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

District of Columbia Economic and Revenue Trends: September 2016

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Data revisions give a different picture of Personal Income in DC over the past decade

DC's 4.0% growth rate in the second quarter of 2016: slower than a year ago, and faster than the US average

DC Personal Income reached $51.1 billion in the 2016.2 quarter and grew at a 4.0% annualized rate of growth in that quarter, according to the latest estimates of state Personal Income by the US Bureau of Economic Analysis (BEA). These estimates, released in September, also included revisions to earlier years going all the way back to 1998. These revisions give a different view of DC Personal Income growth over the past decade:

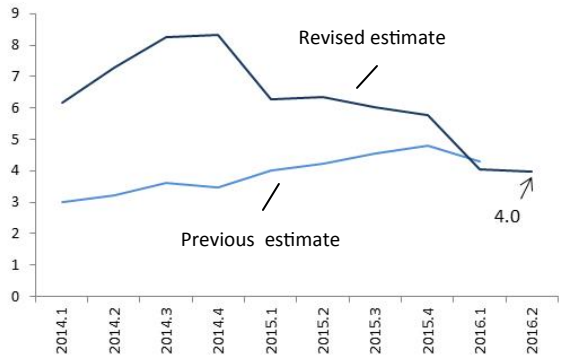
—DC Personal Income has slowed considerably over the past year, primarily because growth in prior years was increased. Last year's 2015.2 quarter is now estimated to have grown at 6.3 % as opposed to the earlier estimate of 4.2%.

—DC Personal Income is growing faster than the US average, which was 3.2% in June. Previous estimates had DC's Personal Income generally growing more slowly than the US over the past two years.

—In the Great Recession which started at the end of 2007, revised data show DC Personal Income falling faster than previously estimated (about the same as the US average), falling not quite so far, and recovering a little faster.

June estimate and September revision of DC Personal Income: 2014.1 to 2016.2
(% change from same quarter of the previous year)

Source: US Bureau of Economic Analysis
(The June estimate stopped at 2016.1.)



The changed picture of DC Personal Income growth over the past decade is largely the result of two data revisions: (1) cuts to proprietors' income, which account for almost all of the reduction in DC Personal Income at the time of the Great Recession, and (2) a shift in the past three years in the relationship between income earned in DC by all persons working there and income earned by DC residents regardless of where they work. This shift **reduced** the amount of income earned in DC, but more than offset this with an increase in income earned by DC residents. *(Continued on p. 21)*

Wage and salary employment

DC job growth moves up closer to the US average

●August wage and salary employment in DC was up by 10,933 (1.2%) from a year earlier as measured by the 3-month moving average.

●Federal government employment in DC for August was up by 3,700 (1.9%). The private sector gained 6,267 (1.2%).

●Total year-over-year DC metropolitan area employment increased by 77,600 (2.4%) in August as measured by the 3-month moving average.

●Suburban Washington employment in August increased by 2.8% from a year earlier.

●Seasonally adjusted DC jobs increased in August by 5,900 from the prior month and is 5,100 above he level of 5 months ago.

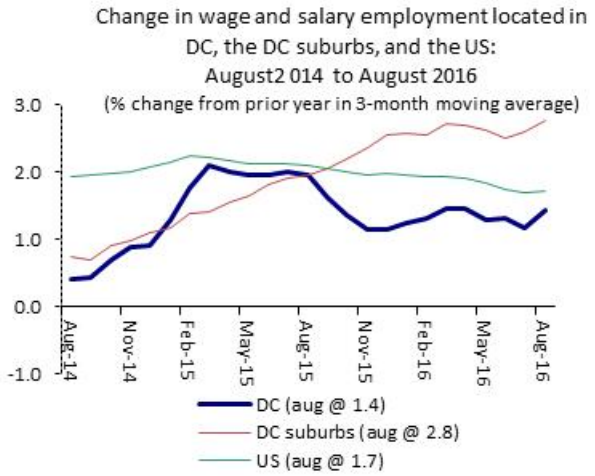


Table 1. **Wage and salary employment in DC, Washington Metro area, and the US: August 2016**

Jurisdiction	FY 2013	FY 2014	FY 2015	12-mo avg	3-mo average	This month
District of Columbia	745,375	751,842	764,250	773,567	777,267	772,400
1 year change	14,425	6,467	12,408	9,933	10,933	13,300
% change	*2.0*	*0.9*	*1.7*	*1.3*	*1.4*	*1.8*
Washington metro area	3,091,067	3,103,833	3,138,300	3,220,475	3,260,500	3,245,800
1 year change	38,017	12,767	36,000	71,350	77,600	77,000
% change	*1.2*	*0.4*	*1.2*	*2.3*	*2.4*	*2.4*
Washington suburbs (% ch)	*1.0*	*0.3*	*1.6*	*2.6*	*2.8*	*2.6*
US (% ch)	*1.6*	*1.8*	*2.1*	*1.9*	*1.7*	*1.7*

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

Source: BLS. August is preliminary.

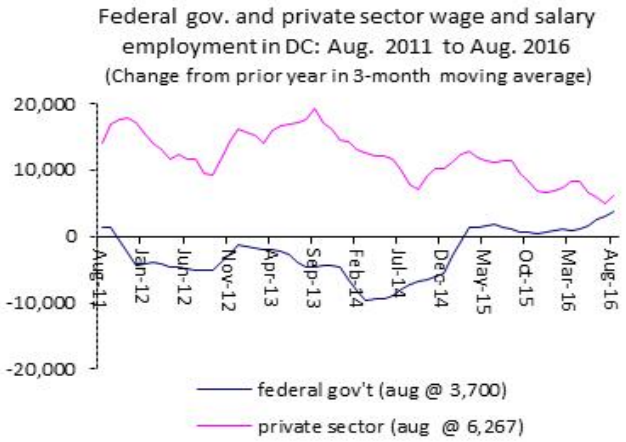


Table 2. **Federal government and private sector wage and salary employment in DC: August 2016**

Sector	FY 2013	FY 2014	FY 2015	12-mo avg	3-month average	This month
Federal government	205,900	198,367	197,950	199,625	202,233	202,100
1 year ch.	-2,675	-7,533	-417	1,733	3,700	4,200
% change	*-1.3*	*-3.7*	*-0.2*	*0.9*	*1.9*	*2.1*
Private sector	504,275	515,808	526,775	533,075	531,400	530,300
1 year ch.	16,633	11,533	10,967	6,783	6,267	7,300
% change	*3.4*	*2.3*	*2.1*	*1.3*	*1.2*	*1.4*

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

Table 3. **Seasonally adjusted DC Employment: March 2016 to August 2016**

Indicator	March	April	May	June	July	August
D.C. Wage and Salary employment	773,800	777,900	781,200	775,200	773,000	778,900
change from prior month	-1,200	4,100	3,300	-6,000	-2,200	5,900
% change from prior month	*-0.2*	*0.5*	*0.4*	*-0.8*	*-0.3*	*0.8*

Source: BLS seasonally adjusted. July is preliminary

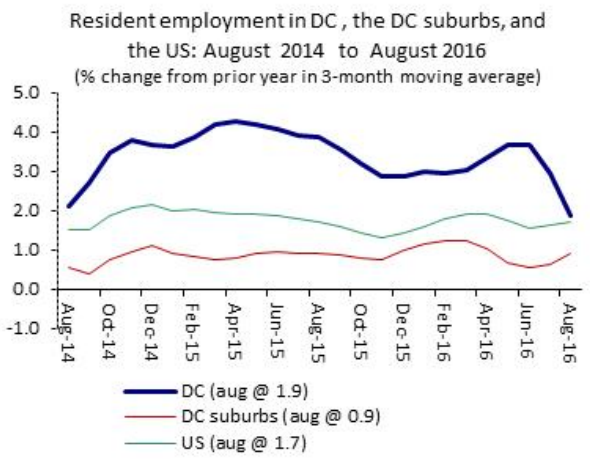
Resident employment and unemployment

DC resident employment growth continues to slow

- In August DC resident employment was up 6,910 (1.9%) from a year earlier *(3-mo. moving average)*. The labor force grew by 4,259 (1.1%).

- The seasonally adjusted unemployment rate edged i[tp 6.0% in August. Until last month, the unemployment rate had been 6.0% of higher every month since April 2008.

- August initial unemployment insurance claims were down 1.8% from last year *(3-month moving average)*.



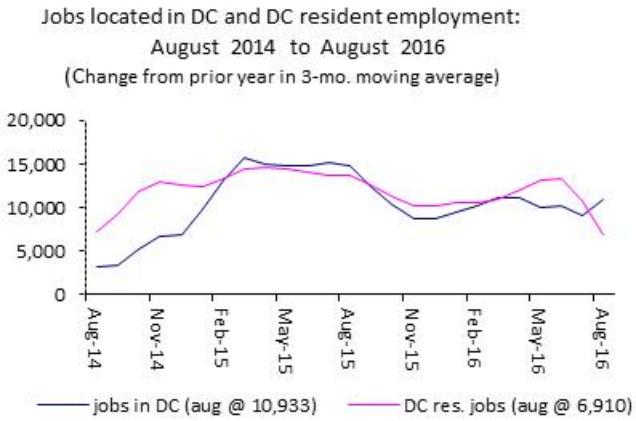


Table 4. **Unemployment rates for DC, metro area, and US: August 2016**

(percent of labor force)

	Not seasonally adj.		Seasonally adj.	
Jurisdiction	Aug. 2015	Aug. 2016	Aug. 2015	Aug. 2016
US	5.5	5.1	5.1	4.9
DC	6.9	6.5	6.7	6.0
DC metro area	4.4	4.0	*na*	*na*
DC suburbs	4.1	3.6	*na*	*na*

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

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

Indicator	FY 2012	FY 2013	FY 2014	FY 2015	12-mo avg	3-mo. avg.	This month
DC Labor force summary							
Resident employment	325,712	341,727	345,573	358,984	368,331	371,423	364,664
1 year change	11,026	16,015	3,846	13,410	10,189	6,910	1,835
% change	*3.5*	*4.9*	*1.1*	*3.9*	*2.8*	*1.9*	*0.5*
Labor Force	359,327	374,045	375,222	386,668	393,142	396,300	390,128
1 year change	9,639	14,718	1,177	11,447	6,994	4,259	273
% change	*2.8*	*4.1*	*0.3*	*3.1*	*1.8*	*1.1*	*0.1*
Unemployed	33,615	32,317	29,648	27,685	24,812	24,877	25,464
1 year change	-1,387	-1,298	-2,669	-1,963	-3,195	-2,651	-1,562
% change	*-4.0*	*-3.9*	*-8.3*	*-6.6*	*-11.4*	*-9.6*	*-5.8*
Unemployment rate	9.4	8.7	7.9	7.2	6.3	6.3	6.5
DC Unemployment insurance (state program)							
Initial claims (monthly avg.)	1,784	1,915	1,851	1,596	1,483	1,749	1,598
1 year change	-317	131	-64	-255	-125	-33	40
% change	*-15.1*	*7.3*	*-3.3*	*-13.8*	*-7.7*	*-1.8*	*2.6*
Weeks compensated (mo. avg.)	45,170	42,862	42,133	32,811	30,877	32,511	36,743
1 year change	-1,253	-2,308	-729	-9,322	-2,436	231	4,762
% change	*-2.7*	*-5.1*	*-1.7*	*-22.1*	*-7.3*	*0.7*	*14.9*

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

Table 6. **Seasonally adjusted DC Resident employment and unemployment: Mar. 2016 to Aug. 2016**

Indicator	March	April	May	June	July	August
DC Resident employment	368,554	371,361	373,304	374,319	373,470	371,228
change from prior month	*1,472*	*2,807*	*1,943*	*1,015*	*-849*	*-2,242*
% change from prior month	*0.4*	*0.8*	*0.5*	*0.3*	*-0.2*	*-0.6*
DC Unemployment rate (%)	6.5	6.4	6.1	5.9	5.9	6.0

Source: BLS seasonally adjusted. July is preliminary.

