

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

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

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#### Highlights:

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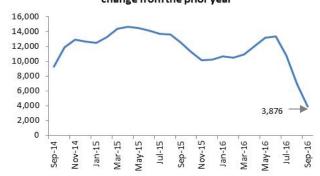
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# Bureau of Labor Statistics data show a slowdown in DC resident employment growth

# This picture seems somewhat at odds with population trends, and some revision may be likely

According to the US Bureau of Labor Statistics, the year-over-year growth of DC resident employment was greater than 10,000 for most of the past two years. At the end of the Spring, however, there was a sharp downturn in growth, and by September 2016 the number of employed DC residents was reported to be just 3,876 more than in September 2015 (measured by the 3-month moving average).

#### DC resident employment: Sept. 2014 to Sept 2016: change from the prior year



Source: US Bureau of Labor Statistics, calculated from the 3-month moving average.

What explains this change? Several possibilities are: more unemployment, lack of job opportunities, and changes in the labor force. The BLS information points to a declining labor force as the explanation. It should be noted, however, that labor market information has often been revised when more information becomes available, particularly regarding population.

**Unemployment.** Rising unemployment cannot explain slower DC resident job growth—unemployment fell over the past year by 1,929. The seasonally adjusted unemployment rate fell from 6.7% in September 2015 to 6.1% in September 2016, and the reduction in unemployment ac-

counted for half of the 3,876 increase in last years' resident employment.

**Job opportunities.** Lack of job opportunities cannot explain slower DC resident job growth because there was no comparable slowdown in the growth of jobs located in DC. From 2014.3 to 2015.3 resident employment exceeded (Continued on p. 21)

#### Change in DC labor market: 2014.3 to 2016.3

	2014.3 to	2015.3 to
	2015.3	2016.3
Resident employment	12,540	3,876
Unemployment	-3,545	-1,929
Labor force	8,995	1,946
Jobs located in DC	12,300	11,967
Source: BLS		

#### Wage and salary employment

#### DC job growth approaches the US average

- •September wage and salary employment in DC was up by 11,967 (1.6%) from a year earlier as measured by the 3-month moving average.
- Federal government employment in DC for September was up by 3,8/00 (1.9%). The private sector gained 7,400 (1.4%).
- •Total year-over-year DC metropolitan area employment increased by 75,433 (2.4%) in September as measured by the 3-month moving average.
- •Suburban Washington employment in September increased by 2.6% from a year earlier.
- •Seasonally adjusted DC jobs increased in September by 2,500 from the prior month and is 3,800 above the level of 5 months ago.

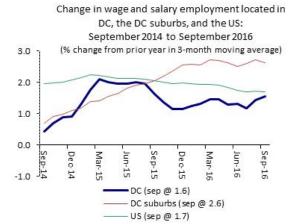


Table 1. Wage and salary employment in DC, Washington Metro area, and the US: Sept. 2016

					3-mo	
Jurisdiction	FY 2013	FY 2014	FY 2015	12-mo avg	average	This month
District of Columbia	745,375	751,842	764,250	774,742	779,067	780,400
1 year change	14,425	6,467	12,408	10,492	11,967	13,800
% change	2.0	0.9	1.7	1.4	1.6	1.8
Washington metro area	3,091,067	3,103,833	3,138,300	3,226,592	3,253,633	3,257,000
1 year change	38,017	12,767	36,000	72,692	75,433	76,100
% change	1.2	0.4	1.2	2.3	2.4	2.4
Washington suburbs (% ch)	1.0	0.3	1.6	2.6	2.6	2.6
US (% ch)	1.6	1.8	2.1	1.8	1.7	1.7

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

Federal gov. and private sector wage and salary employment in DC: Sep. 2011 to Sep. 2016 (Change from prior year in 3-month moving average)

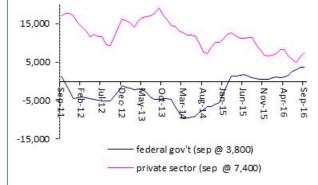


Table 2. Federal government and private sector wage and salary employment in DC: September 2016

					3-month	
Sector	FY 2013	FY 2014	FY 2015	12-mo avg	average	This month
Federal government	205,900	198,367	197,950	199,933	202,133	201,800
1 year ch.	-2,675	-7,533	-417	1,983	3,800	3,700
% change	-1.3	-3.7	-0.2	1.0	1.9	1.9
Private sector	504,275	515,808	526,775	533,825	533,300	538,100
1 year ch.	16,633	11,533	10,967	7,050	7,400	8,700
% change	3.4	2.3	2.1	1.3	1.4	1.6

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

Table 3. Seasonally adjusted DC Employment: April 2016 to September 2016

, ,						
Indicator	April	May	June	July	August	September
D.C. Wage and Salary employment	777,900	781,200	775,200	773,000	779,200	781,700
change from prior month	4,100	3,300	-6,000	-2,200	6,200	2,500
% change from prior month	0.5	0.4	-0.8	-0.3	0.8	0.3
Source: BLS seasonally adjusted. Sentember is	nreliminary					

2

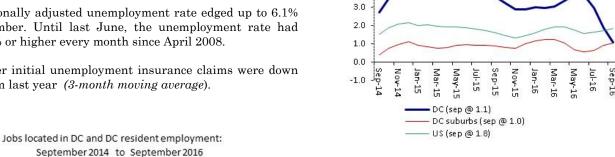
#### Resident employment and unemployment

Resident employment in DC, the DC suburbs, and the US: September 2014 to September 2016

(% change from prioryear in 3-month moving average)

#### DC resident employment growth slowing sharply

- •In September DC resident employment was up 3,876 (1.1%) from a year earlier (3-mo. moving average). The labor force grew by 1,946 (0.5%).
- •The seasonally adjusted unemployment rate edged up to 6.1% in September. Until last June, the unemployment rate had been 6.0% or higher every month since April 2008.
- •September initial unemployment insurance claims were down 1.8% from last year (3-month moving average).



5.0

4.0

September 2014 to September 2016 (Change from prior year in 3-mo. moving average)

20,000 15,000 10,000 5,000 DC res. jobs (sep @ 3,876)

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

(percent of labor force)										
	Not seaso	nally adj.	_	Seasonally adj.						
Jurisdiction	Sep. 2015	Sep. 2016	_ 9	Sep. 2015	Sep. 2016					
US	5.5	5.1		4.9	4.8					
DC	6.8	6.5		6.8	6.5					
DC metro area	4.3	3.9		na	na					
DC suburbs	4.0	3.5		na	na					

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

Table 5. Resident employment and unemployment: September 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	368,567	367,898	364,310
1 year change	11,026	16,015	3,846	13,410	9,583	3,876	2,821
% change	3.5	4.9	1.1	3.9	2.7	1.1	0.8
Labor Force	359,327	374,045	375,222	386,668	393,298	393,095	389,711
1 year change	9,639	14,718	1,177	11,447	6,629	1,946	1,890
% change	2.8	4.1	0.3	3.1	1.7	0.5	0.5
Unemployed	33,615	32,317	29,648	27,685	24,731	25,197	25,401
1 year change	-1,387	-1,298	-2,669	-1,963	-2,954	-1,929	-931
% change	-4.0	-3.9	-8.3	-6.6	-10.7	-7.1	-3.5
Unemployment rate	9.4	8.7	7.9	7.2	6.3	6.4	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: Apr. 2016 to Sep. 2016

Indicator	April	May	June	July	August	September		
DC Resident employment	371,361	373,304	374,319	373,470	371,231	368,763		
change from prior month	2,807	1,943	1,015	-849	-2,239	-2,468		
% change from prior month	0.8	0.5	0.3	-0.2	-0.6	-0.7		
DC Unemployment rate (%)	6.4	6.1	5.9	5.9	6.0	6.1		
Source: BLS seasonally adjusted. September is preliminary.								

