



District of Columbia Economic and Revenue Trends: August 2016

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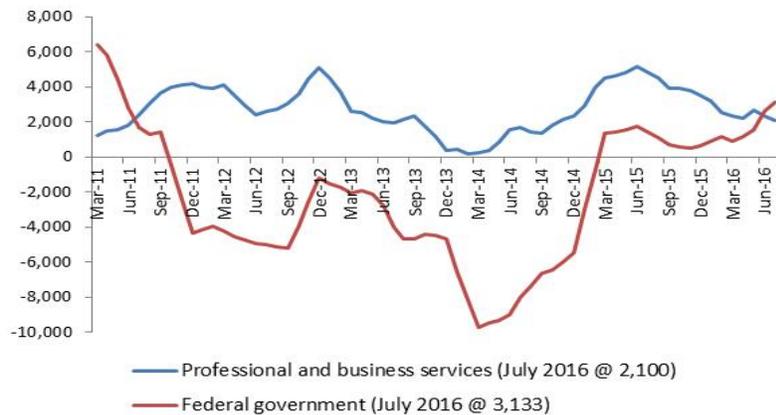
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Does slowing growth in business and professional services jobs signal a change in DC's economy?

Federal jobs in DC are now growing faster than those in business and professional services

There was some good news in the July Bureau of Labor Statistics report on wage and salary employment located in the District of Columbia: more federal civilian employees worked in DC in July than a year earlier—3,133 of them, the biggest gain in 5 years. There was also some not-so-good news: jobs in professional and business services increased by 2,100, just half the yearly gains the sector experienced a year earlier. Federal employment gains last topped those of professional and business services, DC's largest private industrial sector, 5 years ago, when DC was shaking off the effects of the Great Recession and federal employment growth from stimulus programs was winding down.

Change in employment from the prior year in DC's Professional and Business Services and Federal Government sectors: March 2011 to July 2016



Source: BLS (calculated from 3-month moving averages)

The slower growth of business and professional services jobs has occurred in DC despite the fact that the US economy is still expanding from the last recession—an expansion also largely led by those services. For the 12-months ending July 2015 DC's business and professional services jobs grew at a 3.1% rate, close to the national one of 3.3%. Then, over the next year, as the national growth rate slipped a bit to 2.7%, DC's rate fell sharply to 1.3%, less than half the national rate.

Why professional and business services employment has slowed down in DC is not clear from the BLS data. Should the slowdown continue, however, it would greatly affect the outlook for future job growth in DC. Now accounting for 21% of all DC jobs, these services are expected to account for half to three quarters of all net new jobs in DC over the next several years, according to forecasts by (continued on p. 19)

Wage and salary employment

Private sector job growth continues to slow

- July wage and salary employment in DC was up by 9,000 (1.2%) from a year earlier as measured by the 3-month moving average.
- Federal government employment in DC for July was up by 3,133 (1.6%). The private sector gained 5,033 (1.0%).
- Total year-over-year DC metropolitan area employment increased by 78,367 (2.5%) in July as measured by the 3-month moving average.
- Suburban Washington employment in July increased by 2.9% from a year earlier.
- Seasonally adjusted DC jobs decreased in July by 2,100 from the prior month and is below the level of 5 months ago.

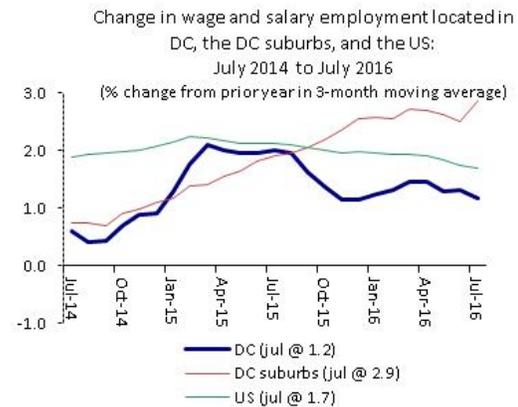


Table 1. Wage and salary employment in DC, Washington Metro area, and the US: July 2016

Jurisdiction	FY 2012	FY 2013	FY 2014	FY 2015	12-mo avg	3-mo average	This month
District of Columbia	730,950	745,375	751,842	764,250	772,458	778,967	784,100
1 year change	7,717	14,425	6,467	12,408	9,992	9,000	8,500
% change	1.1	2.0	0.9	1.7	1.3	1.2	1.1
Washington metro area	3,053,050	3,091,067	3,103,833	3,138,300	3,215,633	3,266,800	3,279,700
1 year change	36,617	38,017	12,767	36,000	71,617	78,367	94,800
% change	1.2	1.2	0.4	1.2	2.3	2.5	3.0
Washington suburbs (% ch)	1.3	1.0	0.3	1.6	2.6	2.9	3.6
US (% ch)	1.7	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. July is preliminary.

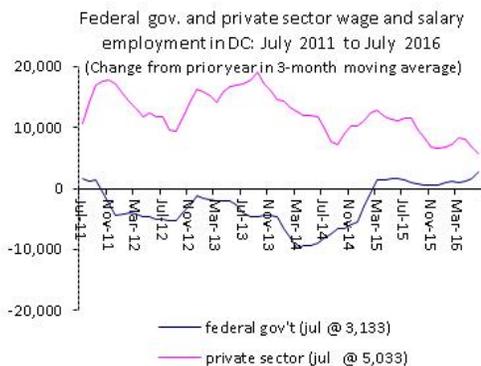


Table 2. Federal government and private sector wage and salary employment in DC: July 2016

Sector	FY 2013	FY 2014	FY 2015	12-mo avg	3-month average	This month
Federal government	205,900	198,367	197,950	199,275	201,567	202,500
1 year ch.	-2,675	-7,533	-417	1,442	3,133	3,500
% change	-1.3	-3.7	-0.2	0.7	1.6	1.8
Private sector	504,275	515,808	526,775	532,467	533,633	531,200
1 year ch.	16,633	11,533	10,967	7,108	5,033	5,900
% change	3.4	2.3	2.1	1.4	1.0	1.1

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

Table 3. Seasonally adjusted DC Employment: February 2016 to July 2016

Indicator	February	March	April	May	June	July
D.C. Wage and Salary employment	775,000	773,800	777,900	781,200	775,200	773,100
change from prior month	-200	-1,200	4,100	3,300	-6,000	-2,100
% change from prior month	0.0	-0.2	0.5	0.4	-0.8	-0.3

Source: BLS seasonally adjusted. July is preliminary

The federal government and retail once again topped job growth in July

● In July the federal government’s 3,133 increase in jobs over the prior year was more than in any other sector. Retail’s 1,833 gain was next. (3-month moving average.)

● In the private sector, legal services (1,700) was the only other sector to grow by more than 1,000 jobs in July.

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

● Local government rose by 833 (1.9%).

● The federal government accounted for 25.9% 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.

Change in private sector wage and salary jobs located in DC, the DC suburbs, and the US: July 2014 to July 2016