The federal government and once again topped job growth in August

●In August the federal government's 3,700 increase in jobs over the prior year was more than in any other sector. *(3-month moving average.)*

●In the private sector, education (1,867), retail (1,533), and legal services (1,333) were the other sector to grow by more than 1,000 jobs in July.

●Private sector industries losing jobs included information, business services, and construction.

●Local government rose by by 967 (2.3%).

●The federal government accounted for 26.0 % of all DC jobs in July. Over the past year, DC's share of US federal employment increased in the metro area and the US.

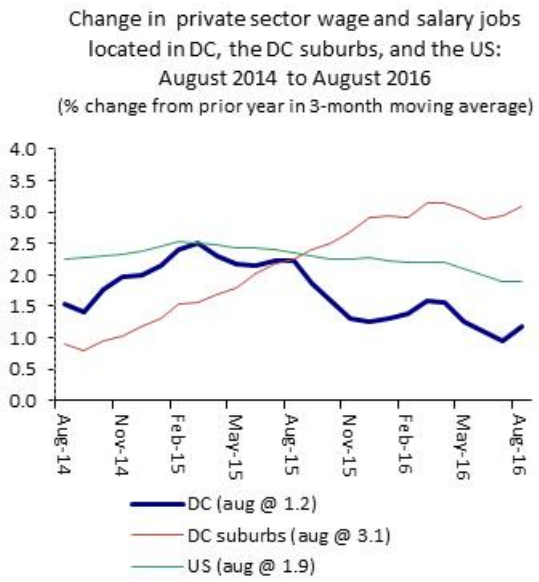


Table 7. **Wage and salary employment located in DC: August 2016**

Industry sector	3-month moving average: Aug 2015	Aug 2016	1 year change: Amount	%	12-mo. moving avg: % change	Sector % of all DC jobs, Aug 2016	DC share (%) in Aug 2016 of all sector jobs in: metro area	US	Change from Aug 2015 to Aug 2016 in DC share of sector jobs in: metro area	US
Federal government	198,533	202,233	3,700	1.9	0.9	26.0	54.5	7.21	0.2	0.04
Local government	42,667	43,633	967	2.3	3.6	5.6	13.6	0.24	0.1	0.00
Legal services	28,733	30,067	1,333	4.6	2.8	3.9		2.66		0.10
Other Professional and technical	84,533	84,833	300	0.4	2.2	10.9	22.8	1.09	-0.4	-0.04
Employment services	15,133	14,867	-267	-1.8	1.4	1.9	32.4	0.41	-2.0	-0.01
Other Business services	34,667	34,500	-167	-0.5	-0.8	4.4	17.5	0.44	-0.3	-0.01
Information	17,267	17,067	-200	-1.2	-0.3	2.2	22.5	0.61	0.1	-0.01
Finance	30,433	30,833	400	1.3	0.6	4.0	19.8	0.37	0.2	0.00
Organizations	63,900	63,867	-33	-0.1	-0.3	8.2	35.4	2.12	-0.5	-0.02
Education	53,800	55,667	1,867	3.5	-0.6	7.2	48.0	1.71	-3.4	0.03
Health	67,000	67,433	433	0.6	0.9	8.7	22.1	0.35	-0.2	-0.01
Food service	51,100	51,567	467	0.9	3.5	6.6	21.7	0.44	-0.5	-0.01
Accomodations	15,100	15,633	533	3.5	1.8	2.0	37.3	0.76	2.5	0.02
Amusement and recreation	7,733	7,933	200	2.6	1.4	1.0	14.2	0.31	-1.0	0.00
Retail trade	22,200	23,733	1,533	6.9	7.6	3.1	8.2	0.15	0.3	0.01
Wholesale trade	4,833	4,867	33	0.7	-1.5	0.6	7.6	0.08	-0.2	0.00
Construction	14,800	14,533	-267	-1.8	0.4	1.9	9.0	0.21	-0.6	-0.01
Personal and miscellaneous ser.	7,833	7,767	-67	-0.9	-0.6	1.0		0.28		-0.01
Other private	6,067	6,233	167	2.7	6.4	0.8	5.3	0.04	0.1	0.00
Total	**766,333**	**777,267**	**10,933**	**1.4**	**1.3**	**100.0**	**23.8**	**0.54**	**-0.2**	**0.00**
Public sector	*241,200*	*245,867*	*4,667*	*1.9*	*1.3*	*31.6*	35.6	1.15	0.2	0.01
Private sector	*525,133*	*531,400*	*6,267*	*1.2*	*1.3*	*68.4*	20.7	0.43	-0.3	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")

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 June quarter, the federal governmnet 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.

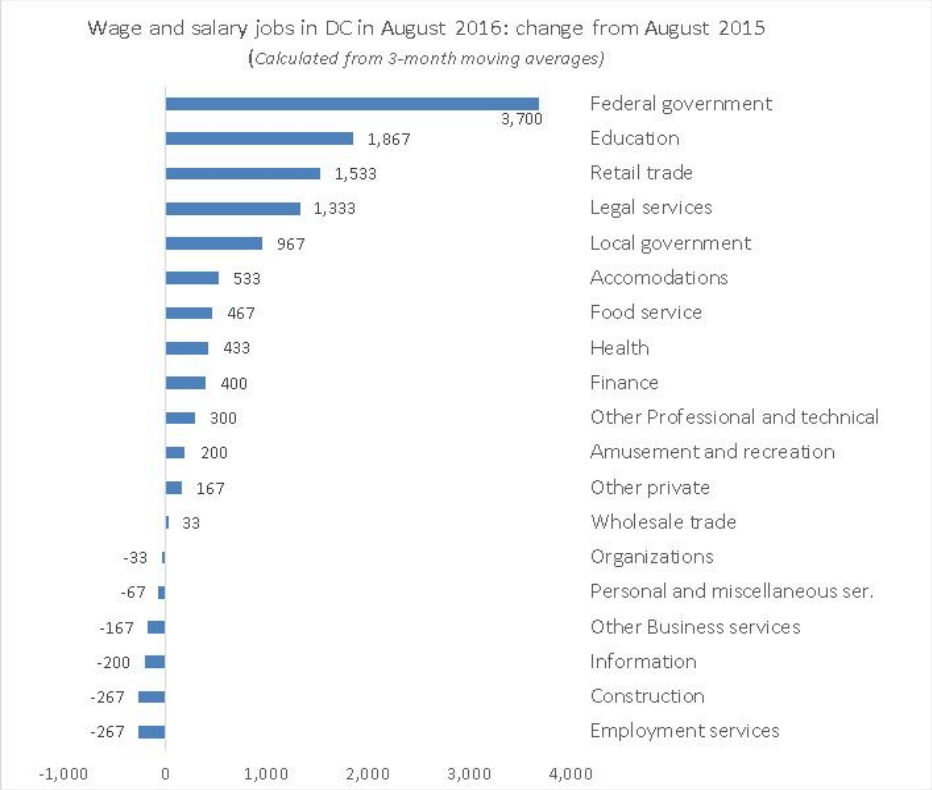


Table 8. **Employment and income by sector of the DC economy: June 2016 (2016.2)**

	Wage an salary employment in DC in the June 2016 quarter			Wages and salaries earned in DC in the June 2016 quarter			Percentage Distributions			
							Employment		Wages	
Sector	Level	Change from June 2015	% change	Level ($B)	Change from June 2015 ($B)	% change	June 2016	change from June 2015	June 2016	change from 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
Private sector	*536,400*	*5,800*	*1.1*	*44.08*	*1.63*	*3.8*	*69.0*	*57.0*	*63.0*	*63.7*
Government	*240,967*	*4,367*	*1.8*	*25.93*	*0.93*	*3.7*	*31.0*	*42.9*	*37.0*	*36.3*

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

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 March 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.

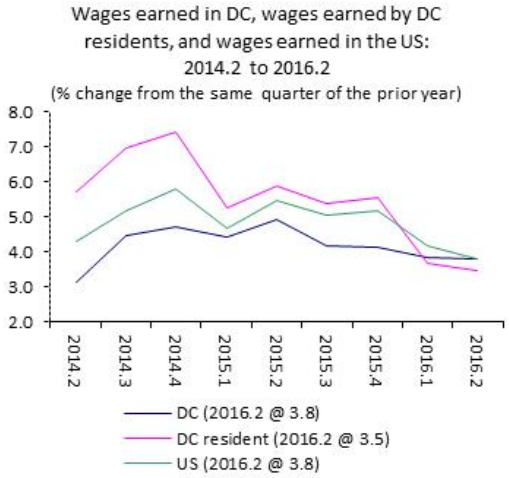


Table 9. **DC Wages and Personal Income: June 2016 (2016.2)**
($ billion at seasonally adjusted annual rates unless otherwise noted)

Indicator	FY 2012	FY 2013	FY 2014	FY 2015	4-qtr. 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*
Addendum:						
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 invididuals.*

Source: BEA; date released September 28, 2016

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.

●DC's labor force and resident employment grew faster than population in the June quarter.

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

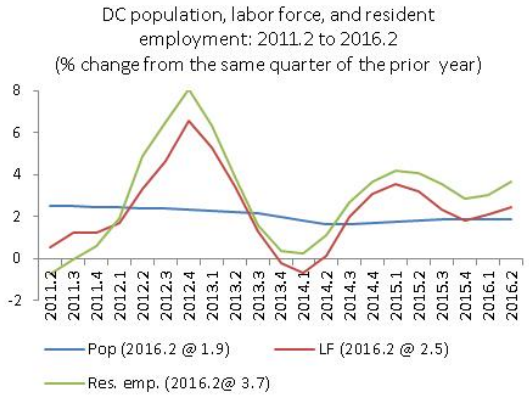
Calendar year	Population Number	Population Change from prior yr. Number	Population Change from prior yr. %	Wage and salary employment Number	Wage and salary employment Change from prior yr. Number	Wage and salary employment Change from prior yr. %
2010	605,126	11,326	1.9	712,242	10,859	1.5
2011	620,472	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*	

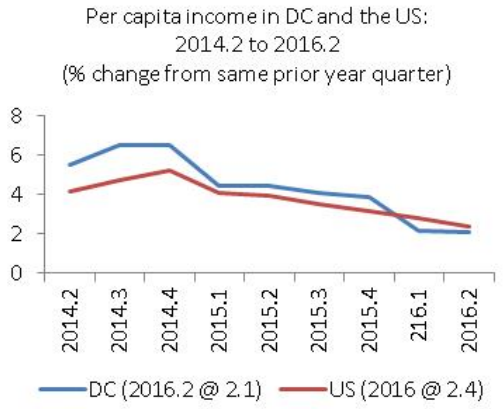
Source: U.S. Bureau of the Census, BLS, and BEA (2016.2 population)

Table 11. **Per capita income in DC and the US: FY 2013 to June 2016**

	DC FY 2013	DC FY 2014	DC FY 2015	DC June 2016	US FY 2013	US FY 2014	US FY 2015	US June 2016
Per capita income	66,688	69,253	72,602	74,820	44,591	45,816	47,732	49,142
% ch in per capita income	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 income	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, population and Personal Income. BLS for US CPI, Global Insight for DC CPI





Single family and condominium housing

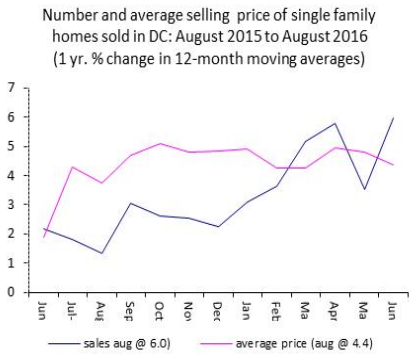
The June increase in the federal house price index for DC was the slowest in 5 years

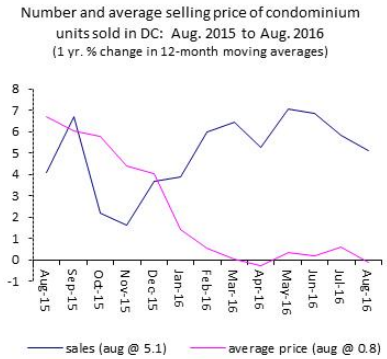
●The 3-month moving total of single family home sales in August was up 6.7% from a year earlier, and the average selling price was 1.8% higher. The year-to-date median sales price ($678,000) was up 2.5% from the prior year.

