entire US economy.
- US employment (seas. adj.) increased by 142,000 in October from the month before.
- The US unemployment rate (seas. adj.) fell to 4.9% in October.
- In October the average S&P 500 index fell 0.7% from September; it was 5.8% above a year earlier.

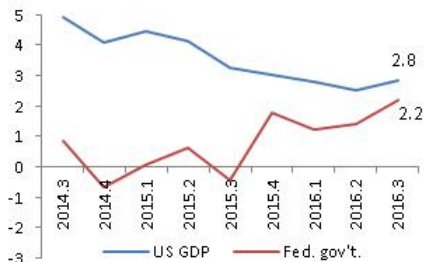


**Table 29. Federal government sector, US GDP accounts: 2016.3**  
(percent change from same period of prior year)

Indicator	FY 2013	FY 2014	FY 2015	12-mo avg*	2016.3
<b>Non-defense</b>					
Compensation of employees	-0.4	1.7	4.1	3.7	4.7
Purchases of goods and services	-4.9	-1.7	8.0	7.7	9.1
Gross investment	-3.7	-0.4	3.0	1.4	2.0
<b>Defense</b>					
Compensation of employees	-3.5	-0.6	-0.8	1.1	2.0
Purchases of goods and services	-9.0	-7.2	-5.2	-0.9	-0.4
Gross investment	-8.2	-4.2	-4.5	2.3	3.4
<b>All federal consumption and investment</b>	<b>-4.1</b>	<b>-1.8</b>	<b>-0.1</b>	<b>1.6</b>	<b>2.2</b>

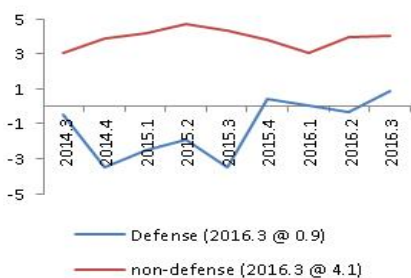
\*Same as FY 2016 Source: BEA (November 29, 2016). Nominal values.

Federal government consumption and investment and US GDP: 2014.3 to 2016.3



Federal government consumption and investment, by defense and non-defense: 2014.3 to 2016.3

(Nominal.; % change from same Q of the prior year)



**Table 30. Qtr. to Qtr. ch. in US GDP: 2015.3 to 2016.3**  
(% ch. from previous quarter at seasonally adj. annual rates)

Indicator	2015.3	2015.4	2016.1	2016.2	2016.3
US GDP real	2.0	0.9	0.8	1.4	3.2
US GDP nominal	3.2	1.8	1.3	3.7	4.6
Wages and salaries	4.4	6.6	-0.7	6.6	5.4
Personal income	4.0	3.4	1.3	4.8	4.4

Note: GDP=Gross Domestic Product Source: BEA, updated Nov. 29, 2016.

**Table 28. US GDP, income, and inflation: 2016.3**

(percent change from same period of prior year)

Indicator	FY 2013	FY 2014	FY 2015	12-mo avg*	2016.3
US GDP real	1.3	2.4	2.8	1.6	1.6
US GDP nominal	3.0	4.3	4.0	2.8	2.8
US Personal income	3.0	3.5	4.9	3.6	3.5
US wages	3.9	4.0	5.2	4.5	4.6
Corporate profits**	2.6	5.4	-1.6	-0.9	0.5
S and P stock index	16.7	20.3	9.7	0.4	6.7
US CPI	1.6	1.6	0.3	0.9	1.1
Balt/Wash. area CPI	1.6	1.7	0.4	1.1	na

Source: BEA (November 29, 2016), BLS, Yahoo.