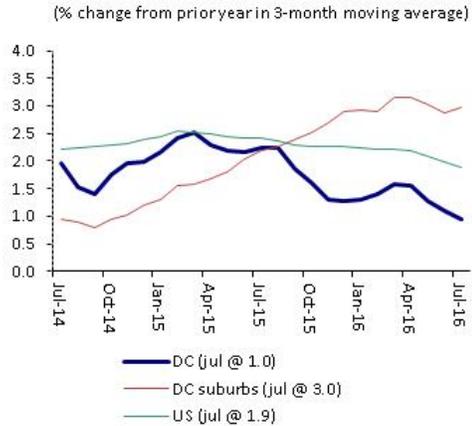


Table 4. Wage and salary employment located in DC: July 2016

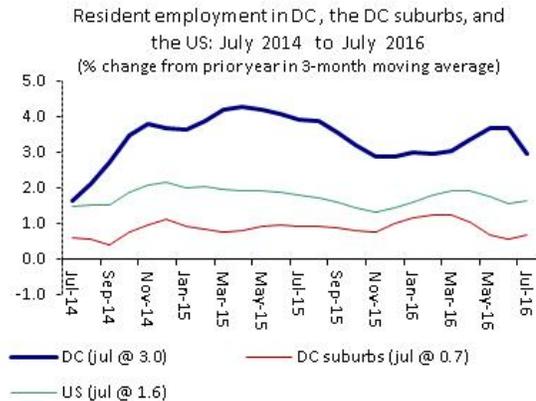
Industry sector	3-month moving average				12-mo. moving avg: % change	Sector % of all DC jobs, Jul 2016	DC share (%) in Jul 2016 of all sector jobs in:		Change from Jul 2015 to Jul 2016 in DC share of sector jobs in:	
	Jul 2015	Jul 2016	Amount	%			metro area	US	metro area	US
Federal government	198,433	201,567	3,133	1.6	0.7	25.9	54.5	7.21	0.1	0.02
Local government	42,933	43,767	833	1.9	3.7	5.6	13.0	0.23	-0.1	0.00
Legal services	28,833	30,533	1,700	5.9	2.2	3.9		2.70		0.14
Other Professional and technical	84,067	84,667	600	0.7	2.7	10.9	22.9	1.09	-0.3	-0.04
Employment services	14,967	14,900	-67	-0.4	2.2	1.9	32.8	0.42	-1.5	-0.01
Other Business services	34,900	34,767	-133	-0.4	-0.9	4.5	17.8	0.45	-0.1	-0.01
Information	17,267	16,967	-300	-1.7	-0.2	2.2	22.7	0.61	0.4	-0.02
Finance	30,333	30,533	200	0.7	0.4	3.9	19.7	0.37	0.2	0.00
Organizations	63,900	63,467	-433	-0.7	-0.4	8.1	35.2	2.12	-0.8	-0.03
Education	57,300	57,833	533	0.9	-0.6	7.4	49.5	1.71	-3.2	-0.02
Health	67,300	67,333	33	0.0	0.8	8.6	22.2	0.35	-0.3	-0.01
Food service	51,333	52,033	700	1.4	4.0	6.7	21.8	0.45	-0.5	-0.01
Accommodations	15,233	15,567	333	2.2	1.2	2.0	37.3	0.77	2.1	0.01
Amusement and recreation	7,800	8,000	200	2.6	1.6	1.0	14.9	0.32	-1.2	0.00
Retail trade	22,067	23,900	1,833	8.3	7.5	3.1	8.3	0.15	0.4	0.01
Wholesale trade	4,867	4,867	0	0.0	-1.7	0.6	7.7	0.08	-0.2	0.00
Construction	14,600	14,433	-167	-1.1	0.7	1.9	9.0	0.21	-0.6	-0.01
Personal and miscellaneous ser.	7,833	7,600	-233	-3.0	-0.6	1.0		0.28		-0.01
Other private	6,000	6,233	233	3.9	7.4	0.8	0.0	0.00	-5.2	-0.03
Total	769,967	778,967	9,000	1.2	1.3	100.0	23.8	0.54	-0.3	0.00
Public sector	241,367	245,333	3,967	1.6	1.2	31.5	34.7	1.13	-0.2	0.01
Private sector	528,600	533,633	5,033	1.0	1.4	68.5	20.8	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")

Resident employment and unemployment

DC resident employment growth slowed in July

- In July DC resident employment was up 10,724 (3.0%) from a year earlier (3-mo. moving average). The labor force grew by 6,946 (1.8%).
- The seasonally adjusted unemployment rate was 5.9% in July, unchanged from June. Until last month, the unemployment rate had been higher than 5.9% every month since April 2008.
- July initial unemployment insurance claims were down 6.7% from last year (3-month moving average).



Jobs located in DC and DC resident employment:
July 2014 to July 2016
(Change from prior year in 3-mo. moving average)

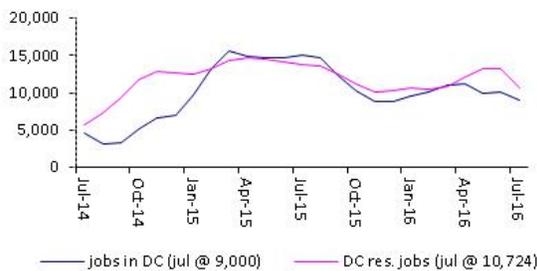


Table 5. Unemployment rates for DC, metro area, and US:
July 2016

Jurisdiction	Not seasonally adj.		Seasonally adj.	
	July 2015	July 2016	July 2015	July 2016
US	5.5	5.1	5.3	4.9
DC	7.1	6.2	6.8	5.9
DC metro area	4.6	4.0	na	na
DC suburbs	4.2	3.6	na	na

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

Table 6. Resident employment and unemployment: July 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	368,174	373,921	374,662
1 year change	11,026	16,015	3,846	13,410	11,164	10,724	6,913
% change	3.5	4.9	1.1	3.9	3.1	3.0	1.9
Labor Force	359,327	374,045	375,222	386,668	393,119	397,115	399,469
1 year change	9,639	14,718	1,177	11,447	7,801	6,946	3,699
% change	2.8	4.1	0.3	3.1	2.0	1.8	0.9
Unemployed	33,615	32,317	29,648	27,685	24,946	23,194	24,807
1 year change	-1,387	-1,298	-2,669	-1,963	-3,363	-3,778	-3,214
% change	-4.0	-3.9	-8.3	-6.6	-11.9	-14.0	-11.5
Unemployment rate	9.4	8.7	7.9	7.2	6.3	5.8	6.2
DC Unemployment insurance (state program)							
Initial claims (monthly avg.)	1,784	1,915	1,851	1,596	1,480	1,715	1,652
1 year change	-317	131	-64	-255	-138	-53	-150
% change	-15.1	7.3	-3.3	-13.8	-8.5	-3.0	-8.3
Weeks compensated (mo. avg.)	45,170	42,862	42,133	32,811	30,480	28,268	29,017
1 year change	-1,253	-2,308	-729	-9,322	-3,375	-2,020	-3,390
% change	-2.7	-5.1	-1.7	-22.1	-10.0	-6.7	-10.5

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

Table 7. Seasonally adjusted DC Resident employment and unemployment: Feb. 2016 to July 2016

Indicator	February	March	April	May	June	July
DC Resident employment	367,082	368,554	371,361	373,304	374,319	373,448
change from prior month	732	1,472	2,807	1,943	1,015	-871
% change from prior month	0.2	0.4	0.8	0.5	0.3	-0.2
DC Unemployment rate (%)	6.5	6.5	6.4	6.1	5.9	5.9

Source: BLS seasonally adjusted. July is preliminary.

Wage growth in DC and for DC residents fell below the US average in the March quarter

●Wages and salaries earned in the District of Columbia were 4.4% higher in the March quarter compared to the same quarter of 2015.

●Wages earned by DC residents grew by 4.7% in the March quarter compared to last year.

●In the March quarter, DC Personal Income grew 4.3%, just below the US increase (4.4%).

●Federal civilian wages and salaries were \$1.07 billion (4.8%) higher in March than a year earlier.

●In the March quarter, private sector wages and salaries earned in DC grew by \$2.10 billion over the prior year, a 5.0% gain.

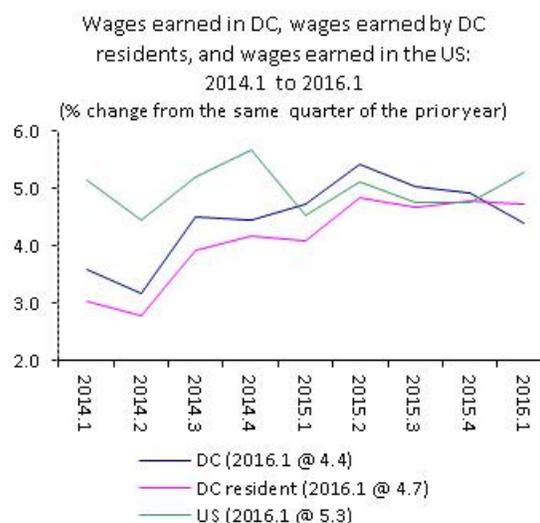


Table 8. DC Wages and Personal Income: March 2016

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

Indicator	FY 2012	FY 2013	FY 2014	FY 2015	4-qtr. moving avg.	Latest qtr. (Mar.)
Wages and salaries earned in DC	60.65	62.07	63.97	67.17	68.65	69.85
1 year change	1.13	1.41	1.90	3.20	3.23	2.94
% change	1.9	2.3	3.1	5.0	4.9	4.4
Supplements to wages & salaries	16.50	16.44	17.24	18.12	18.44	18.73
% change	0.9	-0.4	4.8	5.1	4.3	3.3
Proprietors' income earned by DC residents*	5.87	5.85	5.98	6.37	6.54	6.66
% change	5.9	-0.3	2.2	6.4	5.9	5.5
Wages and salaries of DC residents***	20.77	21.69	22.34	23.35	23.89	24.32
change from one year ago	0.91	0.92	0.65	1.01	1.08	1.10
% change	4.6	4.4	3.0	4.5	4.8	4.7
Income earned by DC residents	29.7	30.3	31.1	32.7	33.4	34.1
% change	4.9	2.0	2.8	5.0	4.9	4.8
Property income of DC residents	7.78	8.26	8.48	8.77	8.98	9.04
% change	11.0	6.2	2.6	3.5	4.7	4.7
Pensions and other transfer of DC residents	5.73	5.90	6.01	6.03	6.12	6.18
% change	-0.3	2.8	1.9	0.4	1.6	1.2
DC Personal Income**	43.21	44.44	45.63	47.50	48.55	49.28
1 year change	2.14	1.23	1.18	1.87	2.08	2.04
% change	5.2	2.8	2.7	4.1	4.5	4.3
US Personal income (% change from prior year)	4.6	3.0	2.9	4.7	4.4	4.4
US Wages and salaries (% change from prior year)	3.4	3.9	4.1	5.0	5.0	5.3
<i>Addendum: Change from prior year in wages earned in DC by sector</i>						
Private sector (1 yr ch, \$B)	1.35	1.79	1.33	2.15	2.20	2.10
Federal government (1 yr ch, \$B)	-0.37	-0.43	0.48	0.85	0.97	1.07
DC res. wages as % of wages earned in DC	34.2	34.9	34.9	34.8	34.8	34.8