●August condominium sales were down –0.4% from last year as measured by the 3-month moving total, and the average selling price was 6.1% higher. The year-to-date median sales price ($449,000) was up 3.0% from last year.

●The total value of all home sales in August rose 7.5% above last year as measured by the 3-month moving total.

●The increase in DC home prices slowed in the June quarter, according to the Federal Housing Finance Agency Index of single-family same-property transactions. DC's gain over the prior year was 1.8%, the slowest growth in 5 years. The US index was up 5.5%, and the Washington metropolitan area gain was 3.4%.





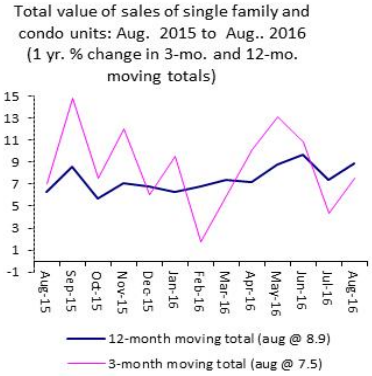


Table 12. **D.C. Residential Real Estate Indicators: August 2016**

Indicator	FY 2012	FY 2013	FY 2014	FY 2015	12-mo moving total or average	3-mo moving total or average	This month
Number of sales (settled contracts)							
Single family	3,563	3,979	4,024	4,097	4,338	1,299	426
1 year change	-237	416	45	73	245	81	93
% change	*-6.2*	*11.7*	*1.1*	*1.8*	*6.0*	*6.7*	*27.9*
Condo	2,784	3,487	3,592	3,832	3,945	1,147	356
1 year change	315	703	105	240	192	-5	3
% change	*12.8*	*25.3*	*3.0*	*6.7*	*5.1*	*-0.4*	*0.8*
Total	6,347	7,466	7,616	7,929	8,283	2,446	782
1 year change	78	1,119	150	313	437	76	96
% change	*1.2*	*17.6*	*2.0*	*4.1*	*5.6*	*3.2*	*14.0*
Average prices of units that sold							
Single family ($)	630,109	712,799	736,362	767,870	792,828	825,842	838,259
1 year change	29,083	82,690	23,563	31,508	33,123	14,589	60,198
% change	*4.8*	*13.1*	*3.3*	*4.3*	*4.4*	*1.8*	*7.7*
Condo ($)	429,611	447,827	472,419	499,650	501,570	522,159	527,355
1 year change	6,245	18,216	24,592	27,232	3,877	30,142	45,139
% change	*1.5*	*4.2*	*5.5*	*5.8*	*0.8*	*6.1*	*9.4*
Total value of all sales ($ million)	3,441.1	4,397.8	4,660.0	5,060.6	5,418.0	1,671.7	544.8
1 year change	111.9	956.7	262.2	400.6	440.7	116.8	115.5
% change	*3.4*	*27.8*	*6.0*	*8.6*	*8.9*	*7.5*	*26.9*
Ratio: active inventory to sales							
Single family	2.3	1.6	1.6	1.5	1.5	1.5	1.4
Condo	2.9	1.7	1.9	1.7	1.8	1.6	1.8

Median contract prices, CY to date in August 2016 *: single family $678,000 (2.5% 1 yr ch); condo $449,000 (3.0% 1 yr ch)*

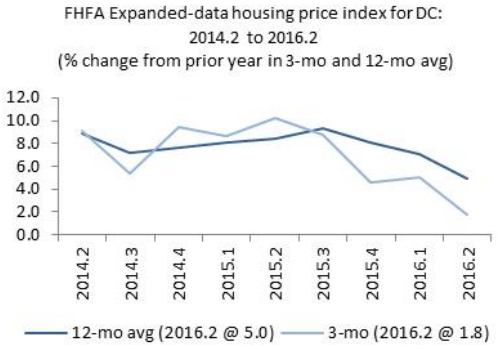
Closed (settled) contracts. Average prices calculated by ORA based on number of sales and total value of sales.

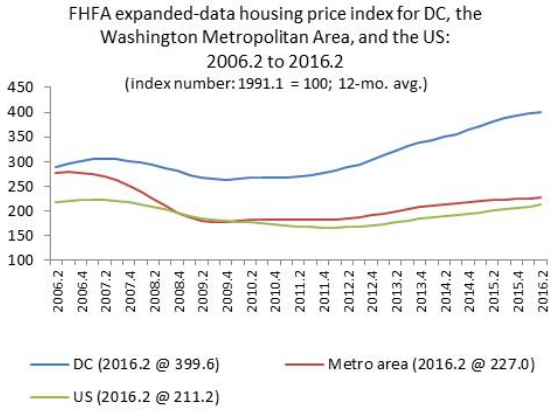
Source: Metropolitan Regional Information Systems (MRIS); median price and inventory accessed through Greater Capital Area Assn. of Realtors.

Table 13. **Federal Housing Finance Agency Price Index for single family property in DC, DC metro area, and US: June 2016 (2016.2)**

Indicator	Fiscal year average				Last 2 Q's	
	FY 2012	FY 2013	FY 2014	FY 2015	2016.1	2016.2
% change from prior year in value of index						
DC	8.2	12.8	7.2	9.3	5.1	1.8
DC metro area	3.4	8.6	5.9	3.6	1.5	3.4
US	0.8	6.8	6.4	5.9	5.7	5.5

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.





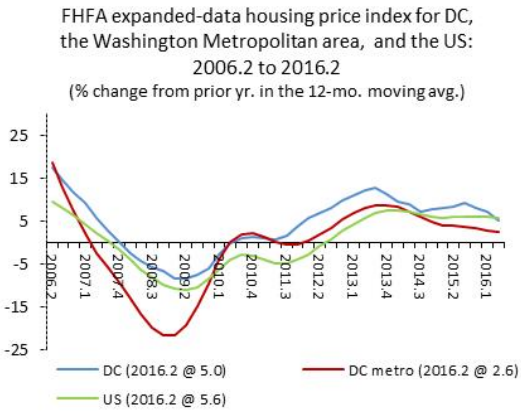


Table 14. **D.C. Single family and condominium home sales at prices of $1 million or more: August 2016**

Category	FY 2013	FY 2014	FY 2015	12-mo moving total	3-mo moving total	This month
Single family homes	689	734	765	925	311	101
1 year change	231	45	31	168	52	44
% change	*50.4*	*6.5*	*4.2*	*22.2*	*20.1*	*77.2*
percent of all single family sales	17.3	18.2	18.7	21.3	23.9	23.7
Condominiums	112	128	160	168	61	20
1 year change	40	16	32	12	22	9
% change	*55.6*	*14.3*	*25.0*	*7.7*	*56.4*	*81.8*
percent of all condominium sales	3.2	3.6	4.2	4.3	5.3	5.6

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 2016.2**

	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:		
2016.2	283	569
1 yr ch	*17*	*49*
% ch.	*6.4*	*9.4*

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

Table 16. **Condominium units (1) currently being marketed or under construction, or (2) planned: June 2016**

item	projects	units	Avg. units per project
Unsold units in projects currently marketing or under construction	48	1,293	
Planned with probable sales within 36 months	20	1,566	78
subtotal	***68***	***2,859***	
Proposed/rumored with long term delivery	17	1,256	74

Note: an additional 12,589 units in 24 projects are planned as either condominium or rental

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

Apartments

In the June quarter of 2016 the apartment sector continued to add inventory and renters at much the same pace. The vacancy rate decreased and construction increased

●In June occupied apartment units increased 3,856 (2.3%) from a year earlier; inventory was up 3,599 (2.9%).

●The vacancy rate was 2.9%, down from 3.1% in March; rents rose 4.4% over the prior year.

●11,709 apartment units were under construction in June, up from 11,149 in the prior quarter.

●Class A units account for 23% of all apartment units, 22% of the occupied units, and 94% of new construction in June.

●Class A vacancy rate of 6.7% in June was down from 7.4% a year earlier. Average rent per unit was up 3.6% from the prior year.

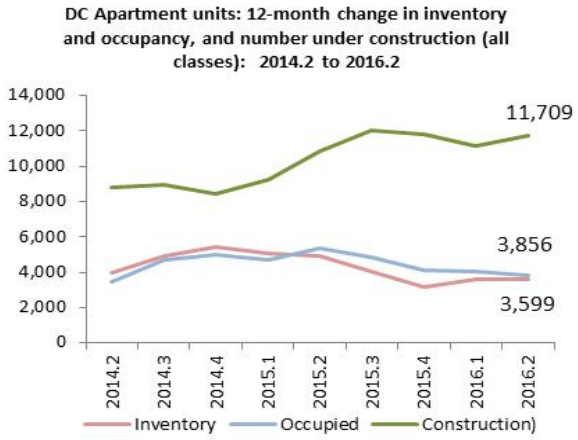


Table 17. **Market rate apartment units in DC: 2010 to 2015 (2016.2)**

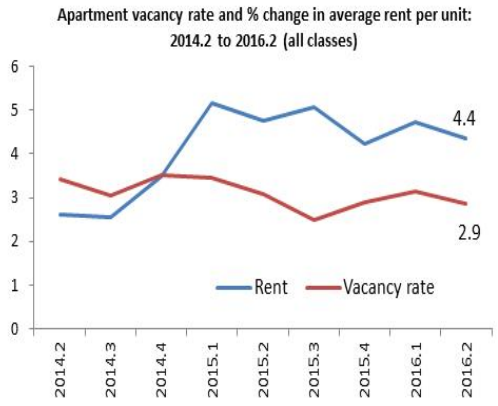
CY	Inventory				Occupied units			Effective monthly rent		Under Construction	
		Units						$ per month			
	Buildings	Number	1 yr ch	*% vacant*	Number	1 yr ch	% ch	per unit	1 yr % ch	Buildings	Units
2010	3,195	161,513	1,104	2.8	157,063	2,098	1.4	$1,410	1.4	18	2,430
2011	3,204	163,052	1,539	2.7	158,588	1,525	1.0	$1,486	5.4	21	4,868
2012	3,212	165,121	2,069	2.8	160,482	1,894	1.2	$1,521	2.4	35	8,026
2013	3,227	168,918	3,797	3.4	163,255	2,773	1.7	$1,550	1.9	51	7,819
2014	3,255	174,341	5,423	3.5	168,230	4,975	3.0	$1,604	3.5	80	8,417
2015	3,303	177,479	3,138	2.9	172,337	4,107	2.4	$1,672	4.2	97	11,788
2016.1	3,318	178,274	3,578	3.1	172,660	4,027	2.4	$1,685	4.7	93	11,149
2016.2	3,321	179,317	3,599	2.9	174,179	3,856	2.3	$1,720	4.4	106	11,709
1 Q change	*3*	*1,043*	*21*	*-0.3*	*1,519*	*-171*		*35*		*13*	*560*