#### Jobs by sectors of the economy

## The federal government once again topped job growth in September

- •In September the federal government's 3,800 increase in jobs over the prior year was more than in any other sector. (3-month moving average.)
- •In the private sector, legal services (1,733), retail (1,300), and education 1,067) were the other sectors that grew by more than 1,000 jobs in .September.
- •Private sector industries losing jobs included information, employment services, and construction.
- •Local government rose by by 767 (1.8%).
- •The federal government accounted for 25.9 % of all DC jobs in September. 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:
September 2014 to September 2016
(% change from prior year in 3-month moving average)

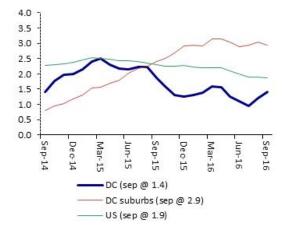


Table 7. Wage and salary employment located in DC: September 2016

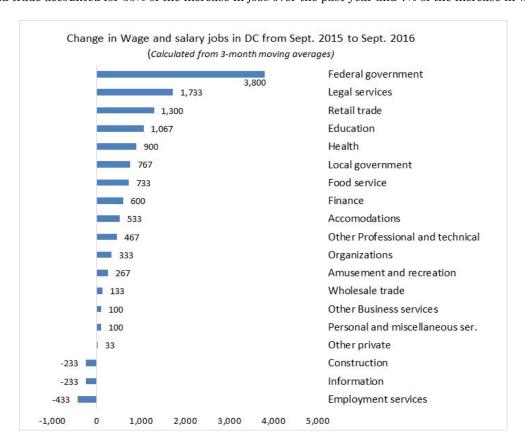
3-mor	nth moving		ange	12-mo. moving avg:	Sector % of all DC jobs,		•	Change from 5 to Sep 2016 in of sector jo	DC share
Sep 2015	Sep 2016	Amount	%	% change	Sep 2016	metro area	US	metro area	US
198,333	202,133	3,800	1.9	1.0	25.9	54.5	7.21	0.3	0.03
42,867	43,633	767	1.8	3.7	5.6	14.0	0.23	0.4	0.00
28,300	30,033	1,733	6.1	3.6	3.9		2.66		0.14
84,333	84,800	467	0.6	1.8	10.9	22.8	1.09	-0.3	-0.04
15,367	14,933	-433	-2.8	1.0	1.9	32.5	0.41	-2.2	-0.02
34,400	34,500	100	0.3	-0.5	4.4	17.6	0.44	-0.2	-0.01
17,200	16,967	-233	-1.4	-0.4	2.2	22.5	0.61	0.0	-0.01
30,367	30,967	600	2.0	0.8	4.0	19.9	0.37	0.3	0.00
63,533	63,867	333	0.5	-0.2	8.2	35.5	2.13	-0.3	-0.01
56,433	57,500	1,067	1.9	-0.3	7.4	48.6	1.74	-3.7	0.00
66,533	67,433	900	1.4	1.0	8.7	22.1	0.35	-0.1	-0.01
50,767	51,500	733	1.4	3.4	6.6	21.8	0.45	-0.4	-0.01
15,033	15,567	533	3.5	2.1	2.0	37.4	0.76	2.7	0.02
7,667	7,933	267	3.5	1.6	1.0	15.0	0.32	-0.5	0.00
22,367	23,667	1,300	5.8	7.5	3.0	8.3	0.15	0.2	0.01
4,833	4,967	133	2.8	-1.2	0.6	7.7	0.08	-0.1	0.00
14,800	14,567	-233	-1.6	0.3	1.9	9.1	0.21	-0.5	-0.01
7,833	7,933	100	1.3	-0.5	1.0		0.29		0.00
6,133	6,167	33	0.5	5.1	0.8	5.2	0.03	0.0	0.00
767,100	779,067	11,967	1.6	1.4	100.0	23.9	0.54	-0.2	0.00
241,200	245,767	4,567	1.9	1.4	31.5	35.6	1.15	0.1	0.01
525 000	533 300	7,400	1 /	1.3	68.5	20.8	0.43	0.2	0.00
	Sep 2015 198,333 42,867 28,300 84,333 15,367 34,400 17,200 30,367 63,533 56,433 66,533 7,667 22,367 4,833 14,800 7,833 6,133 767,100	Sep 2015         Sep 2016           198,333         202,133           42,867         43,633           28,300         30,033           84,333         84,800           15,367         14,933           34,400         34,500           17,200         16,967           30,367         30,967           63,533         63,867           56,433         57,500           66,533         67,433           50,767         51,500           15,033         15,567           7,667         7,933           22,367         23,667           4,833         4,967           14,800         14,567           7,833         7,933           6,133         6,167           767,100         779,067	Sep 2015         Sep 2016         Amount           198,333         202,133         3,800           42,867         43,633         767           28,300         30,033         1,733           84,333         84,800         467           15,367         14,933         -433           34,400         34,500         100           17,200         16,967         -233           30,367         30,967         600           63,533         63,867         333           56,433         57,500         1,067           66,533         67,433         900           50,767         51,500         733           15,033         15,567         533           7,667         7,933         267           22,367         23,667         1,300           4,833         4,967         133           14,800         14,567         -233           7,833         7,933         100           6,133         6,167         33           767,100         779,067         11,967	Sep 2015         Sep 2016         Amount         %           198,333         202,133         3,800         1.9           42,867         43,633         767         1.8           28,300         30,033         1,733         6.1           84,333         84,800         467         0.6           15,367         14,933         -433         -2.8           34,400         34,500         100         0.3           17,200         16,967         -233         -1.4           30,367         30,967         600         2.0           63,533         63,867         333         0.5           56,433         57,500         1,067         1.9           66,533         67,433         900         1.4           50,767         51,500         733         1.4           15,033         15,567         533         3.5           7,667         7,933         267         3.5           22,367         23,667         1,300         5.8           4,833         4,967         133         2.8           14,800         14,567         -233         -1.6           7,833         7,933         <	Sep 2015         Sep 2016         Amount Amount         % change avg: Act and avg: A	Sep 2015         Sep 2016         Amount         %         Moving avg: vchange         Sector % of all DC jobs, Sep 2016           198,333         202,133         3,800         1.9         1.0         25.9           42,867         43,633         767         1.8         3.7         5.6           28,300         30,033         1,733         6.1         3.6         3.9           84,333         84,800         467         0.6         1.8         10.9           15,367         14,933         -433         -2.8         1.0         1.9           34,400         34,500         100         0.3         -0.5         4.4           17,200         16,967         -233         -1.4         -0.4         2.2           30,367         30,967         600         2.0         0.8         4.0           63,533         63,867         333         0.5         -0.2         8.2           56,433         57,500         1,067         1.9         -0.3         7.4           66,533         67,433         900         1.4         1.0         8.7           50,767         7,933         267         3.5         1.6         1.0	Sep 2015         Sep 2016         Amount         %         % change avg: Avchange         Sector % of all DC jobs, Sep 2016         metro area metro area avg: Sep 2016           198,333         202,133         3,800         1.9         1.0         25.9         54.5           42,867         43,633         767         1.8         3.7         5.6         14.0           28,300         30,033         1,733         6.1         3.6         3.9         22.8           15,367         14,933         -433         -2.8         1.0         1.9         32.5           34,400         34,500         100         0.3         -0.5         4.4         17.6           17,200         16,967         -233         -1.4         -0.4         2.2         22.5           30,367         30,967         600         2.0         0.8         4.0         19.9           63,533         63,867         333         0.5         -0.2         8.2         35.5           56,433         57,500         1,067         1.9         -0.3         7.4         48.6           66,533         67,433         900         1.4         1.0         8.7         22.1           50,767	Sep 2015         Sep 2016         Amount Amount         % Achange Avg: Sep 2016         Sector % of all sector jobs in: metro area         US           198,333         202,133         3,800         1.9         1.0         25.9         54.5         7.21           42,867         43,633         767         1.8         3.7         5.6         14.0         0.23           28,300         30,033         1,733         6.1         3.6         3.9         2.66           84,333         84,800         467         0.6         1.8         10.9         22.8         1.09           15,367         14,933         -433         -2.8         1.0         1.9         32.5         0.41           34,400         34,500         100         0.3         -0.5         4.4         17.6         0.44           17,200         16,967         -233         -1.4         -0.4         2.2         22.5         0.61           30,367         30,967         600         2.0         0.8         4.0         19.9         0.3           63,533         63,867         333         0.5         -0.2         8.2         35.5         2.13           56,433         57,500         1,06	12-mo.   12-mo.   12-mo.   12-mo.   12-mo.   13-mo.   13-mo.