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

**Reflects deduction of social insurance paid by individuals. Wage and salary amounts shown are before this deduction.

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

Source: BEA; data for March were released June 22, 2016

Single family and condominium housing

The pace of sales of single family and condominium units has been slowing

- The 3-month moving total of single family home sales in July was up 3.5% from a year earlier, and the average selling price was 0.5% lower. The year-to-date median sales price (\$678,000) was up 2.0% from the prior year.
- July condominium sales were up 3.5% from last year as measured by the 3-month moving total, and the average selling price was 3.2% higher. The year-to-date median sales price (\$445,000) was up 1.7% from last year.
- The total value of all home sales in July rose 4.3% above last year as measured by the 3-month moving total.
- The increase in DC home prices slowed in the March quarter, according to the Federal Housing Finance Agency Index of single-family same-property transactions. DC's gain over the prior year was 2.8%. The US index was up 5.6%. The Washington metropolitan area gain was only 0.8%.

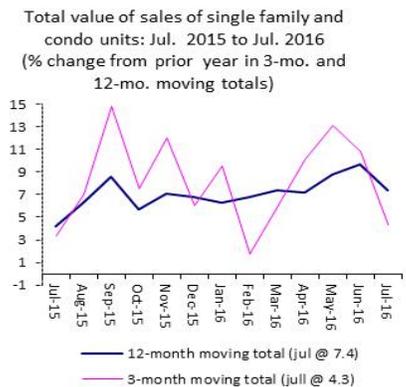
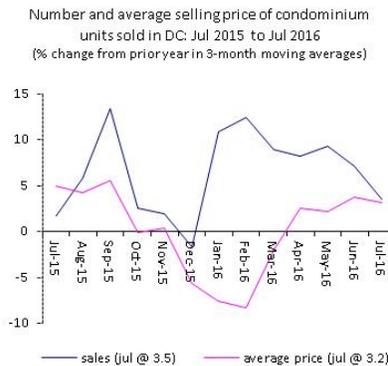
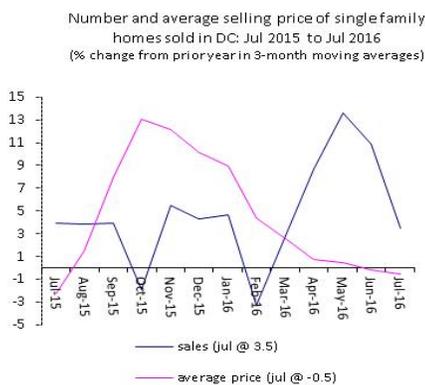


Table 9. D.C. Residential Real Estate Indicators: July 2016

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	4,245	1,312	394
1 year change	-237	416	45	73	144	44	-46
% change	-6.2	11.7	1.1	1.8	3.5	3.5	-10.5
Condo	2,784	3,487	3,592	3,832	3,942	1,212	363
1 year change	315	703	105	240	217	41	-18
% change	12.8	25.3	3.0	6.7	5.8	3.5	-4.7
Total	6,347	7,466	7,616	7,929	8,187	2,524	757
1 year change	78	1,119	150	313	361	85	-64
% change	1.2	17.6	2.0	4.1	4.6	3.5	-7.8
Average prices of units that sold							
Single family (\$)	630,109	712,799	736,362	767,870	787,111	827,907	794,002
1 year change	29,083	82,690	23,563	31,508	36,120	-4,406	-24,904
% change	4.8	13.1	3.3	4.3	4.8	-0.5	-3.0
Condo (\$)	429,611	447,827	472,419	499,650	497,509	517,953	515,556
1 year change	6,245	18,216	24,592	27,232	-604	16,011	13,998
% change	1.5	4.2	5.5	5.8	-0.1	3.2	2.8
Total value of all sales (\$ million)							
	3,441.1	4,397.8	4,660.0	5,060.6	5,302.5	1,714.0	500.0
1 year change	111.9	956.7	262.2	400.6	367.2	70.8	-51.4
% change	3.4	27.8	6.0	8.6	7.4	4.3	-9.3
Ratio: active inventory to sales							
Single family	2.3	1.6	1.6	1.5	1.5	1.4	1.7
Condo	2.9	1.7	1.9	1.7	1.8	1.6	1.7

Median contract prices, CY to date in July 2016 : single family \$678,000 (2.0% 1 yr ch); condo \$445,000 (1.7% 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.

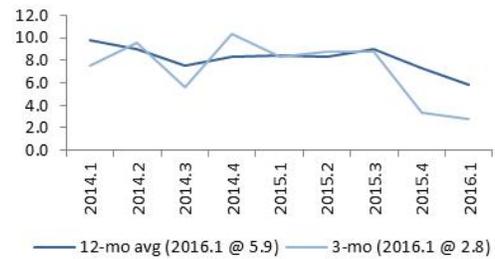
Single family and condominium housing

Table 10. Federal Housing Finance Agency Price Index for single family property in DC, DC metro area, and US: March 2016 (2016.1)

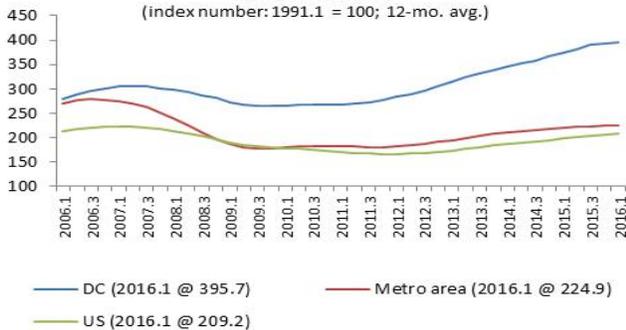
Indicator	Fiscal year average				Last 2 Q's	
	FY 2012	FY 2013	FY 2014	FY 2015	2015.4	2016.1
% change from prior year in value of index						
DC	8.2	12.8	7.5	9.0	3.4	2.8
DC metro area	3.4	8.7	6.0	3.7	2.2	0.8
US	0.8	6.9	6.5	6.0	5.6	5.6

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:
2014.1 to 2016.1
(% 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:
2006.1 to 2016.1
(index number: 1991.1 = 100; 12-mo. avg.)



FHFA expanded-data housing price index for DC, the Washington Metropolitan Area, and the US:
2013.1 to 2016.1
(% change from prior yr. in the 12-mo. moving avg.)

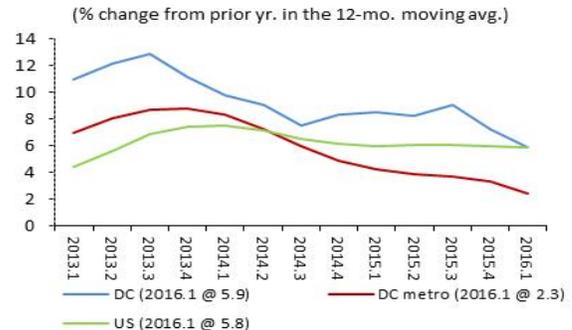


Table 11. D.C. Single family and condominium home sales at prices of \$1 million or more: July 2016

Category	FY 2013	FY 2014	FY 2015	12-mo moving total	3-mo moving total	This month
Single family homes	689	734	765	881	330	90
1 year change	231	45	31	129	51	-13
% change	50.4	6.5	4.2	17.2	18.3	-12.6
percent of all single family sales	17.3	18.2	18.7	20.8	25.2	22.8
Condominiums	112	128	160	159	61	15
1 year change	40	16	32	-2	13	6
% change	55.6	14.3	25.0	-1.2	27.1	66.7
percent of all condominium sales	3.2	3.6	4.2	4.0	5.0	4.1

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

Table 12. 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 13. 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.11 For definition of planned and proposed.