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

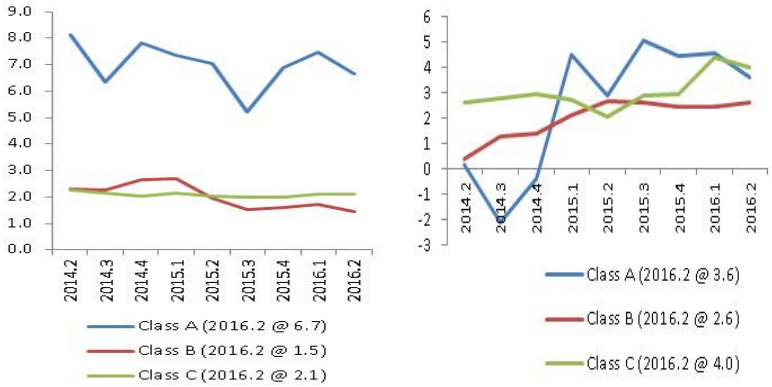
Table 18. **Market rate apartment units in DC, Classes A, B, and C: 2016.2**

Class	Inventory				Occupied units			Effective monthly rent		Under construction		
		Units										
	Buildings	Number	1 yr ch	*% vacant*	Number	1 yr ch	% ch	$ per month	1 yr % ch	Buildings	Units	Avg. size
Class A	254	40,735	3,337	6.7	38,022	3,260	9.4	$2,452	3.6	74	11,127	150
Class B	1,019	77,651	281	1.5	76,516	650	0.9	$1,612	2.6	32	582	18
Class C	2,034	60,683	-19	2.1	59,405	-54	-0.1	$1,171	4.0	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.



Vacancy rate and 1 year % change in rent for Class A, Class B, and Class C Apartment units: 2014.2 to 2016.2

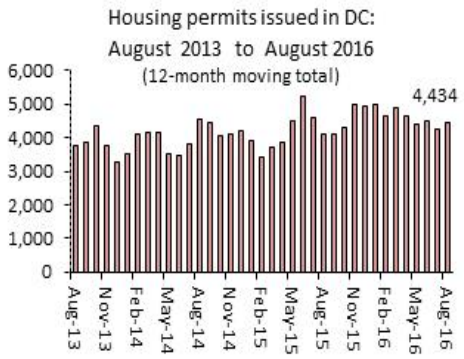


Housing permit pace picks up

●For the the 12-month period ending August, 4,434 housing permits were issued, up 7.6% from a year ago; the 3-month total was 3.9% higher than last year.

●The ratio of new apartment construction to 1 year change in occupied units rose to 3.04 in the June 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: 2007.2 to 2016.2

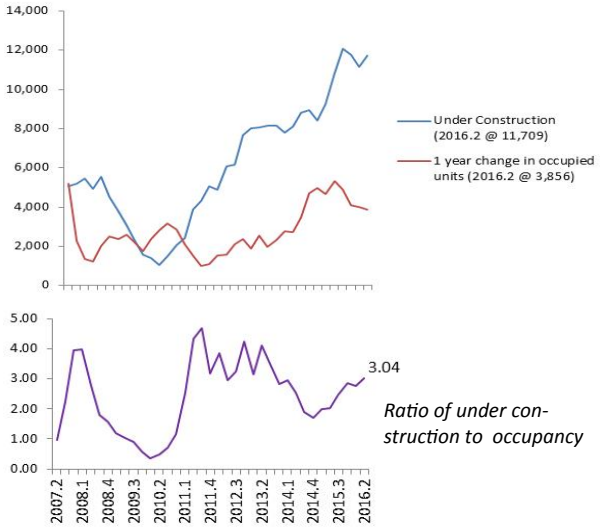


Table 19. **Housing unit building permits issued in DC: August 2016**

	FY 2013	FY 2014	FY 2015	12-mo. moving total	3-month moving total	This month
Total units	3,855	4,467	4,131	4,434	1,438	444
change from 1 yr ago	-236	612	-336	312	54	166
% change from 1 year	*-5.8*	*15.9*	*-7.5*	*7.6*	*3.9*	*59.7*
Multi-family projects with 5 or more units						
number	36	32	37	36	11	3
average size	107	140	112	123	131	138

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**

	Change in the number of households					Measures of newly occupied housing units			
date	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 unts: CoStar; 5) new condo sales: Delta Associates; 6) Single family permits: Census, with a 2 year lag.

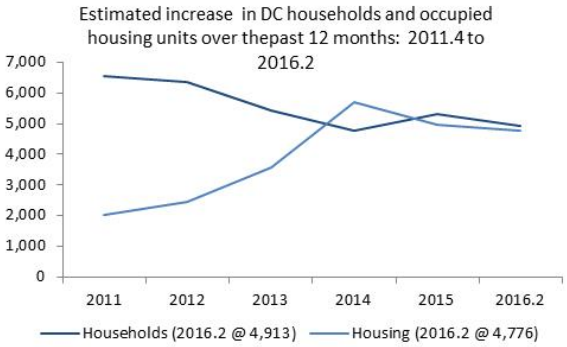
Note: all occupants of newly occupied housing units are not nesessarily DC resident households for Census purposes.

Table 21. **Delta Associates outlook for Class A apt. units: June 2016**

item	projects	units	Avg. units per project
Under construction/and or marketing	50	9,341	217*
Planned with probable sales within 36 mo.	41	8,891	217
Proposed/rumored with long term delivery	54	14,108	261
Addendum: estimated supply and demand for the next 3 years			
*supply***		*11,501*	
demand		*8,410*	

**Average based on all units, including 1,527 already rented.*
***Supply available by June 2019 is vacant units, units under construction and marketing, and 25% (2,160) of planned units.*
Source: Delta Associates, except for under construction (CoStar).

For definitions of planned and proposed, see p. 13.



Commercial office space

In the June quarter, occupied commercial office space increased, the vacancy rate decreased slightly, and new contruction increased

● According to CoStar, for the the 12-month period ending June occupied office space increased by 0.27 million sq. ft. from the prior quarter but was 0.1% below a year earlier. Occupied space still remains below the levels of 2012, 2013, and 2014. Base rent rose 3.2%.

●Class A office space accounted for 15% of all office buildings, 62% of office space, 61% of occupied space, and 99% of new construction. The vacancy rate for class A space was 12.2%, down from 12.5% in the last quarter, but up from 11.7% a year earlier. Class A rent rose 3.8% over the past year.

DC Commercial office space: 1 year change in inventory and occupancy ,and under construction: 2014.2 to 2016.2 *(all classes, msf):*

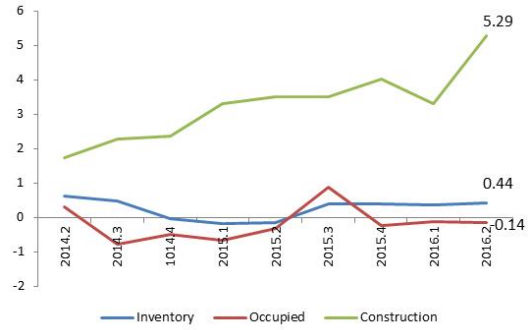
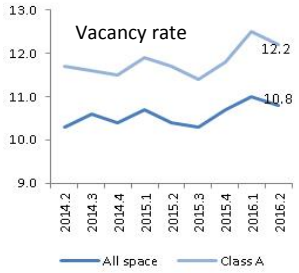


Table 22. **DC commercial office space: 2010 to 2016.2**

CY (year end)	Build-ings	Inventory Level (msf)	Inventory 1 yr ch (msf)	Occupied space Level (msf)	Occupied space 1 yr ch (msf)	Occupied space % ch	Vacancy % Direct	Vacancy % Total	Base rent (direct) $ per sq ft.	Base rent (direct) 1 yr % ch	Under constr. build-ings	Under constr. msf
2010	2,364	151.58	2.56	134.87	3.16	2.4	10.0	11.0	$45.61	1.6	6	1.56
2011	2,359	152.48	0.90	135.78	0.91	0.7	10.2	11.0	$46.15	1.2	9	2.05
2012	2,349	152.22	-0.26	137.25	1.47	1.1	9.2	9.8	$45.18	-2.1	8	2.23
2013	2,346	152.99	0.78	137.59	0.34	0.2	9.5	10.1	$46.08	2.0	12	2.14
2014	2,339	152.96	-0.03	137.09	-0.49	-0.4	9.9	10.4	$47.24	2.5	13	2.38
2015	2,332	153.35	0.40	136.87	-0.22	-0.2	10.3	10.7	$47.94	1.5	19	4.03
2016.1	2,331	153.44	0.38	136.63	-0.11	-0.1	10.3	11.0	$48.14	2.3	13	3.30
2016.2	2,330	153.44	0.44	136.90	-0.14	-0.1	10.2	10.8	$48.94	3.2	17	5.29
1 Q ch	*-1*	*0.00*		*0.27*			*-0.1*	*-0.2*	*$0.80*		*4*	*1.98*

Source: CoStar.All classes, all sizes.

Vacancy rate and 1 year % change in rent for all commercial office space and for Class A office space: 2014.2 to 2016.2



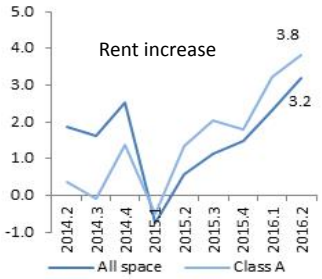


Table 23. **DC Class A, B, and C commercial office space: 2016.2**

CY (year end)	Build-ings	Inventory Level (msf)	Inventory 1 yr ch (msf)	Occupied space Level (msf)	Occupied space 1 yr ch (msf)	Occupied space % ch	Vacancy % Direct	Vacancy % Total	Base rent (direct) $ per sq ft.	Base rent (direct) 1 yr % ch	Under constr. build-ings	Under constr. msf
Class A	351	95.00	1.05	83.38	0.38	0.5	11.5	12.2	$53.09	3.8	14	5.26
Class B	861	47.96	-0.54	43.40	-0.57	-1.3	8.9	9.5	$42.49	2.4	3	0.03
Class C	1,114	10.44	-0.08	10.12	0.05	0.5	3.1	3.1	$32.82	3.0	0	0.00

Source: CoStar.

2015.4	*345*	*93.63*	*0.67*	*82.81*	*0.67*	*0.8*	*11.0*	*11.6*	*$51.74*	*1.9*	*14*	*3.74*
1 Q ch	*0*	*0.00*		*-0.05*			*0.0*	*0.1*	*$0.38*		*1*	*0.33*

Source: CoStar. All Class A.

The value of property transfers over the past 12 months was 11% below the prior year total

●Delta Associates expects the demand for new office space in DC to exceed the new supply over the next two years. DC's share of regional office new supply is estimated at 67.2% and the share of demand at 52.9%.

●The value of July property transfers was down 14.5% from last year as measured by the 3-month moving total. The 12-month moving total ($12.61 billion) was 11.2% lower than last year.