\* Same as FY 2016 \*\*Before tax, w/o IVV and CCAAdj. na=not available

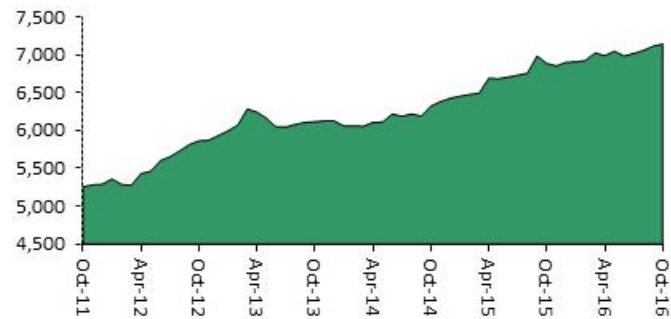
**Table 31. Monthly selected US Indicators: July 2016 to October 2016**

Indicator	July	August	September	October
S and P stock index (level)	2149	2177	2158	2142
% change from prior month	3.0	1.3	-0.9	-0.7
% change from 1 year ago	2.6	6.7	11.0	5.8
10 yr. Treasury Interest rate (level)	1.50	1.55	1.63	1.76
CPI % ch from prior month (seasonally adjusted)	-0.04	0.20	0.29	0.36
CPI % ch from prior year (seasonally adjusted)	0.87	1.09	1.48	1.64
Jobs (seasonally adjusted level, in millions)	144.42	144.60	144.81	144.95
change from prior month (thousands)	252	176	208	142
% change from prior month	0.17	0.12	0.14	0.10
Resident employment (season. adj. level, in mil.)	151.517	151.614	151.968	151.925
change from prior month (thousands)	420	97	354	-43
% change from prior month	0.28	0.06	0.23	-0.03
Unemployment rate (seasonally adj.)	4.9	4.9	5.0	4.9

Source: BLS and Yahoo! Finance.

## DC tax collections

**Total DC tax collections (before earmarking):**  
**October 2011 to October 2016**  
 (12-month moving total in October 2016 is \$7,142 million)



**Table 32. Tax Collections (before earmarking): November 2016 (Preliminary)**

Tax	Revenue (from CAFR)				Tax collections			
	FY 2013	FY 2014	FY 2015	FY 2016 collections	12-month moving total	FY 2016 to date	3-month moving total	This month
Total taxes	6,100.5	6,290.0	6,916.8	7,112.8	7,169.3	712.8	2,205.9	327.0
1 year change	247.2	189.5	656.9	134.6	318.7	56.5	112.9	27.0
% change	4.2	3.1	10.0	1.9	4.7	8.6	5.4	9.0
Real property	1,914.8	2,015.6	2,194.5	2,347.4	2,348.3	23.5	1,023.6	4.9
1 year change	92.8	100.7	178.9	49.5	148.3	0.8	42.0	0.4
% change	5.1	5.3	8.9	2.2	6.7	3.6	4.3	8.8
General sales	1,137.9	1,172.1	1,315.3	1,300.8	1,329.2	260.2	347.3	121.1
1 year change	26.8	34.2	143.2	46.7	70.6	28.4	15.7	10.7
% change	2.4	3.0	12.2	3.7	5.6	12.2	4.7	9.7
Individual income	1,640.9	1,679.2	1,868.0	1,874.1	1,887.5	267.1	473.1	124.5
1 year change	150.2	38.3	188.9	1.0	13.8	13.4	20.7	16.5
% change	10.1	2.3	11.2	0.1	0.7	5.3	4.6	15.2
withholding	1,391.2	1,472.9	1,553.2	1,623.6	1,641.4	270.5	401.1	131.3
1 year change	69.6	81.7	80.3	43.7	61.4	17.8	27.5	10.1
% change	5.3	5.9	5.4	2.8	3.9	7.1	7.4	8.4
non-withholding	249.6	206.2	314.8	250.5	246.1	-3.4	72.1	-6.8
1 year change	80.6	-43.4	108.6	-42.7	-47.6	-4.5	-6.9	6.4
% change	47.7	-17.4	52.6	-14.6	-16.2	-426.2	-8.7	-48.5
Corporate income	299.0	280.2	308.0	356.2	367.7	21.2	89.6	8.6
1 year change	-3.9	-18.8	27.8	39.2	50.9	11.5	18.5	3.0
% change	-1.3	-6.3	9.9	12.4	16.1	118.0	26.1	53.8
Unincorporated Bus.	154.3	135.4	139.8	158.2	156.4	6.1	33.0	1.7
1 year change	-8.7	-18.9	4.4	9.7	4.8	-1.8	-1.4	-0.1
% change	-5.3	-12.3	3.2	6.5	3.2	-22.9	-4.0	-7.5
Deed taxes*	372.8	391.2	480.6	444.1	442.9	321.0	115.4	31.9
1 year change	60.3	18.4	89.4	-36.4	-3.1	248.3	0.1	-13.4
% change	19.3	4.9	22.8	-7.6	-0.7	341.5	0.1	-29.5
Other taxes	580.8	616.4	610.6	631.9	637.4	74.4	123.8	34.2
1 year change	-70.4	35.6	-5.8	25.0	33.4	16.8	17.2	9.9
% change	-10.8	6.1	-0.9	4.1	5.5	29.2	16.2	40.6