Population and 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.

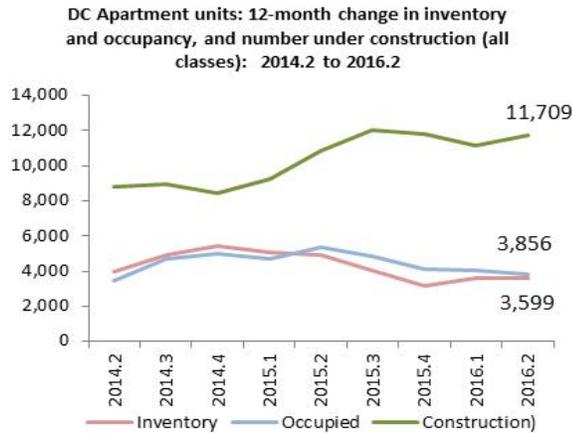


Table 17. Market rate apartment units in DC: 2010 to 2015 (2016.2)

CY	Inventory				Occupied units			Effective monthly rent		Under Construction	
	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 15. DC Population and Households: 2005 to 2015

Calendar year	Population			Households (estimated)			
	Number	Change from prior yr. number	%	Number	Change from prior yr. number	% pop/hh ratio	
2005	567,136	-618	-0.1	253,232	763	0.3	2.24
2006	570,681	3,545	0.6	254,435	1,204	0.5	2.24
2007	574,404	3,723	0.7	255,715	1,279	0.5	2.25
2008	580,236	5,832	1.0	257,928	2,213	0.9	2.25
2009	592,228	11,992	2.1	262,868	4,941	1.9	2.25
2010	605,126	12,898	2.2	268,196	5,327	2.0	2.26
2011	620,472	15,346	2.5	274,519	6,324	2.4	2.26
2012	635,342	14,870	2.4	280,611	6,092	2.2	2.26
2013	649,540	14,198	2.2	286,385	5,774	2.1	2.27
2014	659,836	10,296	1.6	290,422	4,037	1.4	2.27
2015	672,228	12,392	1.9	295,362	4,940	1.7	2.28
Change from 10 to 15	67,102	11.1		27,166	10.1	2.47	

Source: U.S. Census Bureau. Estimate is as of July 1 of the year shown. Households estimated by ORA based on DC Office of Planning data.

Apartments and housing permits

A somewhat slower pace of housing permits still tops 4,000 for the past year

• For the the 12-month period ending July, 4,268 housing permits were issued, down 7.7% from a year ago; the 3-month total was 22.7% lower than last year.

• 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.

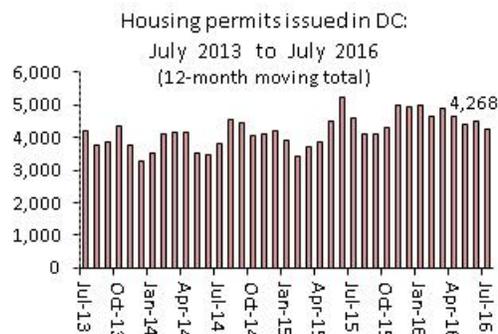


Table 16. Delta Associates outlook for Class A apartment units: June 2016

item	projects	units	Avg. units per project
Under construction/and or marketing	50	9,341	217*
Planned with probable sales within 36 months	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 represents 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. 11.

Table 14. Housing unit building permits issued in DC: July 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	4,268	1,357	67
change from 1 yr ago	-236	612	-336	-355	-398	-250
% change from 1 year	-5.8	15.9	-7.5	-7.7	-22.7	-78.9
Multi-family projects with 5 or more units						
number	36	32	37	35	9	2
average size	107	140	112	122	151	24

Source: Census Bureau (permits issued during period).

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

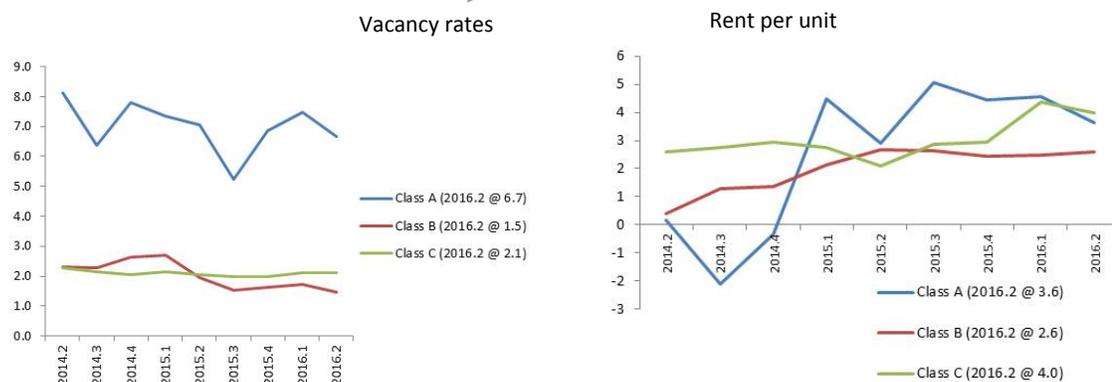


Table 18. Market rate apartment units in DC, Classes A, B, and C: 2016.2

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	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.

Commercial office space

Last quarter, occupied commercial office space increased, the vacancy rate decreased slightly, and new construction 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):

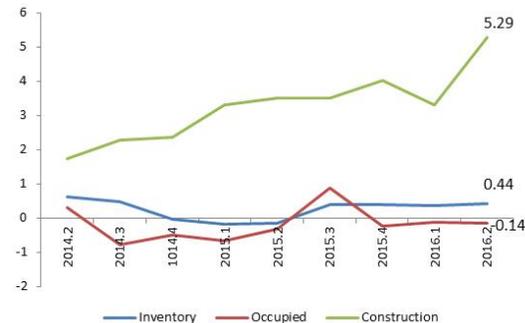


Table 19. DC commercial office space: 2010 to 2016.2

CY (year end)	Buildings	Inventory		Occupied space			Vacancy %		Base rent (direct)		Under constr. buildings	
		Level (msf)	1 yr ch (msf)	Level (msf)	1 yr ch (msf)	% ch	Direct	Total	\$ per sq ft.	1 yr % ch	buildings	msf
2010	2,364	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

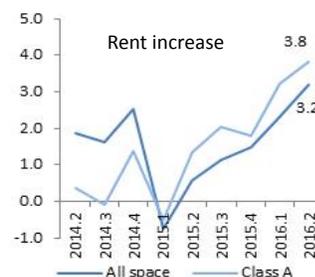


Table 20. DC Class A, B, and C commercial office space: 2016.2

CY (year end)	Buildings	Inventory		Occupied space			Vacancy %		Base rent (direct)		Under constr. buildings	
		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	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.

Office outlook and value of all property transfers

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 21. 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 22. 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.

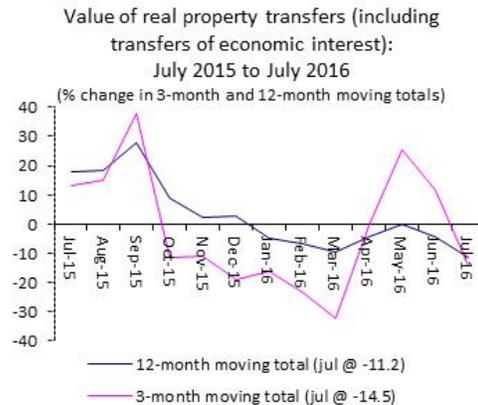
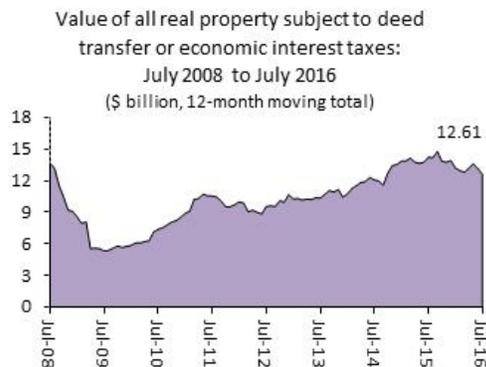


Table 23. Market Value of Real Property transfers subject to the Deed Transfer or Economic Interest tax: July 2016

	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	12,612.2	3,367.7	1,118.2
change from one year ago (\$M)	-526.2	1,530.6	505.8	3,196.5	-1,593.8	-569.6	-522.5
% change from 1 year ago	-5.2	16.1	4.6	27.6	-11.2	-14.5	-31.8

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

The rate of increase in hotel room revenue has slowed to 3.2%

- In July the 3-month moving total for hotel room-days sold was 1.3% above a year earlier. The average room rate was 1.9% higher, and revenue was up 3.2%. For the past 12 months, hotel revenue was up 1.8%.
- Employment in food services was 1.4% more in July than a year earlier as measured by the 3-month moving average. Hotel employment was up 2.2%.
- May airline traffic into the DC area was up 3.3% compared to a year earlier as measured by the 3-month moving total. Reagan National was up 4.0%. For the past 12-months, total traffic into the DC area was 6.0% higher.

