

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

District of Columbia Economic and Revenue Trends: June 2017

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Highlights:

\(\)	Decline in federal jobs2
\Diamond	Slight rise in the unemployment rate3
\Diamond	Rising home sales and values8
\Diamond	Strong hotel revenue growth14

inaicator upaates:
Wage and salary employment2
Resident employment and unemployment3
Sectors of the economy 4
Income and population6
Residential real estate8
Commercial office space11
Property transfers13
Hospitality14
US economy and federal government15
DC tax collections16
US and DC forecasts18
DC revenue estimate20
ORA reports , documents, & blog23
About this report23
ORA contact information23

Job growth in food services has bounced back from last year's slowdown, but retail has not

More than seven years into the recovery from the Great Recession, retail job growth is now negative

New stores and restaurants are tangible evidence of the continued growth of DC's economy, and these sectors have also been important contributors to employment growth since the Great Recession. Food services and retail combined accounted for 25.2% of the increase in all DC private sector employment in the 7 years since April 2010, when the recession's effects on DC employment were beginning to wear off. The share of all private sector jobs in food services and retail increased from 11.8% in April 2010 to 13.9% in April 2017—from one in every 8.5 jobs to one in every 7.2.

During most of 2016, however, 2017 the amount of increase over the prior year in jobs in food services and retail began to slow down. From December 2015 to August 2016 the annual gain in food services fell from 3,000 per year to just 500. Retail fell from 1.200 to 400. In the fall of 2016, the pace of job growth in food services picked up, but retail con-

Retail, food services, and all other private sector jobs in DC: April 2010 to April

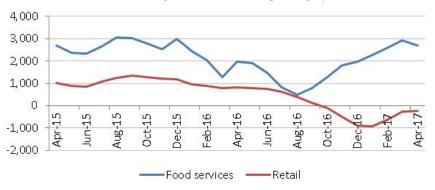
	April	April	Change:	
	2010	2017	Amount	%
Retail	18,000	22,500	4,500	25.0
Food services	36,733	54,000	17,267	47.0
subtotal	54,733	76,500	21,767	39.8
All other private	408,200	472,733	64,533	15.8
Total private	462,933	549,233	86,300	18.6
Addendum:				
Retail & food services as % of private sector	11.8	13.9	25.2	

Source: BLS wage and salary employment data. Data are 3-month averages for dates shown. Reflects May 2017 revision to the April 2017 estimates.

tinued to slow down. In April 2017 food services employed 2,700 more workers than a year earlier, but retail employed 230 fewer people. (Continued on p. 21)

Change in retail and food services jobs in DC:

April 2015 to April 2017 (change in number of jobs from the same period of the prior year, calculated from 3-month moving averages)



Wage and salary employment

Decline in federal sector jobs

- •April wage and salary employment in DC was up by 6,567 (0.8%) from a year earlier as measured by the 3-month moving average.
- Federal government employment in DC for April was down by 1,300 (0.7%). The private sector gained 6,567 (1.2%).
- •Total year-over-year DC metropolitan area employment increased by 51,933 (1.6%) in April as measured by the 3-month moving average.
- •Suburban Washington employment in April increased by 1.9% from a year earlier.
- \bullet Seasonally adjusted DC jobs fell by 2,000 in April from the prior month and are 800 above the level of 5 months ago.

Change in wage and salary employment located in DC, the DC suburbs, and the US:

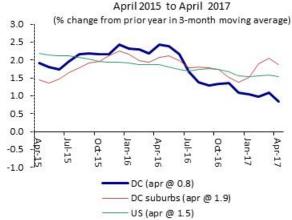


Table 1. Wage and salary employment in DC, Washington Metro area, and the US: April 2017

					3-mo	
Jurisdiction	FY 2014	FY 2015	FY 2016	12-mo avg	average	This month
District of Columbia	751,592	764,583	780,033	784,575	787,300	789,600
1 year change	6,375	12,992	15,450	9,467	6,567	3,800
% change	0.9	1.7	2.0	1.2	0.8	0.5
Washington metro area	3,107,792	3,143,100	3,218,833	3,247,050	3,251,567	3,268,300
1 year change	12,558	36,800	63,167	51,375	51,933	38,000
% change	0.4	1.2	2.0	1.6	1.6	1.2
Washington suburbs (% ch)	0.3	1.5	2.0	1.7	1.9	1.4
US (% ch)	1.8	2.1	1.8	1.6	1.5	1.4

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

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

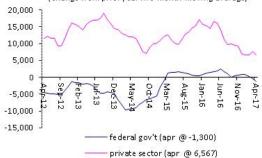


Table 2. Federal government and private sector wage and salary employment in DC: April 2017

					3-month			
Sector	FY 2014	FY 2015	FY 2016	12-mo avg	average	This month		
Federal government	198,367	198,025	199,125	199,100	198,000	197,700		
1 year ch.	-7,533	-342	1,100	425	-1,300	-1,800		
% change	-3.7	-0.2	0.6	0.2	-0.7	-0.9		
Private sector	515,558	527,033	540,992	545,017	549,233	551,800		
1 year ch.	11,442	11,475	13,958	8,500	6,567	3,900		
% change	2.3	2.2	2.6	1.6	1.2	0.7		
Source: BLS. Not seasonally adjusted. April is preliminary.								

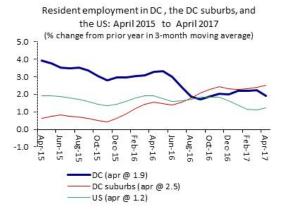
Table 3. Seasonally adjusted DC Employment: November 2016 to April 2017

ranto or occasionally adjusted = c =	, j					
Indicator	November	December	January	February	March	April
D.C. Wage and Salary employment	785,900	787,600	787,500	788,300	788,700	786,700
change from prior month	-500	1,700	-100	800	400	-2,000
% change from prior month	-0.1	0.2	0.0	0.1	0.1	-0.3
Source: BLS seasonally adjusted. April is prel	iminary					

Resident employment and unemployment

Steady gain in resident employment

- •In April DC resident employment was up 7,108 (1.9%) from a year earlier (3-mo. moving average). The labor force grew by 6,564 (1.7%).
- •The seasonally adjusted unemployment rate rose slightly to 5.9% in April. DC's unemployment rate has been below 6% for 7 months in a row, and is about where it was before the Great Recession.
- •April initial unemployment insurance claims were up 3.5% from last year (3-month moving average).