\*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.

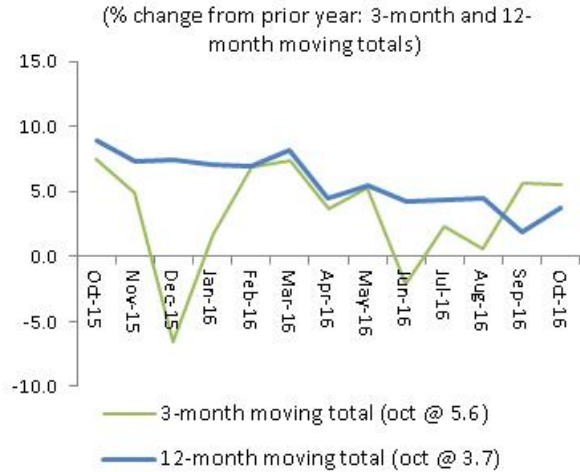
Source: OCFO/ORR



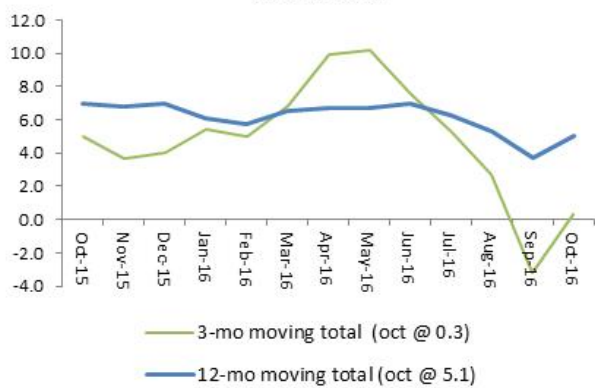
**Tax collections in the last 12 months are 3.7% above a year ago**

- For the 12 month period ending October total tax collections (before earmarking) were \$258.1 million (3.7%) more than in the prior year. For the last 3 months they were 5.6% above last year.
- Individual income tax collections were 1.2% below last year for the 12-months ending October, but withholding was 2.6% higher. For the past 3 months, withholding was up 3.8% and all collections were up 0.7%.
- General sales tax collections were 5.1% above last year for the 12-months ending October. For the past 3 months, they were 0.3% above last year.
- Deed tax collections for the 12-months ending October were down 0.80% from last year; for the past 3 months they were up 22%.
- Corporate income taxes in Oct. were up 15.7% and unincorporated business income taxes rose 3.7% from last year (12-mo. total).

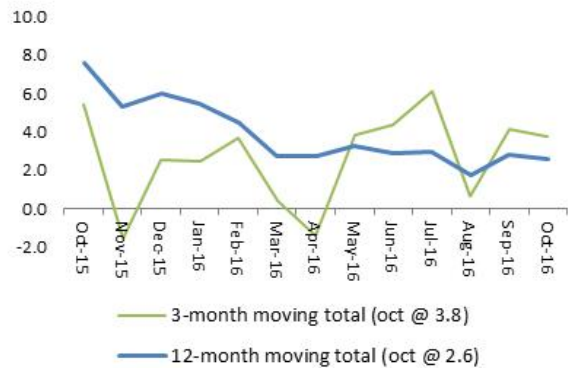
**Total tax collections (before earmarks):  
October 2015 to October 2016**