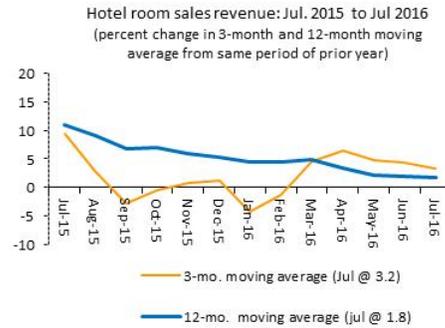


Table 24. Hospitality Industry: July 2016

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)	jul	7.680	7.869	8.196	8.273	2.333	0.776
	1 yr ch		0.062	0.189	0.327	0.050	0.030	0.003
	1 yr % ch		0.8	2.5	4.2	0.6	1.3	0.4
Average room rate	\$	jul	207.31	209.87	215.34	219.06	228.45	190.60
	1 yr ch		3.74	2.56	5.46	2.64	4.30	-1.01
	1 yr % ch		1.8	1.2	2.6	1.2	1.9	-0.5
Occupancy rate	%	jul	75.8	76.6	77.5	77.8	85.8	84.3
(average)	1 yr ch		0.5	0.8	0.9	0.1	-0.2	-1.3
	1 yr % ch		0.6	1.0	1.2	0.1	-0.2	-1.5
Room revenue	(\$M)	jul	1,592.1	1,651.4	1,764.9	1,812.3	532.9	147.8
	1 yr ch		41.4	59.4	113.5	32.7	16.7	-0.2
	1 yr % ch		2.7	3.7	6.9	1.8	3.2	-0.2
Airline passengers								
DCA	1 yr % ch	may	5.5	0.0	10.3	8.8	4.0	2.6
IAD	1 yr % ch	may	-4.0	-1.9	0.3	0.7	-1.0	-1.2
BWI	1 yr % ch	may	-1.5	-0.5	4.1	8.2	6.4	6.6
Total	1 yr % ch	may	-0.3	-0.8	4.8	6.0	3.3	2.8
Employment								
Accommodations	level ('000)	jul	15.2	15.2	15.1	15.3	15.6	15.4
	1 yr ch		-0.2	0.0	-0.1	0.2	0.3	0.4
	1 yr % ch		-1.2	-0.2	-0.3	1.2	2.2	2.7
Food and bev	level ('000)	jul	45.1	47.1	49.7	51.2	52.0	51.3
	1 yr ch		2.5	2.0	2.6	2.0	0.7	0.5
	1 yr % ch		5.7	4.3	5.5	4.0	1.4	1.0

* 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 real GDP—1.1%—was a little faster than in the first quarter

- US real GDP growth in the June quarter was estimated at 1.1%; nominal growth was 3.4% (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 2.4% rate for the entire US economy.
- US employment (seas. adj.) increased by 255,000 in July from the month before.
- The US unemployment rate (seas. adj.) stayed at 4.9% in July.
- In July the average S&P 500 index rose 3.0% from June; it was 2.6% above a year earlier, the first positive 1 yr. gain in 8 months.

Quarterly change in US Real and Nominal GDP: 2014.2 to 2016.2

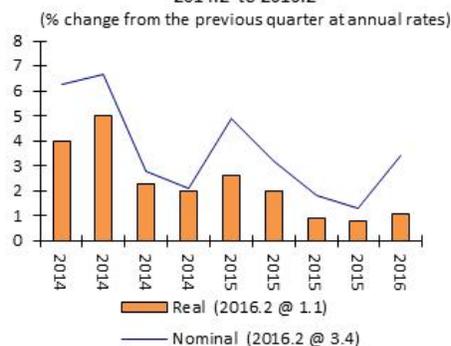


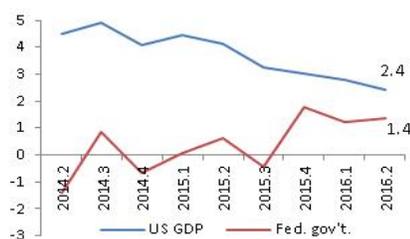
Table 27. Federal government sector, US GDP accounts: 2016.2 (percent change from same period of prior year)

Indicator	FY 2013	FY 2014	FY 2015	12-mo avg	2016.2
Non-defense					
Compensation of employees	-0.4	1.7	4.1	4.6	3.9
Purchases of goods and services	-4.9	-1.7	8.0	9.8	8.1
Gross investment	-3.7	-0.4	3.0	2.6	0.9
Defense					
Compensation of employees	-3.5	-0.6	-0.8	-0.3	1.5
Purchases of goods and services	-9.0	-7.2	-5.2	-3.6	-3.2
Gross investment	-8.2	-4.2	-4.5	-2.2	2.1
All federal consumption and investment	-4.1	-1.8	-0.1	0.8	1.4

Source: BEA (August 26, 2016). Nominal values.

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

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



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

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

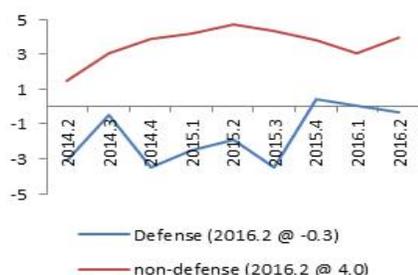


Table 26. Qtr. to Qtr. ch. in US GDP: 2015.2 to 2016.2 (% ch. from previous quarter at seasonally adj. annual rates)

Indicator	2015.2	2015.3	2015.4	2016.1	2016.2
US GDP real	2.6	2.0	0.9	0.8	1.1
US GDP nominal	4.9	3.2	1.8	1.3	3.4
Wages and salaries	6.1	4.4	6.6	-0.7	4.6
Personal income	5.7	4.0	3.4	1.3	4.1

Note: GDP=Gross Domestic Product Source: BEA, updated August 26, 2016.

Table 25. 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	1.2
US GDP nominal	3.0	4.3	4.0	2.9	2.4
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	-6.6	-1.9
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 (August 26, 2016), BLS, Yahoo.

*Before tax, w/o IVV and CCAAdj.

Table 28. Monthly selected US Indicators: April 2016 to July 2016

Indicator	April	May	June	July
S and P stock index (level)	2076	2066	2086	2149
% change from prior month	2.6	-0.5	1.0	3.0
% change from 1 year ago	-0.9	-2.2	-0.7	2.6
10 yr. Treasury Interest rate (level)	1.80	1.80	1.64	1.50
CPI % ch from prior month (seasonally adjusted)	0.41	0.22	0.22	-0.04
CPI % ch from prior year (seasonally adjusted)	1.14	1.07	1.05	0.88
Jobs (seasonally adjusted level, in millions)	143.88	143.90	144.19	144.45
change from prior month (thousands)	144	24	292	255
% change from prior month	0.10	0.02	0.20	0.18
Resident employment (season. adj. level, in mil.)	151.00	151.03	151.097	151.517
change from prior month (thousands)	-316	26	67	420
% change from prior month	-0.21	0.02	0.04	0.28
Unemployment rate (seasonally adj.)	5.0	4.7	4.9	4.9

Source: BLS and Yahoo! Finance.