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

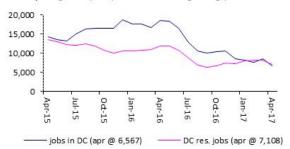


Table 4. Unemployment rates for DC, metro area, and US: April 2017

(percent of labor force)									
	Not seaso	nally adj.	Seasonally adj.						
Jurisdiction	Apr. 2016	Apr. 2017		Apr. 2016	Apr. 2017				
US	4.7	4.1		5.0	4.4				
DC	6.0	5.7		6.1	5.9				
DC metro area	3.2	3.2		na	na				
DC suburbs	3.6	3.4		na	na				
Source: U.S. BLS. na= data not available									

Table 5. Resident employment and unemployment: April 2017

Indicator	FY 2014	FY 2015	FY 2016	12-mo avg	3-mo. avg.	This month
DC Labor force summary						
Resident employment	345,061	357,437	367,036	371,425	375,352	376,440
1 year change	3,562	12,376	9,599	7,598	7,108	6,349
% change	1.0	3.6	2.7	2.1	1.9	1.7
Labor Force	374,726	385,038	391,310	394,724	398,234	398,051
1 year change	904	10,311	6,272	5,531	6,564	6,830
% change	0.2	2.8	1.6	1.4	1.7	1.7
Unemployed	29,665	27,601	24,274	23,299	22,882	21,611
1 year change	-2,659	-2,065	-3,327	-2,067	-545	481
% change	-8.2	-7.0	-12.1	-8.1	-2.3	2.3
Unemployment rate	7.9	7.2	6.2	5.9	5.7	5.4
DC Unemployment insurance (state p	rogram)					
Initial claims (monthly avg.)	1,851	1,596	1,472	1,525	1,287	1,352
1 year change	-64	-255	-123	32	43	71
% change	-3.3	-13.8	-7.7	2.1	3.5	5.5
Weeks compensated (mo. avg.)	42,133	32,811	30,261	30,545	29,734	28,221
1 year change	-729	-9,322	-2,550	-440	-142	2,403
% change	-1.7	-22.1	-7.8	-1.4	-0.5	9.3

 $Source: \textit{Labor force: BLS} \; . \; \textit{Unemployment Insurance: US Dept of Labor. Not seasonally adj.} \\$

Table 6. Seasonally adjusted DC Resident employment and unemployment: Nov. 2016 to Apr. 2017

and the control of th										
Indicator	November	December	January	February	March	April				
DC Resident employment	370,653	371,329	373,223	374,369	375,103	375,747				
change from prior month	733	676	1,894	1,146	734	644				
% change from prior month	0.2	0.2	0.5	0.3	0.2	0.2				
DC Unemployment rate (%)	5.8	5.7	5.7	5.7	5.8	5.9				
Source: BLS seasonally adjusted. April is pr	reliminary.									

Jobs by sectors of the economy

Education tops job growth in DC

- •In April the increase of 4,500 in education over the prior year was more than in any other sector. (3-month moving avg.)
- •In the private sector, food service (2,667), other professional services (1,767), and other business services (1,300) were other sectors that grew by 1,000 or more jobs in April.
- •Private sector industries losing jobs included organizations, constuction, health, retail trade, and information.
- •Local government rose by by 1,300 (3.4%).
- •The federal government accounted for 25.1% of all DC jobs in April. Over the past year, DC's share of US federal employment fell in both the metro area and the US.

Change in private sector wage and salary jobs located in DC, the DC suburbs, and the US:

April 2015 to April 2017
(% change from prior year in 3-month moving average)

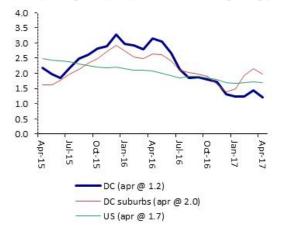


Table 7. Wage and salary employment located in DC: April 2017

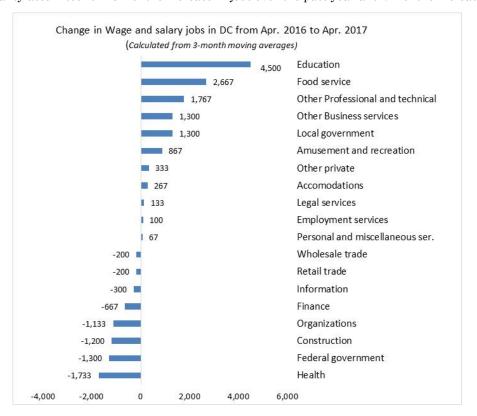
	3-moi	onth moving average 1 year chang		year change avg		Sector % of all DC jobs, Apr	DC share (%) in Apr 2017 of all sector jobs in:		Change from Apr 2016 to Apr 2017 in DC share of sector jobs in:	
Industry sector	Apr 2016	Apr 2017	Amount	%	% change	2017	metro area	US	metro area	US
Federal government	199,300	198,000	-1,300	-0.7	0.2	25.1	54.0	7.07	-0.6	-0.13
Local government	38,767	40,067	1,300	3.4	1.4	5.1	11.9	0.20	0.2	0.01
Legal services	28,133	28,267	133	0.5	0.4	3.6		2.53		0.00
Other Professional and technical	85,267	87,033	1,767	2.1	2.2	11.1	22.8	1.09	-0.1	-0.02
Employment services	14,833	14,933	100	0.7	0.4	1.9	35.5	0.42	1.5	-0.01
Other Business services	35,767	37,067	1,300	3.6	4.1	4.7	18.6	0.48	-0.2	0.01
Information	17,033	16,733	-300	-1.8	-2.2	2.1	23.3	0.61	0.6	0.00
Finance	29,700	29,033	-667	-2.2	0.3	3.7	18.7	0.35	-0.5	-0.02
Organizations	64,033	62,900	-1,133	-1.8	0.5	8.0	36.4	2.14	-0.8	-0.05
Education	67,767	72,267	4,500	6.6	4.3	9.2	54.0	1.91	0.4	0.08
Health	68,933	67,200	-1,733	-2.5	-0.1	8.5	21.5	0.35	-0.7	-0.02
Food service	51,300	53,967	2,667	5.2	3.5	6.9	22.9	0.47	0.4	0.01
Accomodations	14,733	15,000	267	1.8	0.5	1.9	33.7	0.80	-1.9	0.01
Amusement and recreation	8,200	9,067	867	10.6	10.9	1.2	20.8	0.43	0.3	0.04
Retail trade	22,733	22,533	-200	-0.9	-0.7	2.9	8.1	0.14	-0.2	0.00
Wholesale trade	5,000	4,800	-200	-4.0	1.2	0.6	7.8	0.08	-0.4	0.00
Construction	15,700	14,500	-1,200	-7.6	-3.6	1.8	9.5	0.22	-0.7	-0.03
Personal and miscellaneous ser.	7,667	7,733	67	0.9	0.9	1.0		0.28		0.00
Other private	5,867	6,200	333	5.7	2.8	0.8	5.3	0.03	0.3	0.00
Total	780,733	787,300	6,567	0.8	1.2	100.0	24.2	0.54	-0.2	0.00
Public sector	238,067	238,067	0	0.0	0.4	30.2	33.8	1.05	-0.3	-0.01
Private sector	542,667	549,233	6,567	1.2	1.6	69.8	21.6	0.45	-0.1	0.00