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

#### Jobs and wages by sector

### Federal government and business and professional services accounted for 48% of last year's job growth and 65% of the growth in wages and salaries

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



	DC in the Ju				ge and salary employment in Wages and salaries earned in DC Percentage				Distributions		
		ne 2016 q	luarter	in the Ju	ıne 2016 qı	uarter	Employ	ment	Wages Change from		
		Change			Ch. from			Change			
	f	rom June			June 2015			from			
Sector	Level	2015	% change	Level (\$B)	(\$B)	% change	June 2016 J	une 2015	June 2016 J	une 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	

#### Wages and income

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

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

Wages earned in DC, wages earned by DC residents, and wages earned in the US: 2014.2 to 2016.2

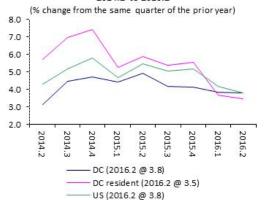


Table 9. DC Wages and Personal Income: June 2016 (2016.2)

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

(,		· · · · ,				
					4-qtr. moving	Latest qtr.
Indicator	FY 2012	FY 2013	FY 2014	FY 2015	avg.	(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

<sup>\*</sup> Proprietors' income is derived from federal tax data and therefore all proprietors' income is earned by DC residents.

Source: BEA; date released September 28, 2016

<sup>\*\*</sup>does not include social insurance paid by individuals. Wage and salary amounts shown do include social insurance paid by individuals.

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

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

<sup>\*\*\*\*</sup>Est. by ORA; assumes wage and salary suppl. are the same % for DC resident wages as for wages earned in DC; excludes social insurance paid by invididuals.

#### Population, jobs, and per capita income

### 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%.
- $\bullet In$  the past year population and jobs both grew slightly below the 5 year average from 2010 to 2015
- •In the June quarter, DC's per capita income 1 yr. rate of growth was less than in the US, but DC's total Personal Income grew faster because of faster population growth.
- •In the June quarter there was no growth in wages earned per DC resident.



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

		Population		Wage and salary employment			
Calendar		Change fron	n prior yr.		Change from	n prior yr.	
year	Number	Number	%	Number	Number	%	
2010	605,126	11,326	1.9	712,242	10,859	1.5	
2011	620,472	15,346	2.5	726,233	13,991	2.0	
2012	635,342	14,870	2.4	734,792	8,558	1.2	
2013	649,540	14,198	2.2	748,325	13,533	1.8	
2014	659,836	10,296	1.6	753,567	5,242	0.7	
2015	672,228	12,392	1.9	766,434	12,867	1.7	
2016.2	683,124	12,451	1.9	777,367	10,167	1.3	
Ch. from 20	010 to 2015	67,102	11.1		54,192	7.6	
Avg. annual ch.		13,420			10,838		

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



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

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

Per capita income in DC and the US:

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

		FY 2013	FY 2014	FY 2015	2016.2
Table 11B. Wages per DC resident job: FY 2013 to 2016.2	Wages per employed DC resident 1 yr % ch in:	63,389	66,108	67,436	67,868
Source: Resident wages estimated by DC Office of Revenue Analysis from BEA data and BLS for DC resident employment.	Wages per DC res. job Employed DC residents All wages earned by DC res.	-0.8 4.9 4.1	4.3 1.1 5.5	2.0 3.9 6.0	0.0 3.5 3.5

#### Single family and condominium housing

#### September single family home sales were above last year; condominium sales were about the same.

- •The 3-month moving total of single family home sales in September was up 8.6% from a year earlier, and the average selling price was 2.2% higher. The year-to-date median sales price (\$678,000) was up 2.3% from the prior year.
- •September condominium sales were down -0.5% from last year as measured by the 3-month moving total, and the average selling price was 3.5% higher. The year-to-date median sales price (\$499,000) was up 3.2% from last year.
- •The total value of all home sales in September rose 8.0% 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: September 2016

	:				12-mo moving total or	3-mo moving total or	
Indicator	FY 2012	FY 2013	FY 2014	FY 2015	average*	average	This month
Number of sales (settled contracts)							
Single family	3,563	3,979	4,024	4,097	4,385	1,186	366
1 year change	-237	416	45	73	288	94	47
% change	-6.2	11.7	1.1	1.8	7.0	8.6	14.7
Condo	2,784	3,487	3,592	3,832	3,955	1,061	342
1 year change	315	703	105	240	123	-5	10
% change	12.8	25.3	3.0	6.7	3.2	-0.5	3.0
Total	6,347	7,466	7,616	7,929	8,340	2,247	708
1 year change	78	1,119	150	313	411	89	57
% change	1.2	17.6	2.0	4.1	5.2	4.1	8.8
Average prices of units that sold							
Single family (\$)	630,109	712,799	736,362	767,870	794,668	816,042	813,909
1 year change	29,083	82,690	23,563	31,508	26,798	17,532	22,186
% change	4.8	13.1	3.3	4.3	3.5	2.2	2.8
Condo (\$)	429,611	447,827	472,419	499,650	500,824	509,725	485,185
1 year change	6,245	18,216	24,592	27,232	1,173	17,055	-8,400
% change	1.5	4.2	5.5	5.8	0.2	3.5	-1.7
Total value of all sales (\$ million)	3,441.1	4,397.8	4,660.0	5,060.6	5,465.4	1,508.6	463.8
1 year change	111.9	956.7	262.2	400.6	404.8	111.5	47.4
% change	3.4	27.8	6.0	8.6	8.0	8.0	11.4
Ratio: active inventory to sales							
Single family	2.3	1.6	1.6	1.5	1.6	1.6	1.8
Condo	2.9	1.7	1.9	1.7	1.8	1.8	1.9