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

item	2016.1	2016.2
Vacant	9.70	9.60
New supply, next 2 years:*		
Under construction	*1.60*	4.32
Part of planned for delivery in 2 yr.		
Total	1.60	4.32
Demand, next 2 years	2.80	4.60
Planned for possible delivery in 2 years	8.09	6.39
Proposed/rumored with long term delivery	14.03	14.87

**Supply for next two years represents office buildings currently under construction and a portion of those planned that could deliver by 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: June 2016 to June 2018**

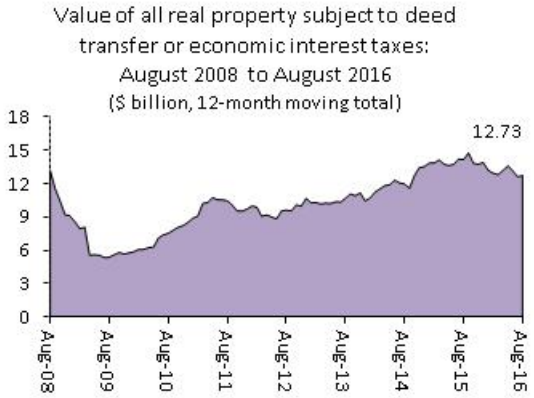
Indicator	DC	No VA	Sub MD	Total	*DC % of total*
Inventory June 2016					
Inventory (msf)	141.9	179.9	86.1	407.9	34.8
Estimated net activity to June 2018					
new supply (msf)	4.3	1.9	0.2	6.4	67.2
new demand (msf)	4.6	3.1	0.9	8.7	52.9

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.*



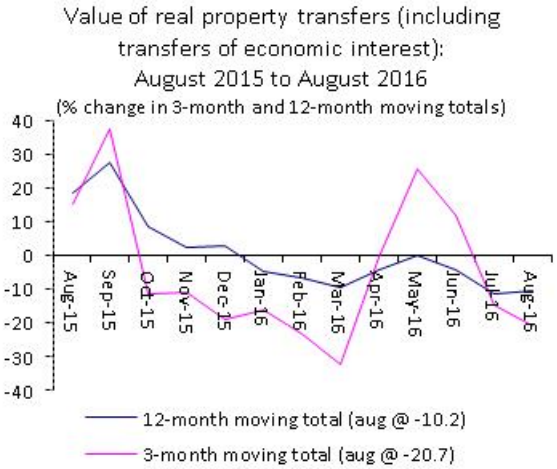


Table 26. **Market Value of Real Property transfers subject to the Deed Transfer or Economic Interest tax: August 2016**

	FY 2012	FY 2013	FY 2014	FY 2015	12-mo moving total	3-month moving total	This month
All property transfers ($ million)	9,533.3	11,063.9	11,569.8	14,766.3	12,728.6	3,352.5	1,059.1
change from one year ago ($M)	-526.2	1,530.6	505.8	3,196.5	-1,444.5	-873.9	116.4
% change from 1 year ago	*-5.2*	*16.1*	*4.6*	*27.6*	*-10.2*	*-20.7*	*12.3*

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).

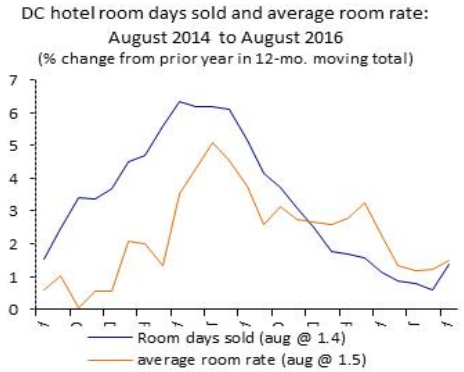
Hospitality

Hotel demand and room sales are increasing

●In August the 3-month moving total for hotel room-days sold was 2.8% above a year earlier. The average room rate was 2.9% higher, and revenue was up 5.8%. For the past 12 months, hotel revenue was up 2.9%.

●Employment in food services was 0.9% more in August than a year earlier as measured by the 3-month moving average. Hotel employment was up 3.5%.

●June 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 2.3%. For the past 12-months, total traffic into the DC area was 4.2% lower.



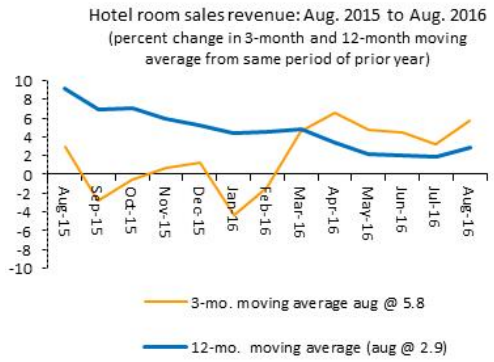


Table 27. **Hospitality Industry: August 2016**

Indicator	Units	date	FY 2013	FY 2014	FY 2015	12-month moving total or average*	3-month moving total or average*	This month
Hotel stays								
Hotel room-days sold	('M)	aug	7.680	7.869	8.196	8.308	2.278	0.723
	1 yr ch		0.062	0.189	0.327	0.114	0.061	0.034
	1 yr % ch		0.8	2.5	4.2	1.4	2.8	5.0
Average room rate	$	aug	207.31	209.87	215.35	219.38	201.36	170.20
	1 yr ch		3.74	2.56	5.47	3.26	5.71	6.18
	1 yr % ch		1.8	1.2	2.6	1.5	2.9	3.8
Occupancy rate	%	aug	75.8	76.6	77.5	77.9	83.2	77.8
(average)	1 yr ch		0.5	0.8	0.9	0.4	0.3	1.3
	1 yr % ch		0.6	1.0	1.2	0.6	0.3	1.7
Room revenue	($M)	aug	1,592.1	1,651.4	1,765.0	1,822.5	458.7	123.1
	1 yr ch		41.4	59.4	113.6	51.8	25.0	10.1
	1 yr % ch		2.7	3.7	6.9	2.9	5.8	8.9
Airline passengers								
DCA	1 yr % ch	jun	5.5	0.0	10.3	-1.6	2.3	2.8
IAD	1 yr % ch	jun	-4.0	-1.9	0.3	-9.3	-1.4	0.7
BWI	1 yr % ch	jun	-1.5	-0.5	4.1	-1.9	6.0	7.5
Total	1 yr % ch	jun	-0.3	-0.8	4.8	-4.2	2.4	3.7
Employment								
Accommodations	level ('000)	aug	15.2	15.2	15.1	15.4	15.6	15.6
	1 yr ch		-0.2	0.0	-0.1	0.3	0.5	0.7
	1 yr % ch		-1.2	-0.2	-0.3	1.8	3.5	4.7
Food and bev	level ('000)	aug	45.1	47.1	49.7	51.2	51.6	51.1
	1 yr ch		2.5	2.0	2.6	1.7	0.5	0.1
	1 yr % ch		5.7	4.3	5.5	3.5	0.9	0.2

** Total for hotel rooms sold and room revenue.*

Source: Smith Travel Research (hotel data);BLS (employment); Airport authorities (airline passengers).

Second quarter annualized growth rate for US nominal GDP raised slightly to 3.7%

●US real GDP growth in the June quarter was estimated at 1.4%; nominal growth was 3.7% (seasonally adjusted, annual rates).

●Federal government consumption and investment for all activities was 1.4% higher in the 2016.2 quarter than a year earlier, below the 2.5% rate for nominal GDP for the entire US economy.

●US employment (seas. adj.) increased by 155,000 in August from the month before.

●The US unemployment rate (seas. adj.) stayed at 4.9% in August.

●In August the average S&P 500 index rose 1.3% from July; it was 6.7% above a year earlier.

Quarterly change in US Real and Nominal GDP: 2014.2 to 2016.2
(% change from the previous quarter at annual rates)

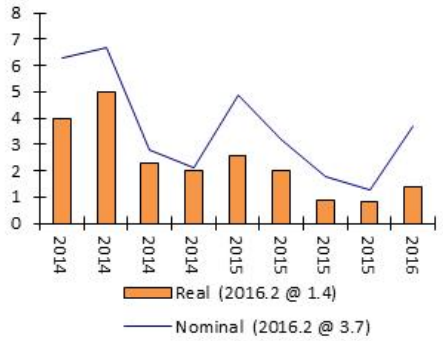


Table 29. **Federal government sector, US GDP accounts: 2016.2**
(percent change from same period of prior year)

Indicator	FY 2013	FY 2014	FY 2015	12-mo avg	2016.2
Non-defense					
Compensation of employees	-0.4	1.7	4.1	3.4	3.8
Purchases of goods and services	-4.9	-1.7	8.0	7.5	8.1
Gross investment	-3.7	-0.4	3.0	1.5	1.1
Defense					
Compensation of employees	-3.5	-0.6	-0.8	0.5	1.5
Purchases of goods and services	-9.0	-7.2	-5.2	-2.8	-3.2
Gross investment	-8.2	-4.2	-4.5	0.5	2.1
All federal consumption and investment	-4.1	-1.8	-0.1	1.0	1.4

Source: BEA (September 29, 2016). Nominal values.

Table 30. **Qtr. to Qtr. ch. in US GDP: 2015.2 to 2016.2**
(% ch. from previous quarter at seasonally adj. annual rates)

Indicator	2015.2	2015.3	2015.4	2016.1	2016.2
US GDP real	2.6	2.0	0.9	0.8	1.4
US GDP nominal	4.9	3.2	1.8	1.3	3.7
Wages and salaries	6.1	4.4	6.6	-0.7	4.6
Personal income	5.7	4.0	3.4	1.3	3.9

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

Federal government consumption and investment and US GDP: 2014.2 to 2016.2

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

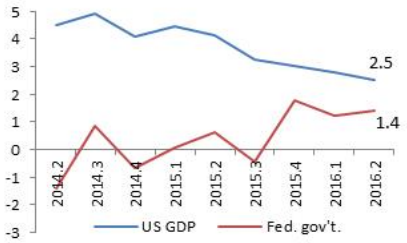


Table 28. **US GDP, income, and inflation: 2016.2**
(percent change from same period of prior year)

Indicator	FY 2013	FY 2014	FY 2015	12-mo avg	2016.2
US GDP real	1.3	2.4	2.8	1.7	1.3
US GDP nominal	3.0	4.3	4.0	2.9	2.5
US Personal income	3.0	3.5	4.9	3.7	3.2
US wages	3.9	4.0	5.2	4.5	3.8
Corporate profits*	2.6	5.4	-1.6	-6.5	-1.2
S and P stock index	16.7	20.3	9.7	-0.6	-0.7
US CPI	1.6	1.6	0.3	0.7	1.0
Balt/Wash. area CPI	1.6	1.7	0.4	0.8	na

Source: BEA (September 29, 2016), BLS, Yahoo.
**Before tax, w/o IVV and CCAdj.*

Federal government consumption and investment , by defense and non-defense: 2014.2 to 2016.2

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

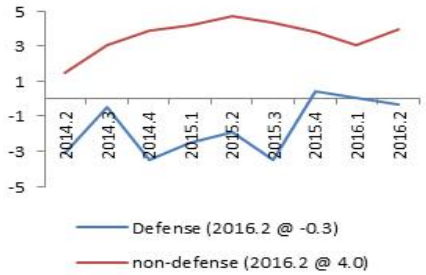


Table 31. **Monthly selected US Indicators: May 2016 to August 2016**

Indicator	May	June	July	August
S and P stock index (level)	2066	2086	2149	2177
% change from prior month	-0.5	1.0	3.0	1.3
% change from 1 year ago	-2.2	-0.7	2.6	6.7
10 yr. Treasury Interest rate (level)	1.80	1.64	1.50	1.55
CPI % ch from prior month *(seasonally adjusted)*	0.21	0.21	-0.04	0.20
CPI % ch from prior year *(seasonally adjusted)*	1.07	1.05	0.87	1.09
Jobs (seasonally adjusted level, in millions)	143.90	144.17	144.45	144.60
change from prior month (thousands)	24	271	275	151
% change from prior month	*0.02*	*0.19*	*0.19*	*0.10*
Resident employment (season. adj. level, in mil.)	*151.03*	*151.097*	*151.517*	*151.614*
change from prior month (thousands)	*26*	*67*	*420*	*97*
% change from prior month	*0.02*	*0.04*	*0.28*	*0.06*
Unemployment rate (seasonally adj.)	4.7	4.9	4.9	4.9

Source: BLS and Yahoo! Finance.