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

Jobs and wages by sector

In the December quarter, professional and business services accounted for 45% of last year's job growth and 30% of the growth in wages and salaries

- •In the December quarter, the federal government accounted for 25% of the jobs and a 32% of the wages and salaries paid in DC. The federal share of last year's job growth fell to 9%, but it still accounted for 33% of all growth in wages.
- •Professional and business services accounted for about 26% of wages paid in DC in December, but 30% of the increase in wages paid in DC over the past year.
- Education and health services accounted for 19% of last year's job increases, but only 4% of the increase in wages.
- •Trade and hospitality accounted for 28% of the increase in jobs over the past year and 7% of the increase in wages.



	Wage and sala	ry employ	ment in	Wages and	Wages and salaries earned in DC			Percentage Distributions			
	DC in the De	DC in the Dec. 2016 quarter			in the Dec. 2016 quarter			ment	Wages		
		Change			Ch. from			Change	Change		
	1	rom Dec.			Dec. 2015			from	from		
Sector	Level	2015	% change	Level (\$B)	(\$B)	% change	Dec. 2016	ec. 2015	Dec. 2016 [Dec. 2015	
Total	790,200	8,467	1.1	72.19	3.73	5.45	100.0	100.0	100.0	100.0	
Federal government	199,167	800	0.4	23.20	1.23	5.62	25.2	9.4	32.1	33.1	
Local government	39,833	533	1.4	3.16	0.26	8.81	5.0	6.3	4.4	6.9	
Business and professional services	168,167	3,833	2.3	18.95	1.13	6.34	21.3	45.3	26.2	30.2	
Information and financial services	46,867	-200	-0.4	6.12	0.33	5.69	5.9	-2.4	8.5	8.8	
Education and health services	139,267	1,633	1.2	7.79	0.17	2.17	17.6	19.3	10.8	4.4	
Trade and hospitality services	104,400	2,400	2.4	4.50	0.25	5.96	13.2	28.3	6.2	6.8	
Organizations and personal services	71,867	633	0.9	6.73	0.30	4.63	9.1	7.5	9.3	8.0	
Other private	20,633	-1,167	-5.4	1.74	0.07	4.07	2.6	-13.8	2.4	1.8	
Private sector	551,200	7,133	1.3	45.83	2.24	5.15	69.8	84.2	63.5	60.1	
Government	239,000	1,333	0.6	26.37	1.49	5.99	30.2	15.7	36.5	39.9	

Wages and income

DC Personal Income growth was above 5% in the December quarter

- Wages and salaries earned in the District of Columbia were 5.5% higher in the December quarter compared to the same quarter of 2015.
- $\bullet Wages$ earned by DC residents grew an estimated 4.6% in the December quarter compared to last year.
- •In the December quarter, DC Personal Income grew 5.1%, above the US increase (3.7%).
- \bullet The growth rate of proprietors' income was 4.8% in the December quarter.
- •Pensions and other transfers grew 7.3% over last year in the December quarter.

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

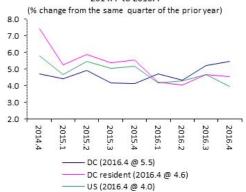


Table 9. DC Wages and Personal Income: December 2016 (2016.4)

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

• •		•				
					4-qtr. moving	Latest qtr.
Indicator	FY 2013	FY 2014	FY 2015	FY 2016	avg.	(Dec)
Wages and salaries earned in DC	62.08	63.97	66.88	69.95	70.89	72.19
1 year change	1.43	1.89	2.91	3.08	3.33	3.73
% change	2.4	3.0	4.5	4.6	4.9	5.5
Supplements to wages & salaries	16.44	17.22	17.91	18.78	19.05	19.34
% change	-0.1	4.7	4.0	4.9	5.5	5.9
Income earned in DC**	74.25	77.01	81.21	85.17	86.33	87.92
% change	0.5	3.7	5.5	4.9	5.1	5.5
Net resident adjustment***	-45.54	-46.28	-47.93	-50.15	-50.90	-51.84
% change	-0.4	1.6	3.6	4.6	5.4	6.1
Income earned by DC residents**	28.71	30.74	33.29	35.02	35.43	36.07
% change	2.1	7.0	8.3	5.2	4.6	4.7
Wages and salaries of DC residents****	21.66	22.85	24.21	25.33	25.61	26.07
change from one year ago	0.85	1.18	1.36	1.12	1.07	1.14
% change	4.1	5.5	6.0	4.6	4.4	4.6
Proprietors' income earned by DC residents*	4.31	5.03	6.10	6.56	6.63	6.77
% change	1.3	16.6	21.3	7.5	4.8	4.8
Property income of DC residents	8.44	8.77	9.12	9.26	9.37	9.56
% change	5.3	3.9	4.1	1.5	2.5	4.7
Pensions and other transfers for DC residents	5.92	6.03	6.18	6.58	6.70	6.82
% change	3.3	1.8	2.5	6.4	7.0	7.3
DC Personal Income	43.08	45.53	48.59	50.86	51.49	52.45
1 year change	1.19	2.46	3.06	2.27	2.22	2.52
% change	2.8	5.7	6.7	4.7	4.5	5.1
US Personal income (% change from prior year)	3.0	3.5	5.0	3.7	3.6	3.7
US Wages and salaries (% change from prior year)	4.0	4.1	5.2	4.6	4.3	4.0
Addendum:						
DC res. wages as % of wages earned in DC	34.9	35.7	36.2	36.2	36.1	36.1
**						

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

Source: BEA; date released March 28, 2017

^{**}does not include social insurance paid by individuals. Wage and salary amounts shown do include social insurance paid by individuals.

^{***}algebraic sum of (1) income earned in DC by non residents (negative) and (2) income earned by DC residents outside of DC (positive).

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

^{****}Est. by ORA; assumes wage and salary suppl. are the same % for DC resident wages as for wages earned in DC; excludes social insurance paid by invididuals.

Population, jobs, and per capita income

In 2015 and 2016 DC jobs grew faster than population

- For 2016, population increased 10,793 (1.6%) and wage and salary employment grew 13,258 (1.7%).
- •In the past year population grew below the 5 year average from 2011 to 2016, and jobs were above the average.
- •In the December quarter, DC's Personal Income grew at a faster rate than the US average, and DC outpaced the US in both population and per capita income.
- $\bullet In$ the December quarter, wages per job in DC grew faster than wages per job in the US (4.3% v 2.4%).