Median contract prices, CY to date in September 2016: single family \$678,000 (2.3% 1 yr ch); condo \$499,000 (3.2% 1 yr ch)

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

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

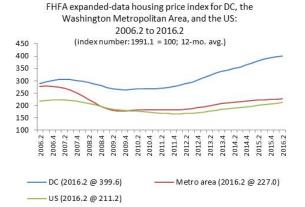
<sup>\*</sup> Same as FY 2016

#### Single family and condominium housing

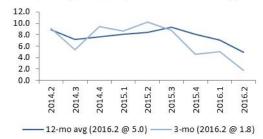
Table 13. Federal Housing Finance Agency Price Index for single family property in DC, DC metro area, and US: June 2016 (2016.2)

		Fiscal yea		Last 2 Q's							
Indicator	FY 2012	FY 2012 FY 2013		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.



FHFA Expanded-data housing price index for DC: 2014.2 to 2016.2 (% 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: 2006.2 to 2016.2

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

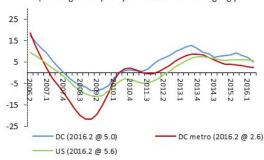


Table 14. D.C. Single family and condominium home sales at prices of \$1 million or more: September 2016

				12-mo	3-mo	
				moving	moving	This
Category	FY 2013	FY 2014	FY 2015	total*	total	month
Single family homes	689	734	765	936	262	71
1 year change	231	45	31	171	42	11
% change	50.4	6.5	4.2	22.4	19.1	18.3
percent of all single family sales	17.3	18.2	18.7	21.3	22.1	19.4
Condominiums	112	128	160	167	47	12
1 year change	40	16	32	7	14	-1
% change	55.6	14.3	25.0	4.4	42.4	-7.7
percent of all condominium sales	3.2	3.6	4.2	4.2	4.4	3.5

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

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

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

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

item	projects	units	Avg. units per project					
Unsold units in projects currently marketing or under construction	42	1,192	!					
Planned with probable sales within 36 months	20	1,190	60					
subtotal	62	2,382						
Proposed/rumored with long term delivery	19	1,256	66					
Note: an additional 12,184 units in 22 projects are planned as either								

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

Associates (condo sales)

<sup>\*</sup>Same as FY 2016

#### **Apartments**

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

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

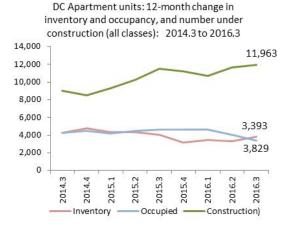


Table 17. Market rate apartment units in DC: 2010 to 2015 (2016.3)

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

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

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

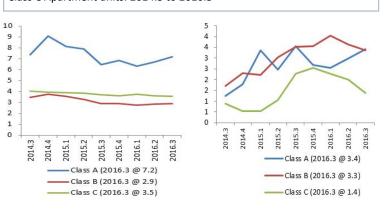
Inventory			Оссі	Occupied units			nthly rent	Under construction				
Class			Units									
	Buildings	Number	1 yr ch	% vacant	Number	1 yr ch	% ch	\$ per month	1 yr % ch	Buildings	Units	Avg. size
Class A	262	40,742	3,631	7.2	37,824	3,110	9.0	\$2,486	3.4	74	11,308	153
Class B	1,060	75,882	384	2.9	73,665	370	0.5	\$1,666	3.3	24	655	27
Class C	2,135	60,641	-186	3.5	58,467	-87	-0.1	\$1,181	1.4	0	-	

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

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



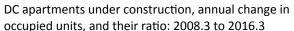
Vacancy rate and 1 year % change in rent per unit for Class A, Class B, and Class C Apartment units: 2014.3 to 2016.3

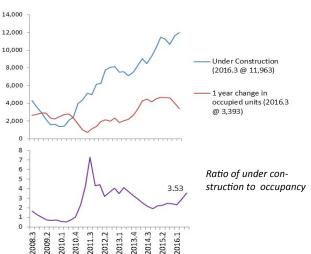


#### Apartments and housing permits

#### Housing permit pace tops annual rate of 5,000

- $\bullet$  For the the 12-month period ending September 5,129 housing permits were issued, up 24.2% from a year ago; the 3-month total was 61.2% higher than last year.
- •The ratio of new apartment construction to 1 year change in occupied units rose to 3.53 in the September quarter.
- •A measure of newly occupied housing units has moved in the past 2 years to closely match the estimated increase in DC households.





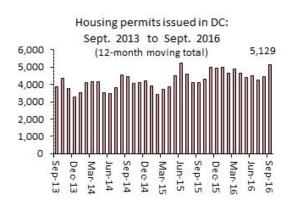


Table 19. Housing unit building permits issued in DC: September 2016

				12-mo.	3-month	
				moving	moving	This
	FY 2013	FY 2014	FY 2015	total*	total	month
Total units	3,855	4,467	4,131	5,129	1,609	1,098
change from 1 yr ago	-236	612	-336	998	611	695
% change from 1 year	-5.8	15.9	<i>-7.5</i>	24.2	61.2	172.5
Multi-family projects						
with 5 or more units						
number	36	32	37	40	11	6
average size	107	140	112	128	146	179
** =		,				

\*Same as FY 2016 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 ho	Measures of newly occupied housing units					
					Ch. In		Single		
			pop/hh			occupied	New condo	family	Total new
date	Population	1 yr ch	ratio	Households	1 yr ch	apt. units	sales	permits	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.

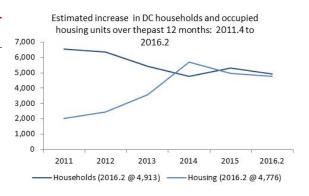
Note: all occupants of newly occupied housing units are not nesessarily DC resident households for Census purposes.