DC tax collections

**Total DC tax collections (before earmarking):
July 2011 to July 2016**
(12-month moving total in July 2016 is \$7,020 million)

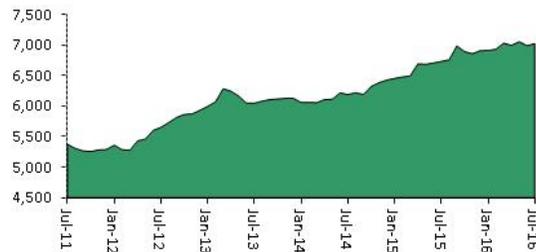


Table 29. Tax Collections (before earmarking): July 2016 (Preliminary)

Tax	Revenue (from CAFR)				Tax collections			
	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	7,019.7	5,129.0	1,262.8	400.8
1 year change	528.0	247.2	189.5	656.9	292.4	38.7	29.1	32.9
% change	9.9	4.2	3.1	10.0	4.3	0.8	2.4	8.9
Real property	1,822.0	1,914.8	2,015.6	2,194.5	2,303.9	1,203.8	26.5	16.1
1 year change	106.9	92.8	100.7	178.9	220.0	-10.7	1.6	-0.7
% change	6.2	5.1	5.3	8.9	10.6	-0.9	6.4	na
General sales	1,111.0	1,137.9	1,172.1	1,315.3	1,317.6	1,112.2	363.4	124.2
1 year change	67.6	26.8	34.2	143.2	78.3	63.2	18.1	6.2
% change	9.5	2.4	3.0	12.2	6.3	6.0	5.2	5.2
Individual income	1,490.7	1,640.9	1,679.2	1,868.0	1,868.2	1,534.7	437.1	129.3
1 year change	194.1	150.2	38.3	188.9	18.6	-5.5	12.2	10.6
% change	15.0	10.1	2.3	11.2	1.0	-0.4	2.9	8.9
withholding	1,321.6	1,391.2	1,472.9	1,553.2	1,616.6	1,358.4	384.0	130.3
1 year change	129.5	69.6	81.7	80.3	45.9	36.8	22.2	8.9
% change	10.9	5.3	5.9	5.4	2.9	2.8	6.1	7.3
non-withholding	169.1	249.6	206.2	314.8	251.6	176.3	53.1	-1.0
1 year change	64.6	80.6	-43.4	108.6	-27.3	-42.3	-10.0	1.7
% change	61.9	47.7	-17.4	52.6	-9.8	-19.3	-15.9	na
Corporate income	302.9	299.0	280.2	308.0	345.7	284.3	64.8	7.3
1 year change	86.6	-3.9	-18.8	27.8	28.6	28.7	-6.8	9.6
% change	40.1	-1.3	-6.3	9.9	9.0	11.2	-9.6	na
Unincorporated Bus.	163.0	154.3	135.4	139.8	156.0	131.4	30.6	1.2
1 year change	19.6	-8.7	-18.9	4.4	3.8	7.4	5.0	5.0
% change	13.6	-5.3	-12.3	3.2	2.5	6.0	19.5	na
Deed taxes*	312.5	372.8	391.2	480.6	433.8	359.3	123.2	41.9
1 year change	1.3	60.3	18.4	89.4	-38.6	-46.8	-1.9	-10.9
% change	0.4	19.3	4.9	22.8	-8.2	-11.5	-1.5	-20.6
Other taxes	651.1	580.8	616.4	610.6	594.5	503.4	217.2	80.7
1 year change	23.3	-70.4	35.6	-5.8	-18.3	2.3	1.0	13.1
% change	3.7	-10.8	6.1	-0.9	-3.0	0.5	0.5	19.4

*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

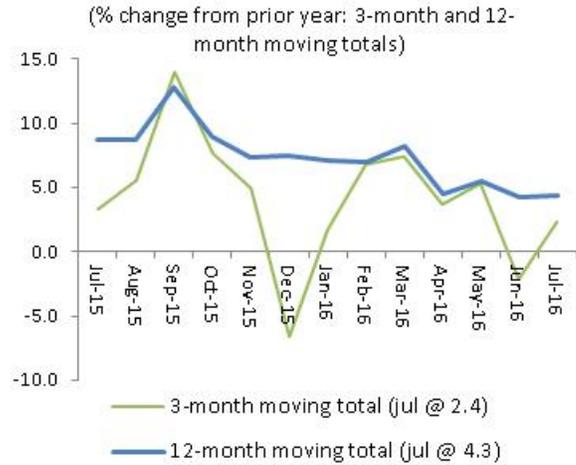
intended to make comparisons with prior year periods more meaningful. The data may therefore vary from other OCFO reports.

Source: OCFO/ORR na=not applicable due to negative numbers

Withholding for the individual income tax has picked up on the last 3 months

- For the 12 month period ending July total tax collections (before earmarking) were \$292.4 million (4.3%) more than in the prior year. For the last 3 months they were 2.4% above last year.
- Individual income tax collections were 1.0% above last year for the 12-months ending July and withholding was 2.9% higher. For the past 3 months, withholding was up 6.1% and all collections were up 2.9%.
- General sales tax collections were 6.3% above last year for the 12-months ending July. For the past 3 months, they were 5.2% above last year.
- Deed tax collections for the 12-months ending July were down 8.2% from last year; for the past 3 months they were down 1.5%.
- Corporate income taxes in July were up 9.0% and unincorporated business income taxes rose 2.5% from last year (12-mo. total).

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



**General Sales tax collections (before earmarks):
July 2015 to July 2016**
(% change from prior year: 3-months and 12-month moving totals)



**Withholding for the Individual Income tax:
July 2015 to July 2016**
(% change from prior year: 3-month and 12-month moving totals)



**General Sales tax and Withholding for the Individual Income tax:
July 2015 to July 2016**
(% change from prior year in the 3-month moving total)



**Deed tax collections (before earmarks):
July 2015 to July 2016**
(% change from prior year: 3-month and 12-month moving totals)



US economic forecasts

The August Blue Chip forecast for the US economy is a little weaker for FY 2016 and FY 2017

- The August Blue Chip Indicators reduced its forecast for real GDP growth in FY 2016 to 1.6% and its FY 2017 estimate to 2.1%. 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 August forecast for inflation (CPI) is slightly higher: 1.1% for FY 2016 and 2.2% in FY 2017.
- S&P 500 August baseline forecasts are higher for the end 2016. Global Insight's forecast: 5.7% annual gain in the 4th quarter of 2016, up from 5.2% in July. Moody's Analytics expects a 6.1% 4th quarter increase in 2016, up from 3.2% in July.

Table 30. Forecasts for US nominal and real GDP:

Fiscal year and date of forecast	real			nominal		
	Blue Chip	Moody's	IHS	Blue Chip	Moody's	IHS
		Analytics	Global Insight		Analytics	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						
May	1.8	1.8	1.7	3.0	3.1	3.1
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
FY 2017						
May	2.2	2.8	2.5	4.1	4.7	5.7
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

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



Table 31. 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 32. Blue Chip forecasts for CPI and 10 year Treasury interest rate: FY 2015 to FY 2017

Forecast date	CPI			10 yr Treasury rate		
	2015	2016	2017	2015	2016	2017
	May	0.3	0.9	2.1	2.2	2.0
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

Source: Blue Chip Indicators

Table 33. IHS Global Insight forecast 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
	baseline				pessimistic	
May	2.0	3.9	5.7	2.0	-3.3	-21.0
June	2.0	3.9	5.7	2.0	-3.3	-17.5
July	2.0	5.2	5.7	2.0	-2.0	-17.5
August	2.0	5.7	5.4	2.0	-0.5	-15.5

Source: IHS Global Insight

Table 34. Moody's Analytics forecast 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
	baseline				pessimistic	
May	2.0	-3.2	0.3	2.0	-6.6	0.3
June	2.0	1.0	0.5	2.0	-2.5	0.4
July	2.0	3.2	0.6	2.0	-0.4	0.6
August	2.0	6.1	1.5	2.0	2.2	-2.2

Source: Moody's Analytics

August baseline forecasts for DC: slower job and income growth for FY 2016 and FY 2017

●**Employment:** Employment forecasts for FY 2016 are for gains of 2,000 to 3,000 less than the FY 2015 actual of 12,500, with even slower gains in FY 2017. The gains in DC resident employment are expected to be about 2,000 less in FY 2016, and an additional 2,000 to 4,000 less in FY 2017. DC's unemployment rate is not expected to fall below 6.0% through FY 2017.

●**Income.** Although similar in their job outlooks, Global Insight and Moody's Analytics differ in their outlook for income. Global Insight estimates DC Personal Income growth will be higher in FY 2016 and FY 2017 than it was in FY 2015, whereas Moody's expects growth to be slower than it was in FY 2015. Global Insight's Personal Income growth for DC in FY 2017 is above the national average, whereas Moody's Analytics shows it below the US average.