**General Sales tax collections (before earmarks):  
October 2015 to October 2016**



**Withholding for the Individual Income tax:  
October 2015 to October 2016**



**General Sales tax and Withholding for the Individual Income tax:  
October 2015 to October 2016**



**Deed tax collections (before earmarks):  
October 2015 to October 2016**



## US economic forecasts

### Little change in the November Blue Chip forecast for the US economy

- The November Blue Chip Indicators kept its forecast for real GDP growth in FY 2016 at 1.6% and its FY 2017 estimate at 2.1%. Both years are lower than the actuals for 2014 and 2015 (2.4% and 2.8%, respectively). FY 2017 nominal growth of 4.0% is below FY 2016 and the same as FY 2015.
- CBO's August economic and budget outlook: real growth rates of 1.9% in FY 2016, and 2.3% in each of 2017 and 2018.
- The Blue Chip Indicators November forecast for inflation (CPI): 1.0% for FY 2016 and 2.1% in FY 2017.
- S&P 500 November baseline forecasts for the end 2016: Global Insight's forecast: 4.8% annual gain in the 4th quarter of 2016, Moody's Analytics is 6.2%. Global Insight predicts faster growth in 2017, Moody's thinks it will decline.
- Global Insight and Moody's Analytics expect nominal Personal Income growth of about 4% in FY 2017 and around 5% in FY 2018.

Table 33. Forecasts for US nominal and real GDP: FY 2013 through FY 2017  
(% 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
<b>FY 2013 Actual</b>	1.3	1.3	1.3	3.0	3.0	3.0
<b>FY 2014 Actual</b>	2.4	2.4	2.4	4.3	4.3	4.3
<b>FY 2015 Actual</b>	2.8	2.8	2.8	4.0	4.0	4.0
<b>FY 2016</b>						
August	1.6	1.6	1.5	2.8	2.7	2.8
September	1.6	1.5	1.5	2.8	2.7	2.8
October	1.6	1.6	1.5	2.9	2.7	2.8
November	1.6	1.6	1.6	2.9	2.7	2.8
<b>FY 2017</b>						
August	2.1	2.6	2.3	4.1	4.5	5.3
September	2.2	2.6	2.3	4.0	4.5	5.1
October	2.1	2.6	2.0	4.1	4.4	4.9
November	2.1	2.6	2.1	4.0	4.4	5.0

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

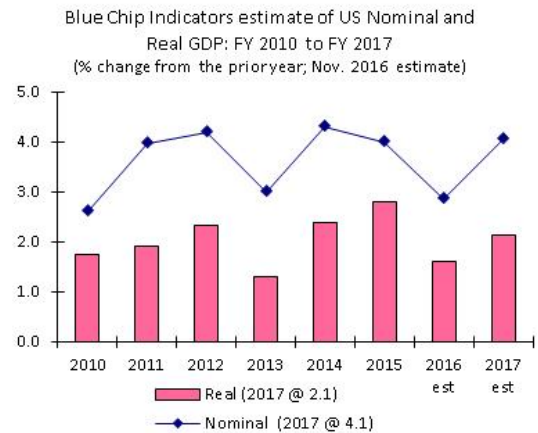


Table 34. CBO estimates of GDP and other indicators: FY 2015 to FY 2018

Indicator	FY 2015	FY 2016	FY 2017	FY 2018
Real GDP (% ch from prior yr.)	2.6	1.9	2.3	2.3
Nominal GDP (% ch from prior yr.)	3.6	3.1	4.0	4.1
CPI (% ch from prior yr.)	0.3	1.0	2.2	2.3
10 yr. Treasury bond rate	2.2	1.9	2.2	2.7
Unemployment rate	5.5	4.9	4.5	4.5

Source: Congressional Budget Office, *The Budget and Economic Outlook: 2016 to 2026*, August 2016