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

			Avg. units
item	projects	units	per project
Under construction/and or marketing	56	10,509	222
Planned with probable sales within 36 mo.	33	7,320	222
Proposed/rumored with long term delivery	63	16,538	263
Planned as either apartment or condo	25	13,006	520
Addendum: estimated supply and demand for the r	next 3 years		
supply**		11,501	
demand		8,410	

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

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



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

#### 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):

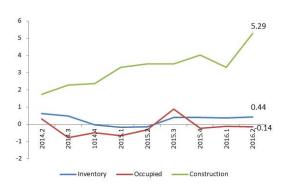


Table 22. DC commercial office space: 2010 to 2016.2

			Inven	tory	Occ	cupied spa	ice	Vacan	cy %	Base rent (d	direct)	Under	constr.
CY (ye	ear	Build-	Level	1 yr ch	Level	1 yr ch				\$	1 yr	build-	
end	)	ings	(msf)	(msf)	(msf)	(msf)	% ch	Direct	Total	per sq ft.	% ch	ings	msf
2	010	2,364	151.58	2.56	134.87	3.16	2.4	10.0	11.0	\$45.61	1.6	6	1.56
2	011	2,359	152.48	0.90	135.78	0.91	0.7	10.2	11.0	\$46.15	1.2	9	2.05
2	012	2,349	152.22	-0.26	137.25	1.47	1.1	9.2	9.8	\$45.18	-2.1	8	2.23
2	013	2,346	152.99	0.78	137.59	0.34	0.2	9.5	10.1	\$46.08	2.0	12	2.14
2	014	2,339	152.96	-0.03	137.09	-0.49	-0.4	9.9	10.4	\$47.24	2.5	13	2.38
2	015	2,332	153.35	0.40	136.87	-0.22	-0.2	10.3	10.7	\$47.94	1.5	19	4.03
201	16.1	2,331	153.44	0.38	136.63	-0.11	-0.1	10.3	11.0	\$48.14	2.3	13	3.30
201	16.2	2,330	153.44	0.44	136.90	-0.14	-0.1	10.2	10.8	\$48.94	3.2	17	5.29
1 C	(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

		Inven	tory	Occ	upied spa	ce	Vacancy	<i>i</i> %	Base rent (d	lirect)	Under	constr.
CY (year	Build-	Level	1 yr ch	Level	1 yr ch			<del>.</del>	\$	1 yr	build-	
end)	ings	(msf)	(msf)	(msf)	(msf)	% ch	Direct	Total	per sq ft.	% ch	ings	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: Co.	Star.											
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: Co	Star. All C	lass A.										

#### Office outlook and value of all property transfers

#### In Sep. 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 September property transfers was down 2.6% from last year as measured by the 3-month moving total. The 12-month moving total (\$13.04 billion) was 11.7% 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 co	nstruction	1.60	4.32
Part of pl	anned for delivery in 2 yr.		
Total		1.60	4.32
Demand, ne	xt 2 years	2.80	4.60
Planned for	possible delivery in 2 years	8.09	6.39
Proposed/ru	mored with long term delivery	14.03	14.87

<sup>\*</sup>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

	0				
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 s	quare feet	<u> </u>		

**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.

Value of real property transfers (including transfers of economic interest): September 2015 to September 2016



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

					12-mo	3-month	
	FY 2012	FY 2013	FY 2014	FY 2015	moving total*	moving total	This month
All property transfers (\$ million)	9,533.3	11,063.9	11,569.8	14,766.3	13,035.9	3,666.4	1,489.1
change from one year ago (\$M)	-526.2	1,530.6	505.8	3,196.5	-1,730.3	-98.8	307.3
% change from 1 year ago	-5.2	16.1	4.6	27.6	-11.7	-2.6	26.0

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).

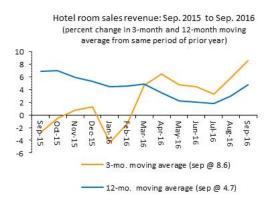
<sup>\*</sup> Same as FY 2016

#### **Hospitality**

#### Hotel demand and room sales are increasing

- •In September the 3-month moving total for hotel room-days sold was 3.2% above a year earlier. The average room rate was 5.3% higher, and revenue was up 8.6%. For the past 12 months, hotel revenue was up 4.7%.
- •Employment in food services was 1.4% more in September than a year earlier as measured by the 3-month moving average. Hotel employment was up 3.5%.
- •July airline traffic into the DC area was up 2.4% compared to a year earlier as measured by the 3-month moving total. Reagan National was up 0.9%. For the past 12-months, total traffic into the DC area was 4.0% higher.





12-month

3-month

Table 27. Hospitality Industry: September 2016

						moving	moving	
						total or	total or	
Indicator	Units	date	FY 2013	FY 2014	FY 2015	average*	average*	This month
Hotel stays								
Hotel room-days sold	('M)	sep	7.680	7.869	8.197	8.340	2.239	0.740
	1 yr ch		0.062	0.189	0.328	0.143	0.069	0.032
	1 yr % ch		0.8	2.5	4.2	1.7	3.2	4.5
Average room rate	\$	sep	207.31	209.87	215.34	221.65	202.26	245.79
	1 yr ch		3.74	2.56	5.46	6.31	10.10	25.67
	1 yr % ch		1.8	1.2	2.6	2.9	5.3	11.7
Occupancy rate	%	sep	75.8	76.6	77.5	77.9	81.2	81.6
(average)	1 yr ch		0.5	0.8	0.9	0.4	0.0	0.3
	1 yr % ch		0.6	1.0	1.2	0.5	0.0	0.4
Room revenue	(\$M)	sep	1,592.1	1,651.4	1,765.1	1,848.6	452.8	182.0
	1 yr ch		41.4	59.4	113.6	83.5	35.9	26.0
	1 yr % ch		2.7	3.7	6.9	4.7	8.6	16.7
Airline passengers		_						
DCA	1 yr % ch	jul	5.5	0.0	10.3	5.2	0.9	-2.7
IAD	1 yr % ch	jul	-4.0	-1.9	0.3	-0.1	1.2	3.9
BWI	1 yr % ch	jul	-1.5	-0.5	4.1	6.6	5.1	1.4
Total	1 yr % ch	jul	-0.3	-0.8	4.8	4.0	2.4	0.9
Employment		_						
Accommodations	level ('000)	sep	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	0.4
	1 yr % ch		-1.2	-0.2	-0.3	2.1	3.5	2.6
Food and bev	level ('000)	sep	45.1	47.1	49.7	51.4	51.5	52.1
	1 yr ch		2.5	2.0	2.6	1.7	0.7	1.6
	1 yr % ch		5.7	4.3	5.5	3.4	1.4	3.2

<sup>\*</sup> Total for hotel rooms sold and room revenue. 12 month moving average or total is the same as FY 2016. Source: Smith Travel Research (hotel data);BLS (employment); Airport authorities (airline passengers).

#### US economy and the federal government sector

### Third quarter annualized growth rate for US nominal GDP increases to 4.4%

- •US real GDP growth in the September quarter was estimated at 2.9%; nominal growth was 4.4% (seasonally adjusted, annual rates).
- •Federal government consumption and investment for all activities was 2.2% higher in the 2016.3 quarter than a year earlier, below the 2.8% rate for nominal GDP for the entire US economy.
- •US employment (seas. adj.) increased by 156,000 in September from the month before.
- •The US unemployment rate (seas. adj.) rose to 5.0% in September.
- $\bullet In$  September the average S&P 500 index fell 0.9% from August; it was 11.0% above a year earlier.

Table 29. Federal government sector, US GDP accounts: 2016.3

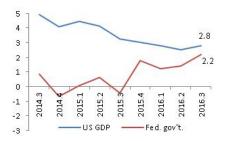
(percent change from same period of prior year)

				12-mo	
Indicator	FY 2013	FY 2014	FY 2015	avg*	2016.3
Non-defense					
Compensation of employees	-0.4	1.7	4.1	3.7	4.5
Purchases of goods and services	-4.9	-1.7	8.0	7.8	9.3
Gross investment	-3.7	-0.4	3.0	1.4	2.0
Defense					
Compensation of employees	-3.5	-0.6	-0.8	1.1	2.0
Purchases of goods and services	-9.0	-7.2	-5.2	-0.9	-0.4
Gross investment	-8.2	-4.2	-4.5	2.3	3.4
All federal consumption and investment	-4.1	-1.8	-0.1	1.6	2.2

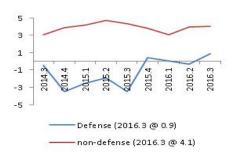
<sup>\*</sup>Same as FY 2016 Source: BEA (October 28, 2016). Nominal values.