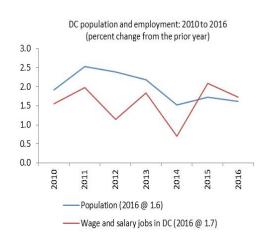




Table 10. DC Population and wage and salary employment located in DC: 2010 to 2016

		Population		Wage and salary employment				
Calendar		Change from	n prior yr.		Change from	n prior yr.		
year	Number	Number	%	Number	Number	%		
2010	605,183	11,383	1.9	712,242	10,859	1.5		
2011	620,477	15,294	2.5	726,292	14,050	2.0		
2012	635,327	14,850	2.4	734,575	8,283	1.1		
2013	649,165	13,838	2.2	748,025	13,450	1.8		
2014	659,005	9,840	1.5	753,300	5,275	0.7		
2015	670,377	11,372	1.7	769,092	15,791	2.1		
2016	681,170	10,793	1.6	782,350	13,258	1.7		
Ch. from 201	1 to 2016	60,693	9.8		56,058	7.7		
Avg. anı	nual ch.	12,139			11,212			

Source: U.S. Bureau of the Census and BLS

Table 11. Per capita income in DC and the US: FY 2014 to December 2016

		D	C			ι	JS			
	FY 2014 FY 2015 FY 2016 2016.4 FY 2014									
Per capita income	69,253	72,602	74,956	76,524	45,816	47,732	49,204	50,207		
% ch in per capita income	3.8	4.8	3.2	3.4	2.7	4.2	3.1	3.0		
% ch in population	1.8	1.8	1.4	1.6	0.8	0.8	0.5	0.7		
% ch in personal income	5.7	6.7	4.7	5.1	3.5	5.0	3.7	3.7		
Consumer price index	1.9	-0.1	0.9	1.9	1.6	0.3	0.9	1.8		

Source: BEA for per capita income, population and Personal Income. Global Insight for DC CPI, Moody's Analytics for US CPI. Note: % changes are from the same period of the prior year.

Table 11A. Wages and salaries per job in DC and the US: FY 2014 to December 2016

Table 11A. Wages and salaries per job in De and the 05.11 2014 to December 2010												
		D	C			l	IS					
	FY 2014	FY 2015	FY 2016	2016.4	FY 2014	FY 2015	FY 2016	2016.4				
Wages per job	85,111	87,469	89,679	91,362	53,275	54,906	56,385	57,028				
% ch in wages per job	2.2	2.8	2.5	4.3	2.2	3.1	2.7	2.4				
% ch in jobs	0.9	1.7	2.0	1.1	1.8	2.1	1.8	1.6				
% ch in total wages and salaries	3.0	4.5	4.6	5.5	4.1	5.2	4.6	4.0				
Source: BEA for wages and salaries and BLS for wage and salary employment. Note: % changes are from the same perio												

the prior year.

Single family and condominium housing

Gains in sales and price for the past three months are strong

- •The 3-month moving total of single family home sales in May was up 6.4% from a year earlier, and the average selling price was 3.5% higher. The year-to-date median sales price (\$681,720) was 4.1% higher than the prior year.
- \bullet May condominium sales were up 3.0% from last year as measured by the 3-month moving total, and the average selling price was 4.2% higher. The year-to-date median sales price (\$455,000) was up 5.6% from last year.
- •The total value of all home sales in May rose 10.5% from last year as measured by the 3-month moving total.







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

Indicator	FY 2013	FY 2014	FY 2015	FY 2016	12-mo moving total or	3-mo moving total or average	This month
Number of sales (settled contracts)	11 2013	11 2014	11 2013	112010	average	average	THIS HIGHER
Single family	3,979	4,024	4,097	4,385	4,516	1,241	501
1 year change	416	45	73	288	259	75	62
% change	11.7	1.1	1.8	7.0	6.1	6.4	14.1
Condo	3,487	3,592	3,832	3,955	4,050	1,152	424
1 year change	703	105	240	123	100	34	3
% change	25.3	3.0	6.7	3.2	2.5	3.0	0.7
Total	7,466	7,616	7,929	8,340	8,566	2,393	925
1 year change	1,119	150	313	411	359	109	65
% change	17.6	2.0	4.1	5.2	4.4	4.8	7.6
Average prices of units that sold							
Single family (\$)	712,799	736,362	767,870	794,668	818,421	831,259	893,352
1 year change	82,690	23,563	31,508	26,798	30,395	43,552	49,288
% change	13.1	3.3	4.3	3.5	3.9	5.5	5.8
Condo (\$)	447,827	472,419	499,650	500,824	513,553	517,915	540,150
1 year change	18,216	24,592	27,232	1,173	20,748	21,031	25,707
% change	4.2	5.5	5.8	0.2	4.2	4.2	5.0
Total value of all sales (\$ million)	4,397.8	4,660.0	5,060.6	5,465.4	5,775.9	1,628.2	676.6
1 year change	956.7	262.2	400.6	404.8	474.7	154.2	89.5
% change	27.8	6.0	8.6	8.0	9.0	10.5	15.2
Ratio: active inventory to sales							
Single family	1.6	1.6	1.5	1.6	1.4	1.4	1.4
Condo	1.7	1.9	1.7	1.8	1.6	1.6	1.7

Median contract prices, CY to date in May 2017: single family \$681,720 (4.1% 1 yr ch); condo \$455,000 (5.6% 1 yr ch)

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

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

Single family and condominium housing

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

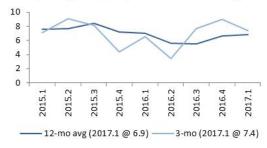
- •The percentage change in DC home prices picked up in the March quarter, according to the Federal Housing Finance Agency Index of single-family same-property transactions. DC's gain over the prior year was 7.4%. The US index was up 6.8%, and the Washington metropolitan area gain was 5.9%.
- •22% of all single family sales for the 12-months ending May have been for properties greater than \$1 million.
- •In the March quarter, sales of new condominium over the past 12 months were 13.6% higher than a year earlier, and single family housing permits were up by 31.8%.