Table 35. Forecasts for US Personal Income: FY 2015 to FY 2018

Forecast date	% change from prior fiscal year				% change from prior fiscal year			
	2015	2016	2017	2018	2015	2016	2017	2018
	Global Insight				Moody's Analytics			
Aug	4.9	3.4	4.3	5.0	4.9	3.3	4.4	6.6
Sep	4.9	3.5	4.3	4.8	4.9	3.5	4.2	5.5
Oct	4.9	3.5	4.1	4.8	4.9	3.5	4.2	5.4
Nov	4.9	3.5	4.0	4.8	4.9	3.5	4.2	5.4

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

Table 36. Forecasts for S and P 500: 2015.4 to 2017.4

Forecast date	% change from prior year			% change from prior year		
	2015.4	2016.4	2017.4	2015.4	2016.4	2017.4
	Global Insight			Moody's Analytics		
August	2.0	5.7	5.4	2.0	6.1	1.5
Sept.	2.0	6.9	5.4	2.0	4.9	-1.8
October	2.0	6.9	5.4	2.0	5.0	-1.9
Nov.	2.0	4.8	5.4	2.0	6.2	-2.9

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

Table 37. Blue Chip forecasts for CPI and 10 year Treasury interest rate: FY 2015 to FY 2017  
(% change from prior fiscal year)

Forecast date	CPI			10 yr Treasury rate		
	2015	2016	2017	2015	2016	2017
	Aug	0.3	1.1	2.2	2.2	1.9
Sep	0.3	1.1	2.2	2.2	1.9	2.0
Oct	0.3	0.9	2.1	2.2	1.9	1.9
Nov	0.3	1.0	2.1	2.2	1.9	2.0

Source: Blue Chip Indicators

**Global Insight and Moody's Analytics have different views on DC 's economy, but both expect job and population growth to slow in FY 2017 and beyond**

- **Global Insight:** Job growth falls much more than population. Population and resident employment growth outpace jobs located in DC. Personal Income in FY 2017 and FY 2018, 4.8% and 4.9%, is a little above the US.
- **Moody's Analytics:** More job growth and less population growth than Global Insight. Personal Income growth falls sharply to 0.5% in FY 2017, far below the US average and the metro area.
- **Changes in the last 3 months:** Global Insight added to its jobs forecast, Moody's reduced theirs, so they are now both quite similar. Moody's cut Personal Inome growth.

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

		FY 2015	Global Insight				Moody's Analytics			
		actual	FY 2016	FY 2017	FY 2018	FY 2019	FY 2016	FY 2017	FY 2018	FY 2019
<b>Jobs in DC</b>	Level	764,359	774,725	782,923	786,497	790,851	774,975	781,325	785,575	791,150
	1 yr, ch	12,534	10,367	8,198	3,574	4,355	10,600	6,350	4,250	5,575
	1 yr % ch.	1.7	1.4	1.1	0.5	0.6	1.4	0.8	0.5	0.7
	Ch. in level of estimate from 3 mo. ago		-105	1,689	2,095	3,016	-150	-2,125	-4,050	-4,975
<b>Population</b>	Level	670,631	681,589	691,415	700,804	709,113	679,225	686,050	691,575	696,375
	1 yr, ch	11,951	10,958	9,826	9,389	8,309	9,175	6,825	5,525	4,800
	1 yr % ch.	1.8	1.6	1.4	1.4	1.2	1.4	1.0	0.8	0.7
	Ch. in level of estimate from 3 mo. ago		0	0	0	0	0	0	0	-0.025

Source: November 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	Global Insight				Moody's Analytics			
		actual	FY 2016	FY 2017	FY 2018	FY 2019	FY 2016	FY 2017	FY 2018	FY 2019
DC resident jobs	1 yr, ch	13,307	10,144	2,860	6,846	6,529	10,150	4,975	3,925	4,300
Households	1 yr, ch	4,678	4,191	2,806	3,198	3,806	4,475	2,350	2,175	2,650
Housing starts		4,025	4,662	3,719	3,295	2,939	3,811	3,676	3,668	3,656