DC tax collections

Total DC tax collections (before earmarking): August 2011 to August 2016
(12-month moving total in July 2016 is $7,057 million)

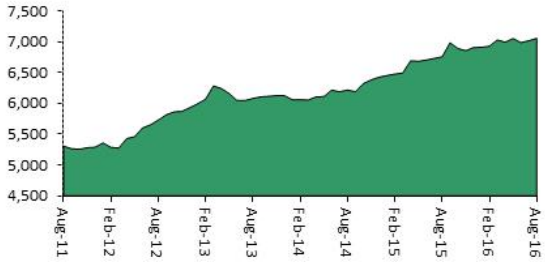


Table 32. **Tax Collections (before earmarking): August 2016 *(Preliminary)***

($ million)	Revenue (from CAFR)				Tax collections			
Tax	FY 2012	FY 2013	FY 2014	FY 2015	12-month moving total	FY 2016 to date	3-month moving total	This month
Total taxes	5,853.3	6,100.5	6,290.0	6,916.8	7,056.6	5,619.6	1,356.9	490.5
1 year change	528.0	247.2	189.5	656.9	305.2	78.1	8.8	39.5
% change	*9.9*	*4.2*	*3.1*	*10.0*	*4.5*	*1.4*	*0.7*	*8.8*
Real property	1,822.0	1,914.8	2,015.6	2,194.5	2,322.8	1,347.2	159.2	143.4
1 year change	106.9	92.8	100.7	178.9	216.6	8.3	13.5	19.0
% change	*6.2*	*5.1*	*5.3*	*8.9*	*10.3*	*0.6*	9.3	na
General sales	1,111.0	1,137.9	1,172.1	1,315.3	1,313.7	1,213.7	343.9	101.6
1 year change	67.6	26.8	34.2	143.2	66.8	59.2	9.0	-4.0
% change	*9.5*	*2.4*	*3.0*	*12.2*	*5.4*	*5.1*	*2.7*	*-3.8*
Individual income	1,490.7	1,640.9	1,679.2	1,868.0	1,866.8	1,668.1	431.4	133.4
1 year change	194.1	150.2	38.3	188.9	6.3	-6.3	-8.8	-0.8
% change	*15.0*	*10.1*	*2.3*	*11.2*	*0.3*	*-0.4*	*-2.0*	*-0.6*
withholding	1,321.6	1,391.2	1,472.9	1,553.2	1,613.9	1,493.0	380.4	134.7
1 year change	129.5	69.6	81.7	80.3	28.1	34.0	2.5	-2.8
% change	*10.9*	*5.3*	*5.9*	*5.4*	*1.8*	*2.3*	*0.7*	*-2.0*
non-withholding	169.1	249.6	206.2	314.8	252.9	175.0	51.1	-1.3
1 year change	64.6	80.6	-43.4	108.6	-21.8	-40.3	-11.3	2.0
% change	*61.9*	*47.7*	*-17.4*	*52.6*	*-7.9*	*-18.7*	*-18.1*	*na*
Corporate income	302.9	299.0	280.2	308.0	349.8	288.4	62.3	4.1
1 year change	86.6	-3.9	-18.8	27.8	36.9	32.7	2.8	4.0
% change	*40.1*	*-1.3*	*-6.3*	*9.9*	*11.8*	*12.8*	*4.6*	*na*
Unincorporated Bus.	163.0	154.3	135.4	139.8	157.8	131.3	24.2	-0.1
1 year change	19.6	-8.7	-18.9	4.4	9.4	9.2	5.0	1.8
% change	*13.6*	*-5.3*	*-12.3*	*3.2*	*6.3*	*7.6*	*25.9*	*na*
Deed taxes*	312.5	372.8	391.2	480.6	442.8	400.2	128.7	40.9
1 year change	1.3	60.3	18.4	89.4	-26.7	-37.8	-7.8	8.9
% change	*0.4*	*19.3*	*4.9*	*22.8*	*-5.7*	*-8.6*	*-5.7*	*28.0*
Other taxes	651.1	580.8	616.4	610.6	603.0	570.7	207.1	67.3
1 year change	23.3	-70.4	35.6	-5.8	-4.1	12.8	-4.9	10.5
% change	*3.7*	*-10.8*	*6.1*	*-0.9*	*-0.7*	*2.3*	*-2.3*	*18.5*

**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 *na=not applicable due to negative numbers*

Tax collections in the last 3 months are 0.7% above a year ago

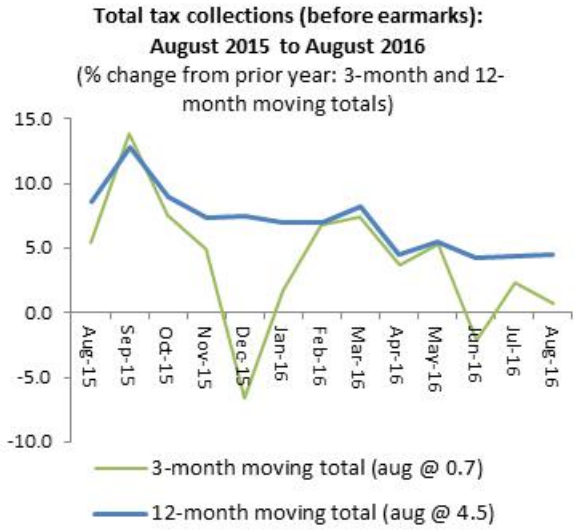
●For the 12 month period ending August total tax collections (before earmarking) were $305.2 million (4.5%) more than in the prior year. For the last 3 months they were 0.7% above last year.

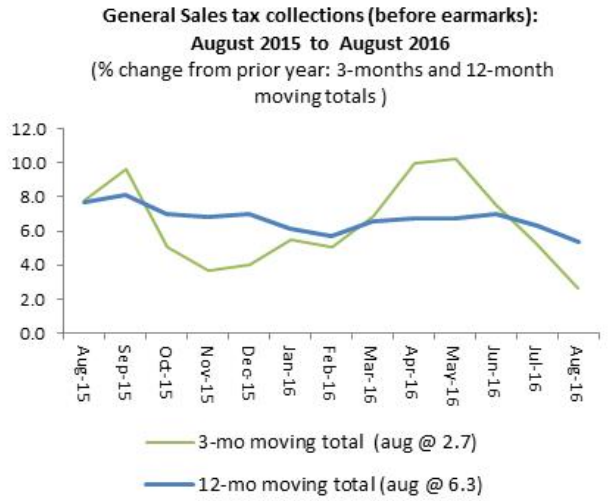
●Individual income tax collections were 0.3% above last year for the 12-months ending August and withholding was 1.8% higher. For the past 3 months, withholding was up 0.7% and all collections were down 2.0%.

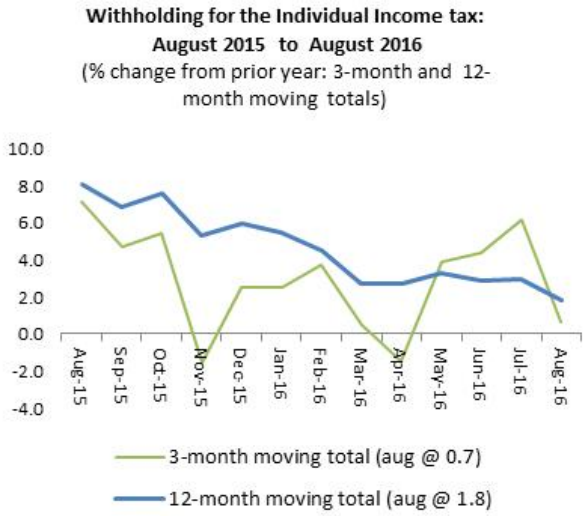
●General sales tax collections were 5.4% above last year for the 12-months ending August. For the past 3 months, they were 2.7% above last year.

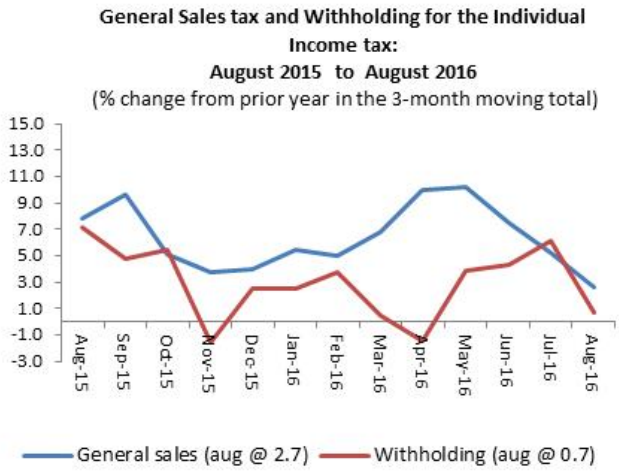
●Deed tax collections for the 12-months ending August were down 5.7% from last year; for the past 3 months they were also down 5.7%.

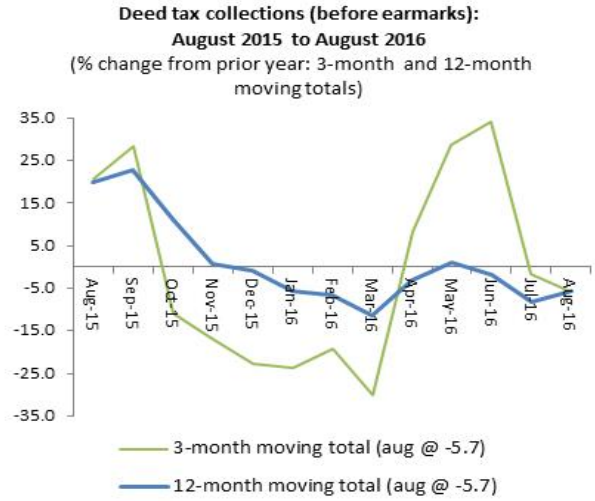
●Corporate income taxes in Aug. were up 11.8% and unincorporated business income taxes rose 6.3% from last year (12-mo. total).











US economic forecasts

Little change in the September Blue Chip forecast for the US economy

●The September Blue Chip Indicators kept its forecast for real GDP growth in FY 2016 at 1.6% and raised its FY 2017 estimate slightly to 2.2%. Both years are lower than the actuals for 2014 and 2015 (2.4% and 2.8%, respectively).

●CBO's August economic and budget outlook report also reduced its estimate for real GDP growth in FY 2016 and FY 2017.

●The Blue Chip Indicators September forecast for inflation (CPI) is unchanged: 1.1% for FY 2016 and 2.2% in FY 2017.

●S&P 500 September baseline forecasts for the end 2016: Global Insight's forecast: 6.9% annual gain in the 4th quarter of 2016, Moody's Analytics is 4.9%.

●Global Insight and Moody's Analytics expect FY 2017 nominal US GDP and Personal Income growth in the 4% to 5% range.