Table 13. Federal Housing Finance Agency Price Index for single family property in DC, DC metro area, and US: March 2017 (2017.1)

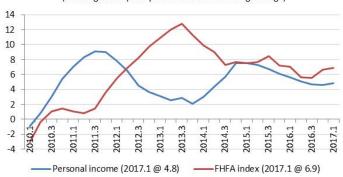
	Fiscal year average Last 2 Q's												
Indicator	FY 2013	FY 2014	FY 2015	FY 2016	2016.4	2017.1							
% change from prior year in value of index													
DC	12.8	7.3	8.4	5.5	9.0	7.4							
DC metro area	8.5	5.8	3.6	2.9	4.9	5.9							
US	6.8	6.4	5.7	5.9	6.7	6.8							

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. Data is collected quarterly.

FHFA Expanded-data housing price index for DC: 2015.1 to 2017.1 (% change from prior year in 3-mo and 12-mo avg)



DC Personal Income and FHFA Housing index: 2010.1 to 2017.1 (% change from prior year in 12-month moving average)



FHFA expanded-data housing price index for DC, the Washington Metropolitan area, and the US: 2014.1 to 2017.1

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

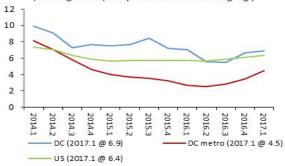


Table 14. D.C. Single family and condominium home sales at prices of \$1 million or more: May 2017

				12-mo	3-mo	TL:-
				moving	moving	This
Category	FY 2014	FY 2015	FY 2016	total	total	month
Single family homes	734	765	936	1,015	307	137
1 year change	45	31	171	142	43	17
% change	6.5	4.2	22.4	16.3	16.3	14.2
percent of all single family sales	18.2	18.7	21.3	22.5	24.7	27.3
Condominiums	128	160	167	197	57	22
1 year change	16	32	7	51	12	2
% change	14.3	25.0	4.4	34.9	26.7	10.0
percent of all condominium sales	3.6	4.2	4.2	4.9	4.9	5.2

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

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

III L	C: F1 2012	10 2	017.1	
				Condo.
		Pei	rmits	Sales
	FY 2012		236	479
	FY 2013		368	442
	FY 2014		267	516
	FY 2015		293	483
	FY 2016		283	680
12-r	no. ending:			
	2017.1		336	618
	1 yr ch		81	74
	% ch.		31.8	13.6
_	_	_	,	

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

Apartments

Compared to a year ago, inventory grew more than occupancy in the March quarter, the vacancy rate was up, and construction increased

- •According to CoStar, in March occupied apartment units increased 3,649 (2.1%) from a year earlier; inventory was up by 5,040 (2.8%).
- •The vacancy rate was 5.1% in March, up from 4.5% a year earlier. Rents rents rose 2.4% over the prior year.
- $\bullet 14{,}335$ apartment units were under construction in March,up by 2,615 from the prior year.
- \bullet Class A units account for 6.6% of all apartment buildings, 19.2% of all units, 18.4% of the occupied units, and 85.9% of new construction.
- •Class A vacancy rate was 8.7% in March, up from 7.5% a year earlier. Average rent was up 0.1% from the prior year.

DC Apartment units: 12-month change in inventory and occupancy, and number under construction (all classes): 2015.1 to 2017.1

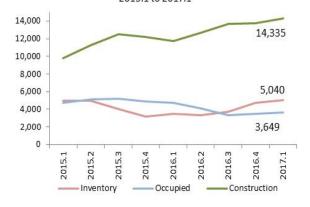


Table 17. Market rate apartment units in DC: 2011 to 2017.1

CY		Inv	entory Unit	·c		Occup	ied units	Effective monthly rent \$ per month			Under Construction Avg units		
Ci	Buildings -	Number	1 yr ch	.s % ch.	% vacant	Number	1 yr ch	% ch		1 yr % ch	Buildings	Units	per bldg.
2011	3,378	163,233	1,539	1.0	4.8	155,475	909	0.6	\$1,484	2.5	21	4,784	228
2012	3,387	165,306	2,073	1.3	4.7	157,569	2,094	1.3	\$1,529	3.0	35	8,020	229
2013	3,402	169,108	3,802	2.3	5.5	159,755	2,186	1.4	\$1,576	3.1	50	7,755	155
2014	3,430	174,523	5,415	3.2	5.6	164,744	4,989	3.1	\$1,634	3.7	84	8,269	98
2015	3,483	177,676	3,153	1.8	4.5	169,648	4,904	3.0	\$1,680	2.8	98	12,221	125
2016	3,533	182,375	4,699	2.6	5.1	173,133	3,485	2.1	\$1,724	2.6	91	13,765	151
2016.4	3,533	182,375	4,699	2.6	5.1	173,133	3,485	2.1	\$1,724	2.6	91	13,765	151
2017.1	3,543	183,394	5,040	2.8	5.1	174,020	3,649	2.1	\$1,738	2.4	93	14,335	154
1 Q ch.	10		1,019				887		14		2	<i>570</i>	

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





Table 18. Market rate apartment units in DC, Classes A, B, and C: 2017.1

		In	ventory			Occupied units			Effective mor	nthly rent	Under construction		
Class			Un	its									
	Buildings N	Number	1 yr ch	% ch	% vacant	Number	1 yr ch	% ch	\$ per month	1 yr % ch	Buildings	Units	Avg. size
Class A	234	35,144	4,309	14.0	8.7	32,076	3,549	12.4	\$2,435	0.1	71	12,307	173
Class B	1,158	78,672	954	0.6	4.1	75,427	267	0.4	\$1,765	1.1	22	2,028	92
Class C	2,138	69,374	-223	-0.3	4.4	66,322	-181	-0.3	\$1,279	2.2	0		

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

Note: Percentages are for 2017.1

Commercial office space

Compared to a year ago, occupied space, rents, and construction all increased in the March quarter, and the vacancy rate decreased

- According to CoStar, for the 12-month period ending March occupied office space increased by 0.62 million sq. ft. from the prior year. Base rent rose 3.6%, and the vacancy rate fell to 11.0% (including sublet).
- \bullet The vacancy rate for class A space was 12.5%, down from 13.2% a year ago. Class A rent rose 3.4% over the past year.
- •Space under construction in March 2017 (5.47 million square feet in 18 buildings) was 2.77 msf (102%) more than a year earlier.
- For Class B and Class C properties, inventory and occupancy have declined over the past year while rents have increased.