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

Table 39. Forecasts of DC Personal Income to FY 2019

Date of estimate	FY 2015	Global Insight				Moody's Analytics			
	actual	FY 2016	FY 2017	FY 2018	FY 2019	FY 2016	FY 2017	FY 2018	FY 2019
August 2016	4.1	4.3	4.9	5.5	6.3	3.8	0.9	3.2	4.3
November 2016	6.7	4.4	4.8	4.9	5.9	4.0	0.5	1.7	3.3

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

Table 41. November forecasts for employment and Personal Income for DC, the metro area, and the US: FY 2015 to FY 2018

(percent change from prior year)

Indicator	Global Insight				Moody's Analytics			
	2015	2016	2017	2018	2015	2016	2017	2018
<b>Wage and salary jobs</b>								
DC	1.7	1.3	0.7	0.4	1.7	1.4	0.8	0.5
Metro area					1.6	2.2	1.7	1.5
US	2.1	1.8	1.4	0.9	2.1	1.8	1.5	1.4
<b>Personal Income</b>								
DC	6.7	4.4	4.8	4.9	6.7	4.0	0.5	1.7
Metro area					4.3	4.5	5.5	6.0
US	4.9	3.5	4.0	4.8	4.9	3.5	4.2	5.4

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

Table 42. November DC forecasts for wages and unemployment: FY 2015 to FY 2018

(percent change from prior year)

	Global Insight				Moody's Analytics			
	2015	2016	2017	2018	2015	2016	2017	2018
<b>Wages and salaries earned in DC</b>								
	4.5	4.0	4.3	4.5	4.5	3.9	3.1	3.8
<b>DC resident wages and salaries</b>								
	6.0	4.0	5.0	5.1	6.0	3.5	-1.9	0.0
<b>DC Unemployment rate (level)</b>								
	7.2	6.3	6.0	6.0	7.2	6.3	6.3	6.6

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

## DC revenue estimate

### The September revenue estimate: \$176 million more in FY 2016 than in FY 2015, followed by an \$83 million increase in FY 2017

- Anticipated tax revenue increase (before earmarks) is 2.5 % in FY 2016, followed by a 1.2% increase in FY 2017. The estimates reflect growth in the DC economy, and the effects of scheduled tax cuts enacted in September 2015.
- Real property tax growth of \$163 million in FY 2016 offset by decreases in other taxes in that year. Real property is also the leading source of revenue gain in FY 2017. Individual income tax revenue increased 11.2% in FY 2015, but is estimated to fall 0.6% in FY 2016 reflecting both tax cuts and extraordinary capital gains in FY 2015. For FY 2018 estimated growth is 4.0%.
- The General sales tax is estimated to grow 4.1% in FY 2017, while deed taxes fall 13.0%.
- As a share of DC Personal Income, tax revenue in FY 2017 is expected to fall to 13.9% from 14.6% in FY 2015 and 14.3% in FY 2016.

Table 43. DC Tax Revenue (before earmarks) for FY 2015 through FY 2018: September 2016 revenue estimate

Tax	FY level (\$ million)				Change from prior year (\$ M)				% change from prior year			
	2015	2016	2017	2018	2015	2016	2017	2018	2015	2016	2017	2018
Real property	2,194.5	2,357.2	2,456.0	2,532.5	178.9	162.7	98.8	76.5	8.9	7.4	4.2	3.1
Deed taxes	480.6	430.5	374.6	384.3	89.4	-50.1	-55.8	9.6	22.8	-10.4	-13.0	2.6
General sales	1,315.3	1,308.5	1,362.5	1,418.2	143.2	-6.8	54.0	55.7	12.2	-0.5	4.1	4.1
Individual income	1,868.0	1,857.0	1,931.9	2,011.9	188.9	-11.1	74.9	80.0	11.2	-0.6	4.0	4.1
Withholding	1,553.2	1,621.2	1,690.2	1,768.2	80.3	68.0	69.0	78.0	5.5	4.4	4.3	4.6
non-withholding	314.8	235.8	241.7	243.7	108.6	-79.0	5.9	2.0	52.7	-25.1	2.5	0.8
Business income	447.8	516.4	449.6	460.9	32.2	68.6	-66.7	11.3	7.8	15.3	-12.9	2.5
Other	610.6	623.7	601.7	598.6	-5.8	13.1	-22.1	-3.1	-0.9	2.2	-3.5	-0.5
Total	6,916.8	7,093.2	7,176.4	7,406.4	626.9	176.4	83.1	230.1	10.0	2.5	1.2	3.2