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

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



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



Quarterly change in US Real and Nominal GDP:

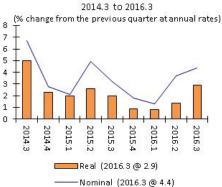


Table 30. Qtr. to Qtr. ch. in US GDP: 2015.3 to 2016.3

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

(70 cm. from previous quarter at seasonally auj. arifual rates)									
Indicator	2015.3	2015.4	2016.1	2016.2	2016.3				
US GDP real	2.0	0.9	0.8	1.4	2.9				
US GDP nominal	3.2	1.8	1.3	3.7	4.4				
Wages and salaries	4.4	6.6	-0.7	4.6	4.7				
Personal income	4.0	3.4	1.3	3.9	3.9				

Note: GDP=Gross Domestic Product Source: BEA, updated Oct. 28, 2016.

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

(percent change from same period of prior year)

Indicator	FY 2013	FY 2014	FY 2015	12-mo avg*	2016.3
US GDP real	1.3	2.4	2.8	1.6	1.5
US GDP nominal	3.0	4.3	4.0	2.8	2.8
US Personal income	3.0	3.5	4.9	3.5	3.2
US wages	3.9	4.0	5.2	4.2	3.9
Corporate profits**	2.6	5.4	-1.6	na	na
S and P stock index	16.7	20.3	9.7	0.4	6.7
US CPI	1.6	1.6	0.3	0.9	1.1
Balt/Wash. area CPI	1.6	1.7	0.4	1.1	na
Source: BEA (October 28,20)	16), BLS, Yaho	00.			

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

Table 31. Monthly selected US Indicators: June 2016 to September 2016

,				
Indicator	June	July	August	September
S and P stock index (level)	2086	2149	2177	2158
% change from prior month	1.0	3.0	1.3	-0.9
% change from 1 year ago	-0.7	2.6	6.7	11.0
10 yr. Treasury Interest rate (level)	1.64	1.50	1.55	1.63
CPI % ch from prior month (seasonally adjusted)	0.21	-0.04	0.20	0.29
CPI % ch from prior year (seasonally adjusted)	1.05	0.87	1.09	1.48
Jobs (seasonally adjusted level, in millions)	144.17	144.42	144.59	144.75
change from prior month (thousands)	271	252	167	156
% change from prior month	0.19	0.17	0.12	0.11
Resident employment (season. adj. level, in mil.)	151.097	151.517	151.614	151.968
change from prior month (thousands)	67	420	97	354
% change from prior month	0.04	0.28	0.06	0.23
Unemployment rate (seasonally adj.)  Source: BLS and Yahoo! Finance.	4.9	4.9	4.9	5.0

Total DC tax collections (before earmarking): September 2011 to September 2016 (12-month moving total in September 2016 is \$7,081 million)



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

(\$ million)		Revenue (fr	om CAFR)			Tax coll	ections	
					12-month	FY 2016	3-month	
Tax	FY 2012	FY 2013	FY 2014	FY 2015	moving total	to date	moving total	This month
Total taxes	5,853.3	6,100.5	6,290.0	6,916.8	7,081.2	7,081.2	2,353.0	1,461.7
1 year change	528.0	247.2	189.5	656.9	103.1	103.1	97.3	24.9
% change	9.9	4.2	3.1	10.0	1.5	1.5	4.3	1.7
Real property	1,822.0	1,914.8	2,015.6	2,194.5	2,335.7	2,335.7	1,147.9	988.4
1 year change	106.9	92.8	100.7	178.9	21.2	21.2	31.1	12.9
% change	6.2	5.1	5.3	8.9	0.9	0.9	2.8	1.3
General sales	1,111.0	1,137.9	1,172.1	1,315.3	1,313.7	1,313.7	325.7	99.9
1 year change	67.6	26.8	34.2	143.2	59.5	59.5	2.5	0.3
% change	9.5	2.4	3.0	12.2	4.7	4.7	0.8	0.3
Individual income	1,490.7	1,640.9	1,679.2	1,868.0	1,869.7	1,869.7	464.3	201.6
1 year change	194.1	150.2	38.3	188.9	-3.4	-3.4	12.6	2.9
% change	15.0	10.1	2.3	11.2	-0.2	-0.2	2.8	1.5
withholding	1,321.6	1,391.2	1,472.9	1,553.2	1,618.7	1,618.7	390.6	125.7
1 year change	129.5	69.6	81.7	80.3	38.9	38.9	11.0	4.9
% change	10.9	5.3	5.9	5.4	2.5	2.5	2.9	4.0
non-withholding	169.1	249.6	206.2	314.8	250.9	250.9	73.6	75.9
1 year change	64.6	80.6	-43.4	108.6	-42.3	-42.3	1.7	-2.0
% change	61.9	47.7	-17.4	52.6	-14.4	-14.4	2.3	-2.5
Corporate income	302.9	299.0	280.2	308.0	355.7	355.7	78.7	67.3
1 year change	86.6	-3.9	-18.8	27.8	38.7	38.7	19.6	6.0
% change	40.1	-1.3	-6.3	9.9	12.2	12.2	33.1	9.7
Unincorporated Bus.	163.0	154.3	135.4	139.8	158.1	158.1	27.9	26.8
1 year change	19.6	-8.7	-18.9	4.4	9.5	9.5	7.2	0.3
% change	13.6	-5.3	-12.3	3.2	6.4	6.4	34.6	1.1
Deed taxes*	312.5	372.8	391.2	480.6	444.1	444.1	126.8	44.0
1 year change	1.3	60.3	18.4	89.4	-36.4	-36.4	-0.5	1.4
% change	0.4	19.3	4.9	22.8	-7.6	-7.6	-0.4	3.3
Other taxes	651.1	580.8	616.4	610.6	604.3	604.3	181.7	33.6
1 year change	23.3	-70.4	35.6	-5.8	14.0	14.0	24.8	1.3
% change	3.7	-10.8	6.1	-0.9	2.4	2.4	15.8	3.9

 $<sup>{\</sup>tt *Deed\ taxes\ include\ deed\ recordation,\ deed\ transfer,\ and\ economic\ interest\ taxes\ on\ real\ property\ transactions.}$ 

Source: OCFO/ORA

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

<sup>(2)</sup> Tax collections data subject to accounting adjustments.

<sup>(3)</sup> 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.

## Tax collections in the last 3 months are 4.3% above a year ago

- For the 12 month period ending September total tax collections (before earmarking) were \$103.1 million (1.5%) more than in the prior year. For the last 3 months they were 4.3% above last year.
- •Individual income tax collections were 0.2% below last year for the 12-months ending September and withholding was 2.5% higher. For the past 3 months, withholding was up 2.9% and all collections were up 2.8%.
- $\bullet$  General sales tax collections were 4.7% above last year for the 12-months ending September. For the past 3 months, they were 0.8% above last year.
- Deed tax collections for the 12-months ending Septgember were down 7.6% from last year; for the past 3 months they were down 0.4%.
- •Corporate income taxes in September. were up 12.2% and unincorporated business income taxes rose 6.4% from last year (12-mo. total).