Table 35. Jobs in DC: forecasts for FY 2015 to FY 2018

(amount of change from prior year, in thousands of jobs)

Date of estimate	Global Insight: baseline				Global Insight: pessimistic				Moody's Analytics: baseline				Moody's Analytics: pessimistic			
	2015	2016	2017	2018	2015	2016	2017	2018	2015	2016	2017	2018	2015	2016	2017	2018
May	12.5	10.8	7.5	3.4	12.5	10.4	3.4	-4.0	12.5	9.8	7.5	7.0	12.5	9.4	1.4	5.1
June	12.5	10.7	7.5	3.1	12.5	10.5	4.2	-3.2	12.5	9.3	6.7	6.3	12.5	8.9	0.7	4.4
July	12.5	12.1	8.3	2.7	12.5	12.0	5.2	-3.7	12.5	13.9	11.3	6.8	12.5	13.5	5.2	4.8
August	12.5	10.5	6.4	3.2	12.5	10.4	4.1	-3.0	12.5	10.7	8.4	6.1	12.5	10.7	3.7	1.6

Source: IHS Global Insight and Moody's Analytics (Economy.com).

Table 36. DC Resident employment: forecasts for FY 2015 to FY 2018

(amount of change from prior year, in thousands of jobs)

Date of estimate	Global Insight: baseline				Global Insight: pessimistic				Moody's Analytics: baseline				Moody's Analytics: pessimistic			
	2015	2016	2017	2018	2015	2016	2017	2018	2015	2016	2017	2018	2015	2016	2017	2018
May	13.3	9.1	7.3	6.1	13.3	8.9	5.0	1.9	13.3	9.0	6.4	4.7	13.3	8.8	3.7	5.4
June	13.3	8.1	6.5	6.5	13.3	7.9	4.8	2.6	13.3	8.5	6.1	4.8	13.3	8.3	3.4	5.4
July	13.3	10.9	8.3	6.0	13.3	10.8	6.7	2.1	13.3	11.3	8.5	4.5	13.3	11.0	5.8	5.1
August	13.3	11.1	9.0	6.7	13.3	11.0	7.7	3.0	13.3	11.0	8.2	4.6	13.3	11.0	6.0	3.8

Source: IHS Global Insight and Moody's Analytics (Economy.com).

Table 37. DC Personal Income: forecasts for FY 2015 to FY 2018

(percent change from prior year)

Date of estimate	Global Insight: baseline				Global Insight: pessimistic				Moody's Analytics: baseline				Moody's Analytics: pessimistic			
	2015	2016	2017	2018	2015	2016	2017	2018	2015	2016	2017	2018	2015	2016	2017	2018
May	4.1	5.0	4.9	5.4	4.1	5.1	5.3	4.3	4.1	3.7	1.5	3.1	4.1	3.6	-0.4	3.0
Jun	4.1	5.3	5.4	5.7	4.1	5.4	6.0	4.8	4.1	3.6	1.3	2.9	4.1	3.4	-0.6	2.8
Jul	4.1	4.9	5.2	5.1	4.1	4.9	5.9	4.2	4.1	4.3	1.4	3.2	4.1	4.1	-0.5	3.0
Aug	4.1	4.3	4.9	5.5	4.1	4.4	5.5	5.0	4.1	3.8	0.9	3.2	4.1	3.8	-0.7	2.4

Source: IHS Global Insight and Moody's Analytics (Economy.com).

Table 38. August 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
Wage and salary jobs								
DC	1.7	1.4	0.8	0.4	1.7	1.4	1.1	0.8
Metro area					1.6	2.1	1.4	1.6
US	2.1	1.8	1.4	0.8	2.1	1.9	1.6	1.4
Personal Income								
DC	4.1	4.3	4.9	5.5	4.1	3.8	0.9	3.2
Metro area					4.3	4.5	5.6	6.9
US	4.9	3.4	4.3	5.0	4.9	3.3	4.4	6.6

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

Table 39. August DC forecasts for wages and unemployment: FY 2015 to FY 2018

	Global Insight				Moody's Analytics			
	2015	2016	2017	2018	2015	2016	2017	2018
Wages and salaries earned in DC								
	4.9	4.3	4.2	4.3	4.9	4.1	3.2	4.5
DC resident wages and salaries								
	4.4	4.6	5.3	6.0	4.4	3.9	-1.4	0.7
DC Unemployment rate (level)								
	7.2	6.3	6.0	6.0	7.2	6.4	6.4	6.6

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

DC revenue estimate

The February revenue estimate: \$31 million less in FY 2016 than in FY 2015, followed by a \$244 million increase in FY 2017

● Anticipated tax revenue decline (before earmarks) is 0.4% in FY 2016, followed by a 3.5% increase in FY 2017. The estimates reflect growth in the DC economy, but the decline in FY 2016 results from a one-time revenue gain in FY 2015 from settlement payments for past due sales taxes from on-line hotel bookings, extraordinary gains from certain taxes, and the effects of scheduled tax cuts enacted in September 2015.

● Real property tax growth of \$163 million in FY 2016 is 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. Sales (due to the hotel booking settlement), deed taxes, and business income are projected to fall in FY 2016.

● As a share of DC Personal Income, tax revenue in FY 2016 is expected to fall to 13.9% from 14.6% in FY 2015.

Table 40. DC Tax Revenue (before earmarks) for FY 2014 through FY 2017: February 2016 revenue estimate

Tax	FY level (\$ million)				Change from prior year (\$ M)				% change from prior year			
	2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017
Real property	2,015.6	2,194.5	2,357.2	2,456.7	100.7	178.9	162.7	99.5	5.3	8.9	7.4	4.2
Deed taxes	391.2	480.6	361.2	367.7	24.0	89.4	-119.4	6.5	6.5	22.8	-24.8	1.8
General sales	1,172.1	1,315.3	1,290.8	1,344.4	34.2	143.2	-24.4	53.5	3.0	12.2	-1.9	4.1
Individual income	1,679.2	1,868.0	1,857.0	1,930.4	38.3	188.9	-11.1	73.4	2.3	11.2	-0.6	4.0
Withholding	1,472.9	1,553.2	1,615.0	1,678.9	81.7	80.3	61.7	64.0	5.9	5.5	4.0	4.0
non-withholding	206.2	314.8	242.0	251.5	-43.4	108.6	-72.8	9.5	-17.4	52.7	-23.1	3.9
Business income	415.6	447.8	420.9	427.7	-37.7	32.2	-26.9	6.8	-8.3	7.8	-6.0	1.6
Other	616.4	610.6	599.0	603.5	30.1	-5.8	-11.7	4.6	5.1	-0.9	-1.9	0.8
Total	6,290.0	6,916.8	6,886.1	7,130.5	189.5	626.9	-30.8	244.4	3.1	10.0	-0.4	3.5

Source: ORA. February 26, 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 2014 and FY 2015 are from the CAFR.

Table 41. DC labor market assumptions: FY 2014 to FY 2017

item	2014	2015	2016	2017
Wage and salary employment	751,483	762,800	772,403	778,754
1 year change	6,000	11,317	9,603	6,351
% change	0.8	1.5	1.3	0.8
DC resident employment	344,826	356,540	365,433	370,564
1 year change	3,434	11,714	8,893	5,130
% change	1.0	3.4	2.5	1.4
Unemployment rate	7.9	7.4	6.5	6.4

Source: ORA February 2016 revenue estimate.

Table 42. DC Income and stock market assumptions: FY 2014 to FY 2017 (% change from prior year)

item	2014	2015	2016	2017
Wages and salaries earned in DC	3.1	5.1	4.2	3.9
Wages and salaries earned by DC residents	3.0	4.6	4.5	4.0
DC Personal income	2.7	4.2	4.0	4.2
S and P 500 stock index	13.6	2.0	0.5	3.5

Source: ORA February 2016 revenue estimate. Stock index, on a calendar year basis, represents the % change from the December quarter of the prior year.

Table 43. 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	6,886	7,130	7,381
Change from prior year	-273	-47	320	528	247	189	627	-31	244	251
Percent change from prior year										
Tax revenue	-5.1	-0.9	6.4	9.9	4.2	3.1	10.0	-0.4	3.5	3.5
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	13.9	13.8	13.7

Source: ORA. February 26, 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.

Global Insight and Moody's Analytics. (These forecasts also assume that professional and business services in DC will grow at a percentage rate about 75% to 80% as fast as national growth in these services; for the last 12-months, as noted above, DC growth was only half the US rate.)

The recent increase in federal employment is a welcome development for DC's economy, but it is questionable whether such gains can be sustained at a time when the federal government is concerned with reducing the federal deficit. Moody's Analytics expects federal employment in DC to grow by only 300 jobs over the next 6 years, and Global Insight has no growth over the next 30 years. Things might, of course, work out differently, but it should be noted that sequestration constraints on federal spending will be re-instituted in FY 2018 unless Congress takes other action.

Taken together, professional and business services and federal civilian employment account for 47% of all DC wage and salary jobs in DC. If growth in professional and business services falters and federal employment cannot be counted on to increase, what about all of the other sectors of the economy?