Source: ORA. September 30, 2016 revenue estimate under existing legislation. 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 labor market assumptions: FY 2015 to FY 2018

item	2015	2016	2017	2018
Wage and salary employment	762,800	772,403	778,754	783,945
1 year change	11,317	9,603	6,351	5,191
% change	1.5	1.3	0.8	0.7
DC resident employment	356,540	365,433	370,564	374,859
1 year change	11,714	8,893	5,130	4,295
% change	3.4	2.5	1.4	1.2
Unemployment rate	7.4	6.5	6.4	6.3

Source: ORA September 2016 revenue estimate.

Table 45. DC Income and stock market assumptions: FY 2015 to FY 2018 (% change from prior year)

item	2015	2016	2017	2018
Wages and salaries earned in DC	5.1	4.2	3.9	4.0
Wages and salaries earned by DC residents	4.6	4.5	4.0	4.2
DC Personal income	4.2	4.0	4.2	4.7
S and P 500 stock index	2.0	0.5	3.5	2.7

Source: ORA September 2016 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 2009 to FY 2018

item	2009	2010	2011	2012	2013	2014	2015	2016 est	2017 est	2018 est
<b>Tax revenue (\$ million)</b>										
Level	5,052	5,005	5,325	5,853	6,100	6,290	6,917	7,093	7,176	7,406
Change from prior year	-273	-47	320	528	247	189	627	176	83	230
<b>Percent change from prior year</b>										
Tax revenue	-5.1	-0.9	6.4	9.9	4.2	3.1	10.0	2.5	1.2	3.2
Personal Income	-0.7	1.5	8.0	5.2	2.8	2.7	4.2	4.0	4.2	4.7
<b>Tax revenue as percent of Personal Income</b>										
	13.5	13.2	13.0	13.5	13.7	13.8	14.6	14.3	13.9	13.7

Source: ORA. September 30, 2016 revenue estimate under existing legislation. The table includes tax revenue only, before all earmarks, and excludes all non-tax revenues, lottery, and "O-type" earmarked revenues.

Within the private sector, the growth in professional and technical services in FY 2016 (2,542) modestly exceeded the five-year average annual growth for the sector. All other private sector industries combined (business services, health and education, retail, hospitality, organizations, etc.) grew by 4,600, less than half of the five year average. Of DC’s job growth in FY 2016, The public sector accounted for a third, and 40% of that was in local government.

**FY 2016 Change in DC wage and salary jobs as percent of average change from FY 2011 to FY 2016**

	5-year avg. change from FY 2011 to FY 2016	Change from FY 2015 to FY 2016	Change from 2015 to 2016 as % of 5 year avg.
Private sector	11,817	7,142	60.4
Prof. and tech.	2,223	2,542	114.3
Other	9,593	4,600	47.9
Public sector	-1,497	3,442	na
Federal	-2,665	1,983	na
Local	1,168	1,458	124.8
Total	10,320	10,583	102.6

Source: BLS (see appendix table A1. na = not applicable due to negative numbers)

Additional detail on trends in DC’s private sector will be discussed in a subsequent Trend report.

**The September quarter of 2016.** DC wage and salary employment ended FY 2016 on the upswing. Employment in the last (September) quarter of 2016 was 12,333 more than in the same quarter of 2015, and it was 1,750 jobs greater than the average for all of FY 2016. This stronger quarter does not, however, change the basic picture of weakening private sector growth.

The increase in total employment in this last quarter of FY 2016 was almost exactly the same (actually 33 jobs more) than in the last quarter of FY 2015. Private sector growth was, however, smaller in the FY 2016 quarter—1,833 less, representing a change from 78% of the year’s growth to 63%. Furthermore, all of the private sector decline in growth between the two years was in professional and technical services.