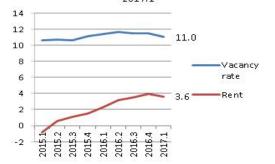
DC commercial office space: 1 yr change in inventory and occupied space, and under construction: 2015.1 to 2017.1 (all classes, msf)



Table 19. DC commercial office space: 2011 to 2017.1

	•	Ir	nventory		Occ	cupied spa	ace	Vacan	cy %	Base rent (d	direct)	ı	Under co	nstr.
CY (year	Build-	Level	1 yr ch	1 yr %	Level	1 yr ch				\$	1 yr	Build-		Avg. sf per
end)	ings	(msf)	(msf)	ch	(msf)	(msf)	% ch	Direct	Total	per sq ft.	% ch	ings	msf	bldg
2011	2,373	152.89	0.90	0.6	136.73	0.90	0.7	9.9	10.6	\$46.13	1.2	9	2.04	226,833
2012	2,363	152.64	-0.26	-0.2	138.14	1.42	1.0	8.9	9.5	\$46.56	0.9	8	2.21	276,436
2013	2,360	153.41	0.78	0.5	138.62	0.48	0.3	9.1	9.6	\$46.63	0.2	12	2.13	177,131
2014	2,354	153.91	0.49	0.3	138.08	-0.54	-0.4	9.8	10.3	\$47.22	1.3	13	2.44	187,402
2015	2,347	154.35	0.44	0.3	137.17	-0.91	-0.7	10.7	11.1	\$47.93	1.5	17	3.41	200,421
2016	2,343	154.51	0.16	0.1	136.69	-0.49	-0.4	10.9	11.5	\$49.80	3.9	19	5.50	289,663
2016.4	2,343	154.51	0.16	0.1	136.69	-0.49	-0.4	10.9	11.5	\$49.80	3.9	19	5.50	289,663
2017.1	2,341	154.42	-0.03	0.0	137.47	0.62	0.5	10.2	11.0	\$49.86	3.6	18	5.47	304,126
1 Q ch	-2		-0.09			0.78		-0.7	-0.5	\$0.06		-1	-0.03	

All DC commercial office space: vacancy rate (with sublet) and annual change in base rent (direct) from: 2015.1 to



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

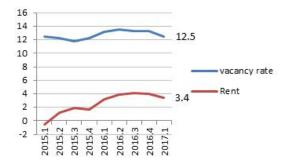


Table 20. DC Class A, B, and C commercial office space: 2017.1

Table 20.	DC Class	A, D, allu	C COMMINE	ciciai office	space. 20.	17.1	_						
	Occu							Vacanc	y %	Base rent (direct)	Under	constr.
CY (year	Build-	Level	1 yr ch	_	Level	1 yr ch	<u> </u>			\$	1 yr	build-	
end)	ings	(msf)	(msf)	1 yr % ch	(msf)	(msf)	% ch	Direct	Total	per sq ft.	% ch	ings	msf
Class A	335	90.81	0.59	0.6	79.48	1.17	1.5	11.6	12.5	\$53.84	3.4	16	5.45
Class B	887	53.13	-0.47	-0.9	47.97	-0.38	-0.8	9.1	9.7	\$43.96	3.9	2	0.03
Class C	1,115	10.43	-0.14		10.00	-0.17	-1.6	3.7	4.1	\$34.27	7.6	0	0.00
Source: Co	Star.												

Trends and outlook for housing and office space

Housing occupancy gains for the year ending in March appears to be similar to the pace for FY 2016

- •An indicator of increased housing occupancy over the past 12 months rose by 4,500 units in the March quarter, about the same pace as the FY 2016 total.
- Class A office space occupancy has been gaining relative to job growth over the past 2 quarters.
- Delta Associates: (1) demand for apartments in the next 3 years to be less than in the prior 3 years and less than new supply, and (2) demand for office space in the next 2 years to be more than in the 2 prior yrs. and about equal to new supply.

Table 21. Estimated DC households, housing permits, and indicators of newly occupied housing units: 2011 to 2017.1

_	Es	stimated DC	households			Measures of newly occupied housing units				
date		pop/hh	Estimated		Housing permits (year	l yr. ch. In occupied	1 yr. new	1 yr. single family	Total 1 yr. new	
CY	Population	ratio	households	1 yr ch	total)	apt. units	sales	permits	occupancy	
2011	620,477	2.258	274,846	6,625	3,853	909	371	135	1,415	
2012	635,327	2.259	281,267	6,421	4,120	2,094	468	104	2,666	
2013	649,165	2.260	287,233	5,966	3,256	2,186	514	267	2,967	
2014	659,005	2.261	291,424	4,191	4,187	4,989	476	236	5,701	
2015	670,377	2.263	296,286	4,862	4,956	4,904	497	368	5,769	
2016	681,170	2.267	300,470	4,184	4,668	3,485	667	288	4,440	
2017.1					4,648	3,649	618	232	4,499	

Source: 1) Population: US Census Bureau 2) population/household ratio based on Office of Planning estimates for 2010, 2015, and 2020 3) households: calculated from population using the pop/hh ratio; 4) Housing permits: US Census Bureau; 5) occupied apt. units: CoStar (see table 17 of this report); 6) new condo sales: Delta (see table 15 of this report); and 7) single family housing permits: Census Bureau, with 2 year lag (see table 15 of this report).

Note: Housing units can be rented or purchased by entities not considered resident households for Census purposes--for example a unit can be leased or purchased by a company. Also units in the existing housing stock can be subdivided, combined, or destroyed.

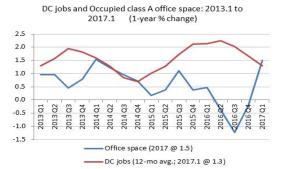


Table 22. Delta Associates outlook for Class A apartments in DC and the surrounding metro area: Mar. 2017 to Mar. 2020

sarrounaning incero ai	sarrounding metro areas mais 2017 to mais 2020									
Indicator	DC	No VA	Sub MD	Total	DC % of total					
Inventory March 2017										
Inventory (msf)	22,703	66,690	35,281	124,674	18.2					
Estimated net activity to	March 202	0								
new supply (msf)	14,205	11,882	9,876	35,963	39.5					
new demand (msf)	8,130	11,111	7,859	27,100	30.0					
Source: Delta Associates										

Table 23. Delta Associates outlook for commercial office space in DC and the surrounding metro area: March 2017 to March 2019

Indicator	DC	No VA	Sub MD	Total	DC % of total			
Inventory March 2017	,							
Inventory (msf)	142.3	179.9	85.9	408.1	34.9			
Estimated net activity	to March 20	19						
new supply (msf)	4.2	3.7	0.1	8.0	52.5			
new demand (msf)	4.0	2.7	0.8	7.5	53.3			
Source: Delta Associates	msf = million	msf = million square feet						

2017.1 (12 month rolling total)
7,000
6,000
5,000
4,499
4,000
1,000

Indicator of annual increase in DC housing occupancy: 2013.1 to

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

	Actual: 2014.1	Forecast:
	to 2017.1	2017.1 to
	(CoStar)	2020.1
New supply	11,668	14,205
New demand	10,996	8,130
C	and the Annual of	

Source: CoStar for actual, Delta Associates for forecast. The sources are not strictly comparable.