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	Moody's Analytics	IHS Global Insight	Blue Chip	Moody's Analytics	IHS Global Insight
FY 2013 Actual	1.3	1.3	1.3	3.0	3.0	3.0
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						
June	1.9	1.9	1.9	3.1	2.9	3.2
July	1.9	2.0	1.9	3.1	2.9	3.2
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
FY 2017						
June	2.2	2.7	2.5	4.1	4.5	5.5
July	2.2	2.8	2.3	4.0	4.4	5.3
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

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

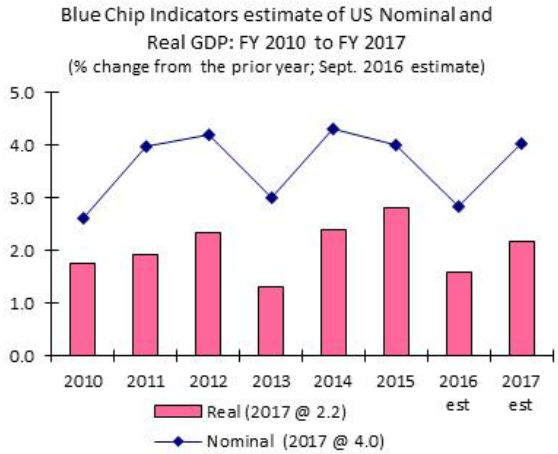


Table 34. **CBO estimates of GDP and other indicators: FY 2015 to FY 2018**

Indicator	*Date of est.*	FY 2015	FY 2016	FY 2017	FY 2018
Real GDP *(1 yr % ch)*	January 2016	2.6	2.3	2.6	2.3
	August 2016		1.9	2.3	2.3
Nominal GDP *(1 yr % ch.)*	January 2016	3.6	3.8	4.3	4.3
	August 2016		3.1	4	4.1
CPI *(1 yr % ch)*	January 2016	0.3	1.0	2.2	2.4
	August 2016		1.0	2.2	2.3
10 yr. Treasury bond rate	January 2016	2.2	2.6	3.3	3.8
	August 2016		1.9	2.2	2.7
Unemployment rate	January 2016	5.5	4.8	4.4	4.5
	August 2016		4.9	4.5	4.5

Source: CBO, The Budget and Economic Outlook: 2016 to 2026, Jan. and Aug. 2016

Table 35. **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
Jun	0.3	1.0	2.1	2.2	2.1	2.4
Jul	0.3	1.0	2.1	2.2	1.9	2.1
Aug	0.3	1.1	2.2	2.2	1.9	2.0
Sep	0.3	1.1	2.2	2.2	1.9	2.0

Source: Blue Chip Indicators

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**		
June	2.0	3.9	5.7	2.0	1.0	0.5
July	2.0	5.2	5.7	2.0	3.2	0.6
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

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

Table 37. **Forecasts for US Personal Income: 2015.4 to 2017.4**

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**			
June	4.7	4.2	4.6	5.1	4.7	4.3	5.5	6.4
July	4.7	4.2	4.3	4.9	4.7	4.1	4.8	6.6
August	4.9	3.4	4.3	5.0	4.9	3.3	4.4	6.6
Sept.	4.9	3.5	4.3	4.8	4.9	3.5	4.2	5.5

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

Jobs and population

•Global Insight: Job growth falls in FY 2017 to about a third of the FY 2015 level. Annual population increase slows, but population growth (and resident employment) outpaces jobs.

• Moody's Analytics: More job growth and less population growth than Global Insight. Annual increase in jobs outpaces population growth.

Table 38. **Forecasts of DC jobs, population, resident jobs, households, and housing starts to FY 2018**

(Amount of change from the prior year)

		Actual		Global Insight			Moody's Analytics		
item and forecast date		3 yr avg	FY 2015	FY 2016	FY 2017	FY 2018	FY 2016	FY 2017	FY 2018
Jobs in DC									
	June	*11,039*	*12,534*	*10,715*	*7,462*	*3,118*	*9,344*	*6,700*	*6,350*
	Sep	11,039	12,534	9,707	4,167	3,723	10,675	8,350	5,650
Population									
	June	*12,396*	*11,950*	*10,795*	*8,112*	*7,197*	*9,502*	*7200*	*5925*
	Sep	12,396	11,951	10,958	9,826	9,389	9175	6825	5525
DC resident jobs									
	June	*10,994*	*13,307*	*8,059*	*6,509*	*6,464*	*8,502*	*6,100*	*4,875*
	Sep	10,994	13,307	11,078	8,844	6,768	11,075	8,225	4,700
Households									
	June	*4,752*	*4,990*	*4,095*	*1,975*	*2,193*	*4,025*	*3,625*	*4,225*
	Sep	4,752	4,990	4,205	2,826	3,136	4,525	2,400	2,300
Housing starts									
	June	*4,025*	*4,057*	*4,143*	*2,893*	*2,759*	*2,815*	*1,856*	*1,885*
	Sep	4,001	3,980	4,500	3,397	3,037	3,819	3,675	3,669

Source: June and Sep. baseline forecasts for Global Insight and Moody's Analytics. 3-yr. average is FY 2013 through 2015.

Income

•Global Insight: Wages earned in DC grow 4.1% in FY 2017, down from FY 2015 and FY 2016. However, wages of DC residents and DC Personal Income grow faster in FY 2017 than the two earlier years.

•Moody's Analytics: Wages earned in DC fall to 3.2% in FY 2017. DC resident wages acutally decrease in FY 2017 and Personal Income grows just 0.7% due to slow population growth and more commuter earnings.

Table 39. **Wages and Personal Income in DC: Forecasts to FY 2018**

(Annual percentage change in nominal amounts)

		Actual		Global Insight			Moody's Analytics		
item and forecast date		3 yr avg.	2015	2016	2017	2018	2016	2017	2018
Wages earned in DC									
	June	*2.7*	*5.0*	*4.8*	*4.5*	*4.4*	*4.4*	*3.3*	*4.5*
	Sep	2.6	4.9	4.5	4.1	4.3	4.1	3.2	4.2
Wages of DC residents									
	June	*2.5*	*4.5*	*6.1*	*6.5*	*6.2*	*3.0*	*3.6*	*1.1*
	Sep	2.5	4.4	4.9	5.0	5.7	4.2	-1.2	0.5
Personal Income									
	June	*2.2*	*4.1*	*5.3*	*5.4*	*5.7*	*3.6*	*1.3*	*2.9*
	Sep	2.2	4.1	4.5	4.6	5.2	4.1	0.7	2.0

Source:June and Sep. fiscal year forecasts for Global Inight and Moody's Analytics. 3-yr. average is FY 2013 to FY 2015

Table 40. **Forecasts of DC Per Capita income and % change in population and income to FY 2018**

	Actual	Global Insight forecast			Moody's Analytics forecast		
	FY 2015	FY 2016	FY 2017	FY 2018	FY 2016	FY 2017	FY 2018
Per capita income	70,795	72,771	75,056	77,921	72,785	72,588	73,449
% ch per capita inc.	2.2	2.8	3.1	3.8	2.7	-0.3	1.2
% ch population	1.8	1.6	1.4	1.4	1.4	1.0	0.8
% ch Personal Inc.	4.1	4.5	4.6	5.2	4.1	0.7	2.0
CPI	*0.1*	*0.8*	*2.3*	*2.3*	*0.9*	*2.0*	*2.9*

Source:September fiscal year forecasts for Global Insight and Moody's Analytics

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 estimatd to grwoth 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 41. **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 ia from the CAFR.

Table 42. **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 43. **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 calendar year basis, represents the % ch. from the December quarter of the prior yr.

Table 44. **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
Tax revenue ($ million)										
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
Percent change from prior year										
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
Tax revenue as percent of Personal Income	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.

Components of DC Personal Income and the recent revisions. DC Personal Income measures the income of DC residents. Earnings, the largest component, includes wages and salaries, benefits (such as health insurance and leave), and proprietors' income. The other income is property income (rent, interest, and dividends) and transfer payments (social security benefits, pensions, and federal medical programs.) In the June 2016 quarter, 68.6% of DC's $51.1 billion Personal Income was from earnings.

Looking back over the past decade, the September revisions reduced DC's Personal Income before 2013 and increased it after 2013. The average annual rate of growth of Personal Income over the 8 years from 2008.1 (after the recession) to 2016.1 was increased to 4.1% from the earlier of 3.0%. Most of the revisions were to the earnings portion of Personal Income (described in more detail below).

Estimated DC Personal Income: June 2016 (2016.2)

Component	Amount ($B)	% of total
Income from DC resident earnings		
Wages and salaries and related benefits*	$28.50	55.8
Proprietors' income	$6.58	12.9
subtotal, earnings	*$35.08*	*68.6*
Income not from earnings:		
Property income**	$9.33	18.3
Transfer payments***	$6.70	13.1
subtotal, other income	*$16.04*	*31.4*
Total Personal Income	$51.11	100.0

**Does not include employee share of social insurance contributions.*

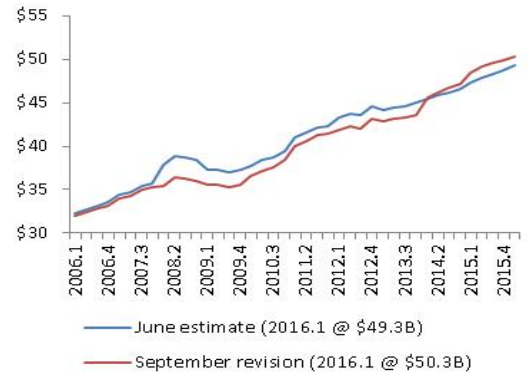
***Rent, interest, and dividends. Does not include capital gains.*

****Social security benefits, pensions, medicare, and medicaid.*

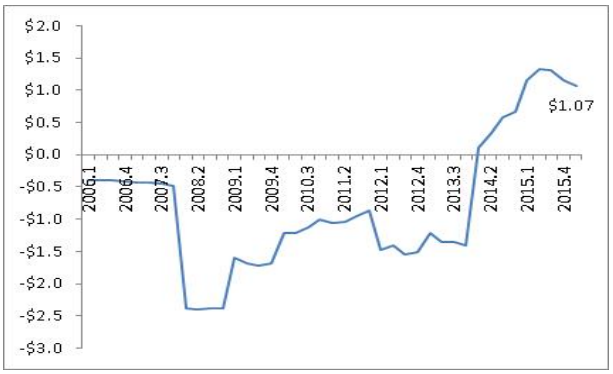
Source: US Bureau of Economic Analysis (September 28, 2016)

The revisions to DC's Personal Income show why it is necessary to consider DC's Personal Income in the context of all income generated by the District's economy. Although DC's 2016.1 Personal Income was increased by $1.1 billion (2.2%), the amount of income generated in DC was $1.0 billion (0.9%) **less.** This occurred because of what is called the "net resident adjustment." This adjustment starts with amounts earned by everybody in DC, subtracts the portion earned by commuters, and adds what DC residents earn outside of DC. The revised net adjustment's $1.6 billion positive contribution to DC Personal Income is a combination of DC residents earning more of the income earned in DC (commuters got less) and DC residents earning more working outside of DC. DC Personal Income rose because the adjustment was able to overcome the negative effect of reduced income generated in DC's economy.