Government employment increased in the last quarter of FY 2016 by 1,867 more than in the FY 2015 quarter. All of this increase—and then some—was due to greater growth in federal employment (3,067 jobs) as the local government increase was less than in FY 2015. —Stephen Swaim, DC Office of Revenue Analysis

**One year change in DC wage and salary jobs in the last (September) quarter of FY 2015 and FY 2016**

	Change from 2014.3 to 2015.3	Change from 2015.3 to 2016.3	Difference in the amount of growth in the 2 years
Private sector	9,600	7,767	-1,833
Prof. and tech.	4,067	2,133	-1,933
Other	5,533	5,633	100
Public sector	2,700	4,567	1,867
Federal	733	3,800	3,067
Local	1,967	767	-1,200
Total	12300	12,333	33

Source: BLS (see appendix table A2.

Appendix

**A1. Wage and salary employment in DC with selected sectors: FY 2011 to FY 2016**

	Level			5 year ch from 2011 to 2016		Change from FY 2015 to FY 2016	
	FY 2011	FY 2015	FY 2016	Amount	Average per	Amount	% of 2011 to
					year		2016 avg
Private sector	474,833	526,775	533,917	59,083	11,817	7,142	60.4
Prof. and tech.	102,608	111,183	113,725	11,117	2,223	2,542	114.3
Other	372,225	415,592	420,192	47,967	9,593	4,600	47.9
Public sector	248,400	237,475	240,917	-7,483	-1,497	3,442	na
Federal	213,258	197,950	199,933	-13,325	-2,665	1,983	na
Local	35,142	39,525	40,983	5,842	1,168	1,458	124.8
Total	723,233	764,250	774,833	51,600	10,320	10,583	102.6

Source: BLS na = not applicable due to negative numbers

**A2. Wage and salary employment in DC with selected sectors in the last (September) quarters of FY 2014, FY 2015, and FY 2016**

	Level			Change from 2014.3 to 2015.3	Change from 2015.3 to 2016.3	Difference in the amount of growth in the 2 years
	2014.3	2015.3	2016.3			
Private sector	516,300	525,900	533,667	9,600	7,767	-1,833
Prof. and tech.	108,567	112,633	114,767	4,067	2,133	-1,933
Other	407,733	413,267	418,900	5,533	5,633	100
Public sector	238,500	241,200	245,767	2,700	4,567	1,867
Federal	197,600	198,333	202,133	733	3,800	3,067
Local	40,900	42,867	43,633	1,967	767	-1,200
Total	754,800	767,100	779,433	12,300	12,333	33

Source: BLS

**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](http://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](http://districtmeasured.com)). You can sign up at the blog page to receive updates as new articles are posted.

**Recent ORA reports:**

**Revised revenue estimate, September 30, 2016.**

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

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

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

**Tax Rates and Tax Burdens 2014 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 2014 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.

**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](http://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	October	December 16
D.C. Personal Income	BEA	2016.2	December 20
D.C. Tax Collections	OTR/ORA	October	c. December 15
D.C. Housing Sales	MRIS*	October	c. December 10
D.C. Commercial Office Building data	CoStar and Delta	2016.3	c. January 10
DC Apartment data	CoStar and Delta	2016.3	c. January 10
D.C. Hotel stay information	Smith Travel Research	October	c. December 20
Consumer Price Index	BLS	October	December 15
U.S. Jobs and Labor Force	BLS	October	December 2
U.S. GDP and Personal Income	BEA	2016.3	December 22
S and P 500 Stock Index	Financial press	October	December 1
Interest rate on 10-Year Treasury Securities	Financial press	October	December 1
IHS Global Insight D.C. forecast	Global Insight	November	c. December 15
Moody's Analytics D.C. forecast	Moody's Analytics	November	c. December 25
Blue Chip Economic Indicators for the U.S.	Aspen Publishers	November	c. December 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](mailto: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](http://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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