#### General Sales tax collections (before earmarks): September 2015 to September 2016

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



### General Sales tax and Withholding for the Individual Income tax:

#### September 2015 to September 2016



#### Total tax collections (before earmarks): September 2015 to September 2016

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



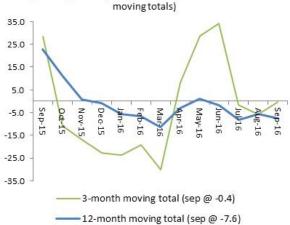
#### Withholding for the Individual Income tax: September 2015 to September 2016

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



#### Deed tax collections (before earmarks): September 2015 to September 2016

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



#### US economic forecasts

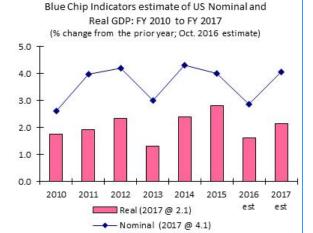
#### Little change in the October Blue Chip forecast for the US economy

- •The October Blue Chip Indicators kept its forecast for real GDP growth in FY 2016 at 1.6% and lowered its FY 2017 estimate back down to 2.1%. Both years are lower than the actuals for 2014 and 2015 (2.4% and 2.8%, respectively). FY 2017 nominal growth of 4.1% is slightly above the FY 2015 actual.
- •CBO's August economic and budget outlook: real growth rates of 1.9% in FY 2016, and 2.3% in each of 2017 and 2018.
- •The Blue Chip Indicators October forecast for inflation (CPI) is slightly reduced: 0.9% for FY 2016 and 2.1% in FY 2017.
- •S&P 500 October baseline forecasts for the end 2016: Global Insight's forecast: 6.9% annual gain in the 4th quarter of 2016, Moody's Analytics is 5.0%.
- •Global Insight and Moody's Analytics expect nominal Personal Income growth just above 4% in FY 2017 and near 5% in FY 2018.

Table 33. Forecasts for US nominal and real GDP: FY 2013 through FY 2017

(% change from prior fiscal year)

		real			nominal	
			IHS			IHS
Fiscal year and		Moody's	Global		Moody's	Global
date of forecast	Blue Chip	Analytics	Insight	Blue Chip	Analytics	Insight
FY 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						
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
October	1.6	1.6	1.5	2.9	2.7	2.8
FY 2017						
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
October	2.1	2.6	2.0	4.1	4.4	4.9



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

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

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

Source: Congressional Budget Office, <u>The Budget and Economic Outlook: 2016 to 2026</u>, August 2016

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

Forecast	% chan	ge from p	rior fiscal	year	% char	nge from p	orior fisca	l year
date	2015	2016	2016 2017 2018		2015	2016	2016 2017 2	
		Global Ir	nsight		1	Moody's A	Analytics	
July	4.7	4.2	4.3	4.9	4.7	4.1	4.8	6.6
Aug.	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
Oct.	4.9	3.5	4.1	4.8	4.9	3.5	4.2	5.4

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

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

Forecast	% chan	ge from pr	ior year	% cha	% change from prior year			
date	2015.4	2016.4	2017.4	2015.4	2016.4	2017.4		
	G	lobal Insig	ht	M	Moody's Analytics			
July	2.0	5.2	5.7	2.0	3.2	0.6		
August	2.0	5.7	5.4	2.0	0 6.1	1.5		
Sept.	2.0	6.9	5.4	2.0	3 4.9	-1.8		
October	2.0	6.9	5.4	2.0	5.0	-1.9		

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

Table 37. Blue Chip forecasts for CPI and 10 year Treasury interest rate: FY 2015 to FY 2017

(% change from prior fiscal year)										
Forecast		CPI		10 yr 1	Treasury rat	:e				
date	2015	2016	2017	2015	2016	2017				
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				
Oct	0.3	0.9	2.1	2.2	1.9	1.9				
Source: Blue Chip Indicators										

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

- *Global Insight:* Job growth falls much more than population. Population and resident employment growth outpace jobs located in DC. Personal Income in FY 2017 and FY 2018, 4.4% to 5.0%, is a little above the US.
- *Moody's Analytics*: More job growth and less population growth than Global Insight. Personal Income growth falls sharply to 0.5% in FY 2017, far below the US average and the metro area.
- *Changes in the last 3 months:* Both forecasts cut expected employment levels. Global Insight increased population estimates. Moody's Analytics cut Personal Inome growth.

Table 38. Forecasts of DC jobs and population to 2019

		FY 2015		Global	Insight			Moody's Analytics					
		actual	FY 2016	FY 2017	FY 2018	FY 2019	FY 2016	FY 2017	FY 2018	FY 2019			
Jobs in DC	Level	764,359	774,549	779,900	783,095	786,982	776,484	784,831	787,568	790,907			
	1 yr, ch	12,534	10,191	5,351	3,195	3,887	10,600	6,350	4,250	5,575			
	1 yr % ch.	1.7	1.3	0.7	0.4	0.5	1.4	0.8	0.5	0.7			
Population	Level	670,631	681,589	691,415	700,804	709,113	679,225	686,050	691,575	696,400			
	1 yr, ch	11,951	10,958	9,826	9,389	8,309	9,175	6,825	5,525	4,800			
	1 yr % ch.	1.8	1.6	1.4	1.4	1.2	1.4	1.0	0.8	0.7			

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

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

		FY 2015		Global	Insight			Moody's Analytics				
		actual	FY 2016	FY 2017	FY 2018	FY 2019	FY 2016	FY 2017	FY 2018	FY 2019		
Resident empl.	1 yr. ch.	13,307	10,325	5,001	6,855	6,532	10,15	0 4,975	3,925	4,300		
Households	1 yr. ch.	4,678	4,183	2,732	3,123	3,805	4,47	5 2,350	2,175	2,650		
Housing starts		3,996	4,557	3,332	2,825	2,539	3,81	1 3,676	3,668	3,656		

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

Table 40. DC Personal Income: forecasts for FY 2015 to FY 2019

(percen	(percent change from prior year)										
Date of	FY 2015		Global	Insight		Moody's <i>i</i>	Analytics				
estimate	act	FY 2016	FY 2017	FY 2018	FY 2019	FY 2016	FY 2017	FY 2018	FY 2019		
July	4.1	4.9	5.2	5.1	5.9	4.3	1.4	3.2	4.1		
October	6.7	4.3	4.4	5.0	6.1	4.0	0.5	1.7	3.3		
Source: IHS	Source: IHS Global Insight and Moody's Analytics (Economy.com). Baseline forecasts										

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

(percent change from	n prior y	ear)							(percent
		Global	Insight		N	loody's	Analytic	cs	
Indicator	2015	2016	2017	2018	2015	2016	2017	2018	2015
Wage and salary jobs					•				Wages and
DC	1.7	1.3	0.7	0.4	1.7	1.4	0.8	0.5	4.5
Metro area					1.6	2.2	1.7	1.5	56
US	2.1	1.8	1.3	0.9	2.1	1.8	1.5	1.4	<b>DC residen</b> 6.0
Personal Income									0.0
DC	6.7	4.3	4.4	5.0	6.7	4.0	0.5	1.7	DC Unemp
Metro area					4.3	4.5	5.5	6.0	7.2
US	4.9	3.5	4.1	4.8	4.9	3.5	4.2	5.4	Source: IHS
Source: IHS Global Insight	and Moo	dy's And	alytics. B	aseline fo	recasts				

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

(perce	nt chang	e from pr	rior year)									
	Global	Insight			Moody's	Analytics						
2015	2016	2017	2018	2015	2016	2017	2018					
Wages a	Wages and salaries earned in DC											
4.5	4.0	3.9	4.4	4.5	3.9	3.1	3.8					
DC reside	ent wage	s and sa	laries									
6.0	3.9	4.1	5.3	6.0	3.5	-1.9	0.0					
DC Unen	nploymei	nt rate (l	evel)									
7.2	6.3	6.0	6.0	7.2	6.3	6.3	6.6					
Source: IHS Global Insight and Moody's Analytics . Baseline forecasts.												