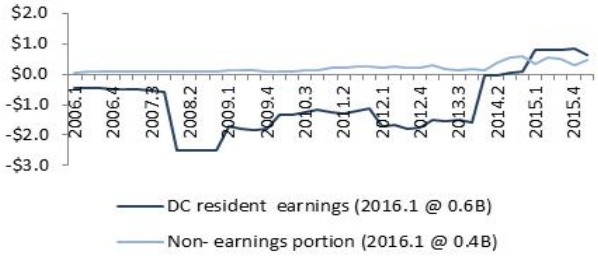
DC Personal Income: 2006.1 to 2016.1 *(June estimate and September revision; $ billion)*



Amount by which the September revision changed DC Personal Income: 2006.1 to 2016.1 ($ billion)



September revisions to the earnings and non-earnings parts of DC Personal Income: 2006.1 to 2016.1 ($B)



DC Personal Income: June and September estimates for March 2016 ($B)

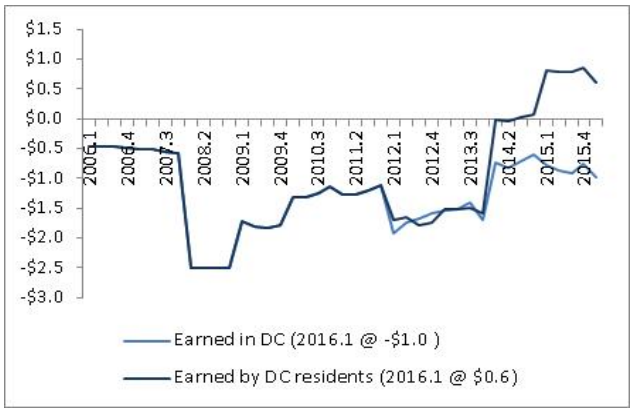
Item	Level in March 2016 June est.	Level in March 2016 Sep. est.	Revision $B	Revision % ch
Personal Income	49.28	50.35	1.07	2.2
Amounts earned in DC	85.34	84.36	-0.98	-1.2
Net resident adjustment	-51.29	-49.69	1.60	
Amounts earned by DC residents	34.05	34.67	0.62	1.8
Property income	9.04	9.19	0.15	1.6
Transfer payments	6.18	6.48	0.30	4.8
Personal Income 1 yr. % ch	*4.3*	*4.0*		

Source: BEA

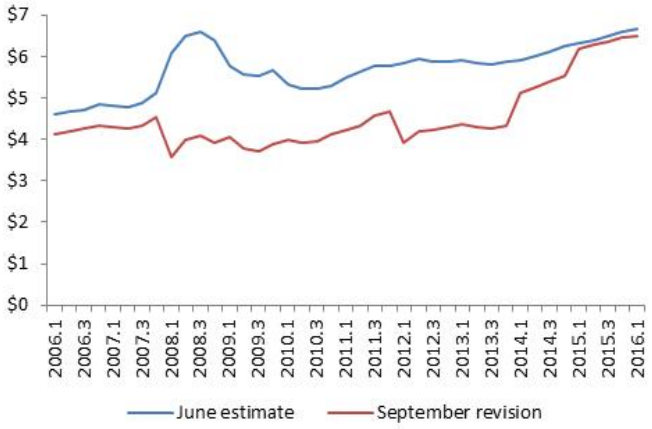
Proprietor's income, the net resident adjustment, and the revisions to earnings. As shown in the graph, amounts earned in DC by all persons working there and amounts earned by DC residents were both revised downward by $0.5 billion to more than $2 billion in the years from 2006 through 2013. Starting in 2014, the earnings of DC residents were revised upward by more than $0.5 billion while amounts earned by everybody were reduced by close to $1 billion.

The decrease in earnings until 2013 is entirely explained by a sharp downward revision to the proprietor's income portion of the earnings. Because proprietor's income data is derived from DC tax returns, this income is all income of DC residents. Proprietors' income was also reduced after 2013, but this was less of a factor in the overall revision as other factors became more important.

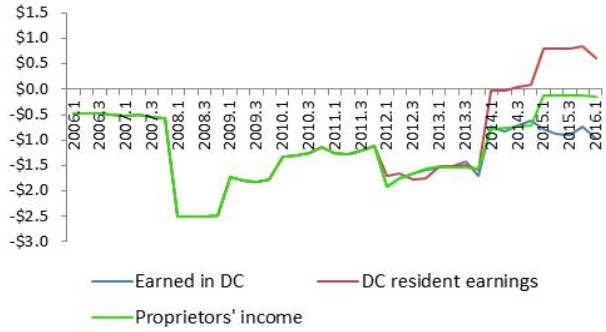
September revision to amounts earned in DC and by DC residents: 2006.1 to 2016.1 *($ billion)*



Proprietors' income in DC: 2006.1 to 2016.1
(June estimate and September revision; $ billion)

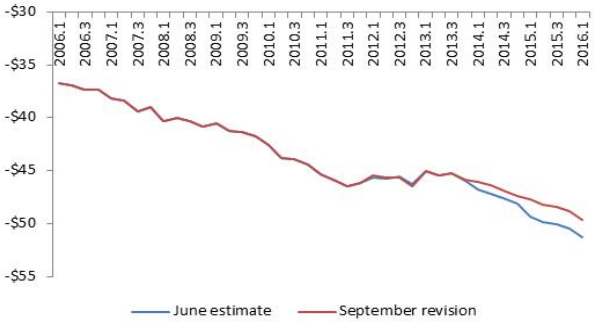


September revision to Proprietors' income and earnings: 2006.1 to 2016.1 *($ billion)*

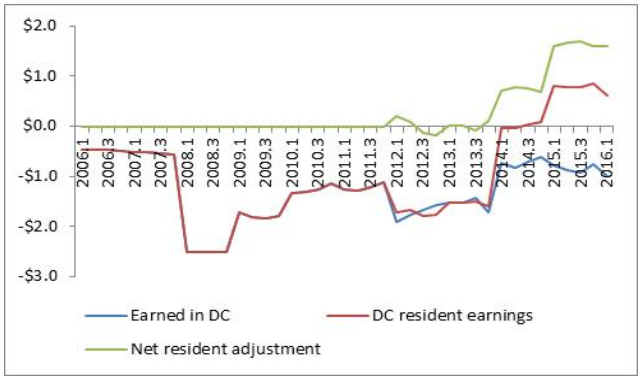


Starting in 2014 the most significant revisions to earnings involved the net resident adjustment. The less negative adjustment increased the earnings of DC residents, enough to more than offset the cut to earnings by all persons working in DC that would otherwise have tended to reduce resident earnings as well. This revision illustrates how important the net resident adjustment is to DC's Personal Income. It should also not be surprising that this is an item where data is revised. DC is the center of a much larger metropolitan area, with 10% of the people, one quarter of the jobs, and lots of commuters (in both directions). The net adjustment is almost as big as DC's Personal Income itself and is an estimating challenge given all the income flows involved.

Net resident adjustment in DC's Personal Income calculation: 2006.1 to 2016.1
(June estimate and September revision; $ billion)



September revision to the net resident adjustment and to DC earnings: 2006.1 to 2016.2 ($B)



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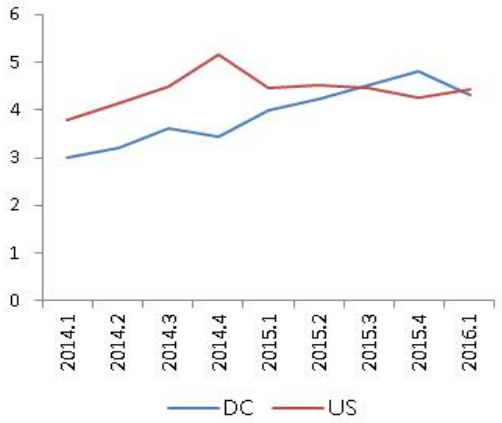
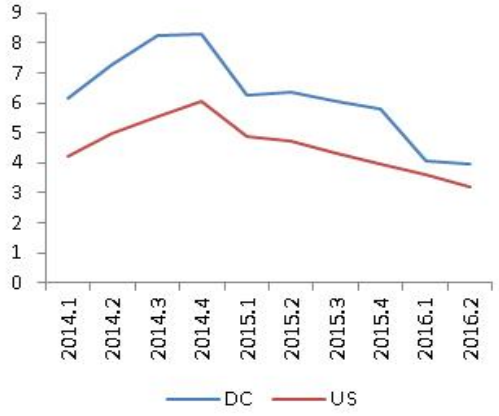
DC and the US average. In June, BEA said that US Personal Income growth remained fairly steady for the two years from 2014.1 to 2016.1, varying between 4% and 5% annual growth rates in each quarter, with DC growing more slowly until the last quarter of 2015. In the revised picture, US Personal Income fell steadily from 6.1% in the 2014.4 quarter to 3.2% in the second quarter of 2016, and DC Personal Income grew at a faster annual rate than the US in each quarter of the past two years.

June estimate of the 1 year % change in DC and US Personal Income: 2014.1 to 2016.1



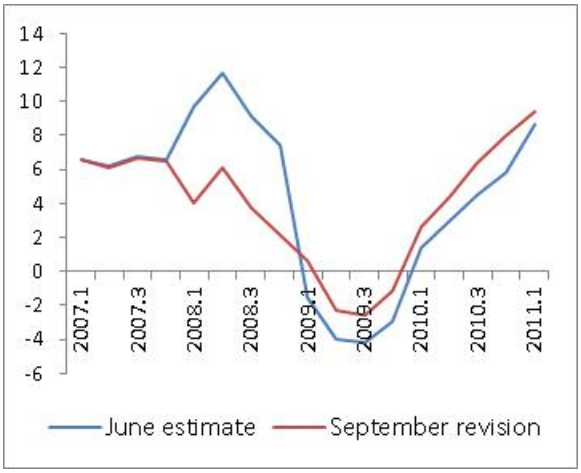
September estimate of the 1 year % change in DC and US Personal Income: 2014.1 to 2016.2



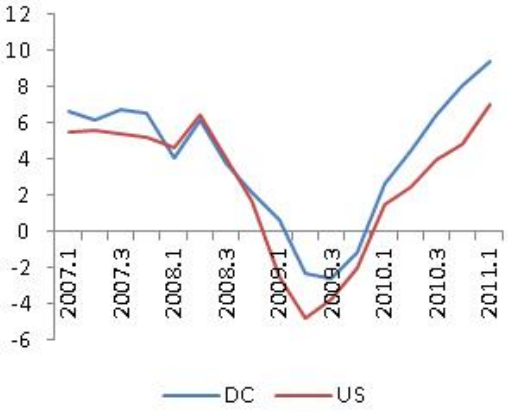
DC Personal Income and the recession.

Until this revision, BEA income data showed that DC's Personal Income continued to grow after the Great Recession started in December 2007. The revised story is that DC's income fell after the recession at about the same pace as it did nationally. DC's income growth did not, however, fall as far into negative territory as previously estimated, and it grew faster in the recovery. As noted earlier, the key revision to the data was a substantial reduction in proprietors' income.

% change from the prior year in DC Personal Income: 2007.1 to 2011.1
(June estimate and September revision)



% change from the prior year in DC and US Personal Income: 2007.1 to 2011.1
(September estimate)



—Stephen Swaim. DC Office of Revenue Analysis

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, 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 (click on *Budget and Revenue/Economy/ Economic and Revenue Trends).*

Table 45. **Information sources**

Indicator	Source	Period covered in this report	Next release
D.C. Jobs and Labor Force information	BLS	August	October 21
D.C. Personal Income	BEA	2016.2	December 20
D.C. Tax Collections	OTR/ORA	August	c. October 15
D.C. Housing Sales	MRIS*	August	c. October 10
D.C. Commercial Office Building data	CoStar and Delta	2016.2	c. October 10
DC Apartment data	CoStar and Delta	2016.2	c. October 10
D.C. Hotel stay information	Smith Travel Research	August	c. October 20
Consumer Price Index	BLS	August	October 18
U.S. Jobs and Labor Force	BLS	August	October 7
U.S. GDP and Personal Income	BEA	2016.2	October 28
S and P 500 Stock Index	Financial press	August	October 1
Interest rate on 10-Year Treasury Securities	Financial press	August	October 1
IHS Global Insight D.C. forecast	Global Insight	September	c. October 25
Moody's Analytics D.C. forecast	Moody's Analytics	September	c. October 25
Blue Chip Economic Indicators for the U.S.	Aspen Publishers	September	c. October 10

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

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

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

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