A look back over 5 years suggests the potential for other sectors of the economy to generate jobs in DC. From July 2011 to July 2016 gains in professional services about cancelled cuts in federal employment, so that the two together accounted for just 667 (1.4%) of the net increase in jobs. However, in these 5 years more than 48,000 jobs, an average of almost 10,000 per year, were added in other sectors, particularly in education, health, retail, food service, and local government.

Things have been different this past year, and the extent to which these other sectors can lead job creation has become more uncertain. From July 2015 to July 2016 professional and business services and the federal government accounted for 58% of the 9,000 net job increase in DC. Growth in the rest of DC's economy (3,767) fell to half of that of the prior year. Indeed, in percentage terms, the net gain in all of these other sector in July 2016 (0.9%) was less than in professional and business services (1.3%).

Does the slowing growth in business and professional services jobs signal a change in DC's economy? It is too early to tell, but the apparent slowing in this and other parts of DC's private sector at a time when the US economy is still expanding and when fiscal policies are likely to restrain federal spending is cause for concern.

—*Stephen Swaim, DC Office of Revenue Analysis*

Appendix

Most of the tables and charts in this appendix are from the wage and salary employment estimates for DC and the US issued monthly by the U.S. Bureau of Labor Statistics. The data is from the July 2016 estimates, with all calculations made from 3-month moving averages. The data is subject to revision.

Professional and business services is a category of employment used by BLS that includes a wide range of services: legal, accounting, architectural and engineering, computer systems design and related activities, management and technical consulting, scientific research and development, advertising, marketing, management of companies and enterprises, administrative and support services, travel services, investigative and security services, and services to buildings. In table 4 of this report, professional and business services are divided into four groups: legal, other technical services, temporary employment, and other business services.

The last table summarizes forecasts of the DC economy by Global Insight and Moody's Analytics. The forecasts made in August 2016 are for the 4 years from 2016.2 to 2020.2 and highlight the key role of professional and business sectors in those forecasts.

Wage and salary employment in DC by selected sectors: July 2011 to July 2016

	Level		Five year change		
	July 2011	July 2016	Amount	%	% of total change
	Professional and bus. services	151,667	164,867	13,200	8.7
Federal government	214,100	201,567	-12,533	-5.9	-25.8
subtotal	365,767	366,433	667	0.2	1.4
All other sectors	364,533	412,533	48,000	13.2	98.6
Total	730,300	778,967	48,667	6.7	100.0

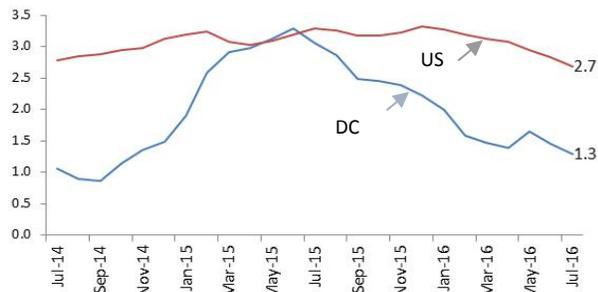
Source: BLS, calculated from 3-month moving averages

Wage and salary employment in DC by selected sectors: July 2015 to July 2016

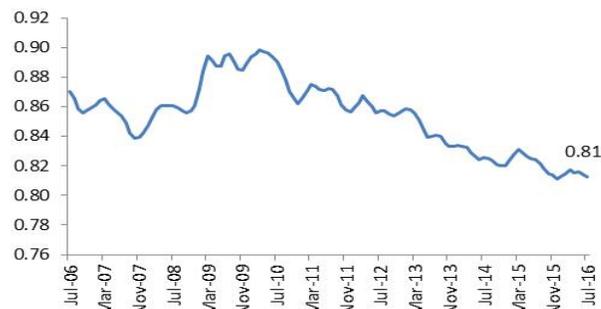
	Level		One year change		
	July 2015	July 2016	Amount	%	% of total change
	Professional and bus. services	162,767	164,867	2,100	1.3
Federal government	198,433	201,567	3,133	1.6	34.8
subtotal	361,200	366,433	5,233	1.4	58.1
All other sectors	408,767	412,533	3,767	0.9	41.9
Total	769,967	778,967	9,000	1.2	100.0

Source: BLS, calculated from 3-month moving averages

% change from the prior year in professional and business services in DC and the US: July 2014 to July 2016 (calculated from 3-month moving averages)



DC professional and business services employment as percent of US total: July 2006 to July 2016

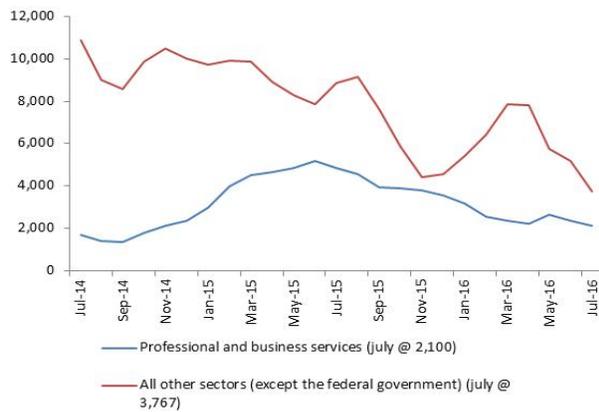


Alternate forecasts of Business and Professional services and all employment in DC and the US: 2016.2 to 2020.2

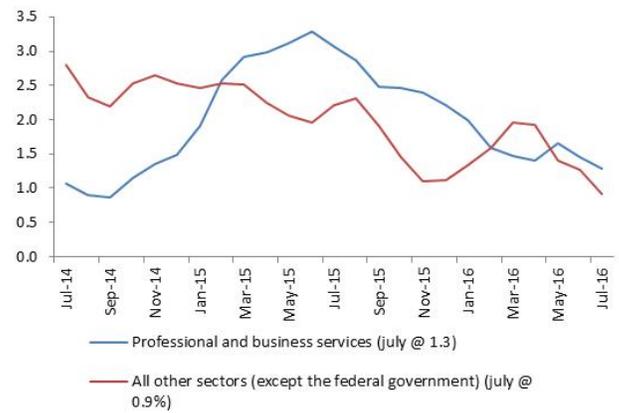
	DC				US			
	Level ('000)		Change		Level ('000)		Change	
	2016.2	2020.2	number	%	2016.2	2020.2	number	%
Global Insight								
Professional and bus. services	163.9	177.1	13.2	8.1	20,141	22,422	2,281	11.3
All employment	778.3	794.0	15.7	2.0	143,990	149,773	5,783	4.0
% of total	21.1	22.3	84.1		14.0	15.0	39.4	
Moody's Analytics								
Professional and bus. services	163.9	175	11.1	6.8	20,141	21,934	1,793	8.9
All employment	778.3	800.5	22.2	2.9	143,990	151,333	7,343	5.1
% of total	21.1	21.9	50.0		14.0	14.5	24.4	

Source: Global Insight and Moody's Analytics (August 2016 forecasts)

Change from the prior year in employment in professional and business services and in all other sectors (except the federal government): July 2014 to July 2016



% change from the prior year in employment in professional and business services and in all other sectors (except the federal government): July 2014 to July 2016



Slowing employment in parts of DC's private sector: July 2015 to July 2016

	Change from prior yr.		% ch from prior yr.	
	July 2015	July 2016	July 2015	July 2016
Selected sectors				
Business and professional services	4,833	2,100	3.1	1.3
Health	900	33	1.4	0.0
Food services	2,633	700	5.4	1.4
Organizations	533	-433	0.8	-0.7
Total private sector	11,533	5,033	2.2	1.0

Source: BLS, calculated from 3-month moving averages.

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, June 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 44. Information sources			
Indicator	Source	Period covered in this report	Next release
D.C. Jobs and Labor Force information	BLS	July	September 20
D.C. Personal Income	BEA	2016.1	September 28
D.C. Tax Collections	OTR/ORA	July	c. September 15
D.C. Housing Sales	MRIS*	July	c. September 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	July	c. September 20
Consumer Price Index	BLS	July	September 16
U.S. Jobs and Labor Force	BLS	July	September 2
U.S. GDP and Personal Income	BEA	2016.2	September 29
S and P 500 Stock Index	Financial press	July	September 1
Interest rate on 10-Year Treasury Securities	Financial press	June	September 1
IHS Global Insight D.C. forecast	Global Insight	August	c. September 15
Moody's Analytics D.C. forecast	Moody's Analytics	August	c. September 25
Blue Chip Economic Indicators for the U.S.	Aspen Publishers	August	c. September 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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