#### DC revenue estimate

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

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

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

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

Source: ORA. September 30, 2016 revenue estimate under existing legislation. Deed taxes include economic interest. The table includes tax revenue only, before all earmarks, and excludes all non-tax revenues, lottery, and "O-type" earmarked revenues. FY 2015 is from the CAFR.

Table 44. DC labor market assumptions: FY 2015 to FY 2018

item	2015	2016	2017	2018			
Wage and salary							
employment	762,800	772,403	778,754	783,945			
1 year change	11,317	9,603	6,351	5,191			
% change	1.5	1.3	0.8	0.7			
DC resident							
employment	356,540	365,433	370,564	374,859			
1 year change	11,714	8,893	5,130	4,295			
% change	3.4	2.5	1.4	1.2			
Unemployment rate	7.4	6.5	6.4	6.3			
Source: ORA September 201	Source: ORA September 2016 revenue estimate.						

Table 45. DC Income and stock market assumptions:

<b>FY 2015 to FY 2018</b> (% c	hange fro	m prior y	ear)	
item	2015	2016	2017	2018
Wages and salaries				
earned in DC	5.1	4.2	3.9	4.0
Wages and salaries				
earned by DC residents	4.6	4.5	4.0	4.2
DC Personal income	4.2	4.0	4.2	4.7
S and P 500 stock index	2.0	0.5	3.5	2.7

Source: ORA September 2016 revenue estimate. Stock index, on a CY basis, represents the % ch. from the December quarter of the prior yr.

Table 46. DC tax revenue (before earmarks) and DC Personal Income: FY 2009 to FY 2018

rable 46. DC tax revenue (belor	e earman	ks) and DC	. Personai	income: r	1 2009 10	L1 7019				
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.

exceeded job growth; this year it was only about one-third as much. In addition, job growth in DC's suburbs was up sharply over the past year providing DC residents more opportunities for reverse commuting.

**Labor force.** The BLS data shows that the primary reason for slower growth of DC resident employment over the past year lies in changing labor force dynamics. From 2014.3 to 2015.3 the labor force grew by 8,995, a percentage increase of 2.4%, From 2015.3 to 2016.3, however, the story changed: the labor force grew by only 1.946, a rate of increase of 0.5%.

This sharp decline in the labor force is puzzling given recent population trends. In the year from 2014.3 to 2015.3 the increase in the labor force exceeded the growth rate of DC's population (1.9%). Population data for the third quarter of 2016 is not yet available from the Bureau of Economic Analysis (which develops quarterly population estimates in consultation with the Census Bureau when preparing Personal Income estimates). Through the second quarter of 2016, however, BEA's estimate of population growth had not slowed at all—it was still growing by 2.9% over the prior year. If population growth is not slowing and job growth continues, there is no obvious reason for the labor force growth to slow. To be sure, in a growing economy changes in the age composition of the population or other factors such as changing migration patterns could influence the relationship between population and the labor force. But a change as precipitous as the one currently estimated by BLS requires more explanation and would represent a big shift in the structure of DC's economy.

When additional population information is available, the latest labor market data will likely be revised. An example of this occurred a year ago. In the 2015.3 quarterly estimate made in October 2015, BLS estimated that DC's labor force was 387,362. BEA had not yet published a DC population estimate for the quarter, and the one that they did publish in December was later revised upward by 3,861 in March. With the higher revised population number, DC's labor force estimate for the 2015.3 quarter was increased by 3,787 and resident employment by 3,947.

DC resident employment, unemployment, jobs, and population: 2014.3 to 2016.3

Change from the prior year

		Level		Num		% (	
				2014.3 to	2015.3 to	2014.3 to	2015.3 to
	2014.3	2015.3	2016.3	2015.3	2016.3	2015.3	2016.3
Resident employment	351,483	364,022	367,898	12,540	3,876	3.6	1.1
Unemployment	30,671	27,126	25,197	-3,545	-1,929	-11.6	-7.1
Labor force	382,154	391,149	393,095	8,995	1,946	2.4	0.5
Jobs located in DC	754,800	767,100	779,067	12,300	11,967	1.6	1.6
Total population	661,504	673,896		12,392		1.9	

Source: BLS for employment, unemployment, and labor force; BEA for population (2016.3 not yet available).

Looking ahead, there are opportunities for DC resident employment to grow by reducing unemployment. However, unless a recession were to occur, the biggest influences on resident employment are those related to population growth and job growth, and to the dynamics of labor force growth related to those two factors.

According to BLS, there are about 25,000 DC residents without jobs who are looking for work. Over the past 20 years DC's unemployment rate has not been below the current 6.1% rate very often. Of the 240 months from September 1996 to September 2016, the unemployment rate has been below 6.0% only about 20% of the time, and never lower than 5.4% (that for four months in the spring of 2000). A drop from 6.1% to 5.4% in the unemployment rate would appear not to be easy according to this past history, but should it occur it would increase DC resident employment by just 2,752 (0.7% reduction in the unemployment rate times the labor force of 393,095).

—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).

Indicator	Source	Period covered in this report	Next release
D.C. Jobs and Labor Force information	BLS	September	November 18
D.C. Personal Income	BEA	2016.2	December 20
D.C. Tax Collections	OTR/ORA	September	c. November 15
D.C. Housing Sales	MRIS*	September	c. November10
D.C. Commercial Office Building data	CoStar and Delta	2016.2	c. October 10
DC Apartment data	CoStar and Delta	2016.3	c. January 10
D.C. Hotel stay information	Smith Travel Research	September	c. November 20
Consumer Price Index	BLS	September	November 17
U.S. Jobs and Labor Force	BLS	September	November 4
U.S. GDP and Personal Income	BEA	2016.3	November 29
S and P 500 Stock Index	Financial press	September	November 1
Interest rate on 10-Year Treasury Securities	Financial press	September	November 1
IHS Global Insight D.C. forecast	Global Insight	October	c. November 15
Moody's Analytics D.C. forecast	Moody's Analytics	October	c. November 25
Blue Chip Economic Indicators for the U.S.	Aspen Publishers	October	c. November 10

For further information or to comment on this report, contact: Stephen Swaim (202-727-7775) or <a href="mailto:stephen.swaim@dc.gov">stephen.swaim@dc.gov</a> 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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