Table 23A. Delta 2-year estimate of new supply and demand for Class A office space in DC: 2017.1 to 2019.1 (msf)

		Forecast:
	Actual: 2015.1 to	2017.1 to
	2017.1 (CoStar)	2019.1
New supply	1.7	4.2
New demand	1.5	4.0
Source: CoStar for	actual, Delta Associates	for forecast.
The sources are no	t strictly comparable	

Housing permits and value of all property transfers

The value of property transferred continues to outpace last year's level.

- For the 12-month period ending April, 4,997 housing permits were issued, up 7.1% from a year ago. The 3-month total was 33.3% above last year.
- •The value of May property transfers rose by 17.1% from last year as measured by the 3-month moving total. The 12-month moving total (\$13.84 billion) was 1.7% higher than last year.



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

Table Islanding and but						
				12-mo.	3-month	
				moving	moving	This
	FY 2014	FY 2015	FY 2016	total	total	month
Total units	4,467	4,131	5,129	4,997	896	374
change from 1 yr ago	612	-336	998	331	224	349
% change from 1 year	15.9	- <i>7.5</i>	24.2	7.1	33.3	1,396.0
Multi-family projects						
with 5 or more units						
number	32	37	40	43	14	5
average size	140	112	128	116	64	67

Source: Census Bureau (permits for privately owned units issued during period).

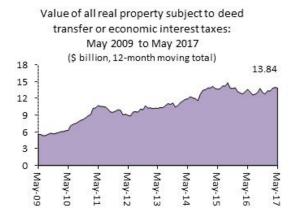




Table 26. Market Value of Real Property transfers subject to the Deed Transfer or Economic Interest tax: May 2017

					12-mo moving	3-month	
	FY 2013	FY 2014	FY 2015	FY 2016	total	moving total	This month
All property transfers (\$ million)	11,063.9	11,569.8	14,766.3	13,035.9	13,840.2	3,749.3	963.4
change from one year ago (\$M)	1,530.6	505.8	3,196.5	-1,730.3	237.7	546.3	-111.0
% change from 1 year ago	16.1	4.6	27.6	-11.7	1.7	17.1	-10.3

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

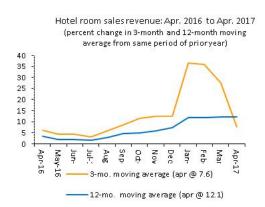
Source: OCFO/Recorder of Deeds and OCFO/ORA (calculated from tax collections and deposits adjusted for tax rate changes).

Hospitality

In the 3 months since the inauguration, hotel revenues were 7.6% higher than last year

- Hotel revenues for April as measured by the 3-month moving total were up by 7.6% over the prior year, the first three months after the inauguration.
- •In April the 3-month moving total for hotel room-days sold was 3.9% above a year earlier. The average room rate was 3.5% higher. For the past 12 months, hotel revenue was up 12.1%.
- Employment in food services was 5.2% more in April than a year earlier as measured by the 3-month moving average. Hotel employment was up 1.8%.
- •March airline traffic into the DC area was up 5.0% compared to a year earlier as measured by the 3-month moving total. Reagan National was up 5.1%. For the past 12-months, total traffic into the DC area was 3.1% higher.





12-month

3-month

Table 27. Hospitality Industry: April 2017

						moving total or	moving total or	
Indicator	Units	date	FY 2014	FY 2015	FY 2016	average*	average*	This month
Hotel stays								
Hotel room-days sold	('M)	apr	7.869	8.197	8.337	8.626	2.227	0.812
	1 yr ch		0.189	0.328	0.140	0.385	0.083	0.029
	1 yr % ch		2.5	4.2	1.7	4.7	3.9	3.7
Average room rate	\$	apr	209.87	215.34	221.36	233.00	250.59	264.03
	1 yr ch		2.56	5.46	6.02	15.47	8.55	-1.72
	1 yr % ch		1.2	2.6	2.8	7.1	3.5	-0.6
Occupancy rate	%	apr	76.6	77.5	78.0	78.5	82.1	87.7
(average)	1 yr ch		0.8	0.9	0.5	0.6	-1.3	-2.0
	1 yr % ch		1.0	1.2	0.7	0.8	-1.6	-2.2
Room revenue	(\$M)	apr	1,651.4	1,765.1	1,845.4	2,009.9	558.0	214.3
	1 yr ch		59.4	113.6	80.3	217.3	39.2	6.2
	1 yr % ch		3.7	6.9	4.6	12.1	7.6	3.0
Airline passengers		_						
DCA	1 yr % ch	mar	0.0	10.3	2.8	2.1	5.1	0.1
IAD	1 yr % ch	mar	-1.9	0.3	-0.1	2.6	5.0	1.2
BWI	1 yr % ch	mar	-0.5	4.1	6.0	4.5	5.0	1.2
Total	1 yr % ch	mar	-0.8	4.8	3.0	3.1	5.0	8.0
Employment								
Accommodations	level ('000)	apr	15.2	15.2	14.9	15.0	15.0	15.2
	1 yr ch		0.0	0.0	-0.3	0.1	0.3	0.3
	1 yr % ch		-0.2	-0.2	-1.9	0.5	1.8	2.0
Food and bev	level ('000)	apr	47.1	49.7	51.4	52.8	54.0	55.5
	1 yr ch		2.0	2.7	1.6	1.8	2.7	2.3
	1 yr % ch		4.3	5.6	3.3	3.5	5.2	4.3
* Total for hotel rooms sold a	nd room revenue.							

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

US economy and the federal government sector

First quarter US nominal GDP was 4.0% above last year

- $\bullet US~real~GDP$ growth in the March (2017.1) quarter was estimated at 1.9% above a year earlier; nominal growth was 4.1%.
- Federal government consumption and investment for all activities was 2.2 % higher in the 2017.1 quarter than a year earlier, about half the growth rate for nominal GDP for the entire US economy.
- $\bullet \mathrm{US}$ employment (seas. adj.) increased by 138,000 in May from the month before.
- •The US unemployment rate (seas. adj.) fell to 4.3% in May.
- $\bullet In$ May the average S&P 500 index rose 1.5% from April; it was 16.0% above a year earlier.

Quarterly change in US Real and Nominal GDP: 2015.1 to 2017.1 (% change from the previous quarter at annual rates)

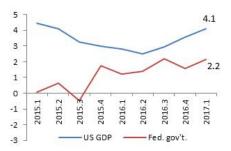


Table 29. Federal government sector, US GDP accounts: 2017.1

(percent change from same period of prior year)

				12-mo	
Indicator	FY 2014	FY 2015	FY 2016	avg	2017.1
Non-defense					
Compensation of employees	1.7	4.1	3.7	4.9	5.8
Purchases of goods and services	-1.7	8.0	7.7	7.7	5.8
Gross investment	-0.4	3.0	1.4	2.5	4.6
Defense					
Compensation of employees	-0.6	-0.8	1.1	2.3	3.2
Purchases of goods and services	-7.2	-5.2	-0.9	-2.7	-3.8
Gross investment	-4.2	-4.5	2.3	2.1	2.7
All federal consumption and investment Source: BEA (May 26, 2017). Nominal values.	-1.8	-0.1	1.6	1.8	2.2

Federal government consumption and investment and US GDP: 2015.1 to 2017.1 (1 yr % ch)



Federal government consumption and investment , by defense and non-defense: 2014.4 to 2016.4 (1 yr% ch)

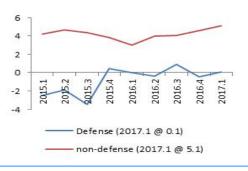


Table 30. Qtr. to Qtr. ch. in US GDP: 2016.1 to 2017.1

(% ch. from previous quarter at seasonally adj. annual rates)									
Indicator	2016.1	2016.2	2016.3	2016.4	2017.1				
US GDP real	0.8	1.4	3.5	2.1	1.2				
US GDP nominal	1.3	3.7	5.0	4.2	3.4				
Wages and salaries	-0.7	6.6	5.9	-1.4	4.0				
Personal income	1.3	4.8	4.6	1.4	4.0				

Note: GDP=Gross Domestic Product Source: BEA, updated May 26, 2017.

Table 28. US GDP, income, and inflation: 2017.1

(percent change from same period of prior year)

Indicator	FY 2014	FY 2015	FY 2016	12-mo avg	2017.1
US GDP real	2.4	2.8	1.6	1.7	2.0
US GDP nominal	4.3	4.0	2.8	3.3	4.1
US Personal income	3.5	4.9	3.6	3.4	3.7
US wages	4.0	5.2	4.6	3.8	3.8
Corporate profits*	5.4	-1.6	3.7	2.6	6.5
S and P stock index	20.3	9.7	0.4	7.6	19.3
US CPI	1.6	0.3	0.9	1.6	2.5

Source: BEA (May 26, 2017), BLS, Yahoo.

*Before tax, with IVA and CCAdj.

Table 31. Monthly selected US Indicators: February 2017 to May 2017

·	•	•		
Indicator	February	March	April	May
S and P stock index (level)	2330	2367	2359	2395
% change from prior month	2.4	1.6	-0.3	1.5
% change from 1 year ago	22.3	17.1	13.7	16.0
10 yr. Treasury Interest rate (level)	2.42	2.48	2.29	2.30
CPI % ch from prior month (seasonally adjusted)	0.12	-0.29	0.17	-0.13
CPI % ch from prior year (seasonally adjusted)	2.80	2.38	2.20	1.87
Jobs (seasonally adjusted level, in millions)	145.773	145.823	145.997	146.135
change from prior month (thousands)	232	50	174	138
% change from prior month	0.2	0.0	0.1	0.1
Resident employment (season. adj. level, in mil.)	152.528	153.000	153.156	152.923
change from prior month (thousands)	447	472	156	-233
% change from prior month	0.3	0.3	0.1	-0.2
Unemployment rate (seasonally adj.)	4.7	4.5	4.4	4.3
Source: BLS and Yahoo! Finance.				

DC tax collections

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

(12-month moving total in May 2017 is \$7,315 million)

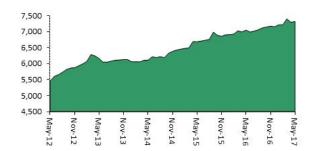


Table 32. Tax Collections (before earmarking): May 2017 (Preliminary)

(\$ million)		Revenue (fro	om CAFR)			Tax collections		
					12-month	FY 2017	3-month	
Tax	FY 2013	FY 2014	FY 2015	FY 2016	moving total		moving total	This month
Total taxes	6,100.5	6,290.0	6,916.8	7,241.0	7,315.0	4,465.1	2,569.2	421.2
1 year change	247.2	189.5	656.9	324.2	267.4	202.3	100.9	24.7
% change	4.2	3.1	10.0	4.7	3.8	4.7	4.1	6.2
Real property	1,914.8	2,015.6	2,194.5	2,357.5	2,434.0	1,274.7	1,243.2	28.1
1 year change	92.8	100.7	178.9	163.0	141.2	86.5	82.5	17.4
% change	5.1	5.3	8.9	7.4	6.2	7.3	7.1	162.9
General sales	1,137.9	1,172.1	1,315.3	1,343.1	1,387.2	956.3	358.5	126.0
1 year change	26.8	34.2	143.2	27.8	82.8	86.5	14.9	5.0
% change	2.4	3.0	12.2	2.1	6.3	9.9	4.3	4.1
Individual income	1,640.9	1,679.2	1,868.0	1,907.9	1,861.3	1,223.8	470.0	146.2
1 year change	150.2	38.3	188.9	39.8	-14.2	-12.7	-8.9	7.1
% change	10.1	2.3	11.2	2.1	-0.8	-1.0	-1.9	5.1
withholding	1,391.2	1,472.9	1,553.2	1,627.6	1,694.5	1,183.6	458.3	129.1
1 year change	69.6	81.7	80.3	74.4	83.2	70.9	29.8	-9.2
% change	5.3	5.9	5.4	4.8	5.2	6.4	7.0	-6.7
non-withholding	249.6	206.2	314.8	280.3	166.8	40.2	11.7	17.1
1 year change	80.6	-43.4	108.6	-34.5	-97.4	-83.7	-38.7	16.3
% change	47.7	-17.4	52.6	-11.0	-36.9	-67.5	-76.8	2,307.5
Corporate income	299.0	280.2	308.0	387.1	397.0	266.3	138.3	9.3
1 year change	-3.9	-18.8	27.8	79.1	50.6	40.8	13.7	2.7
% change	-1.3	-6.3	9.9	25.7	14.6	18.1	11.0	40.6
Unincorporated Bus.	154.3	135.4	139.8	169.4	168.4	117.3	79.1	5.8
1 year change	-8.7	-18.9	4.4	29.6	15.6	10.2	10.1	-0.5
% change	-5.3	-12.3	3.2	21.2	10.2	9.5	14.6	<i>-7.5</i>
Deed taxes*	372.8	391.2	480.6	445.2	465.0	292.3	116.6	38.4
1 year change	60.3	18.4	89.4	-35.4	14.4	20.8	4.1	2.9
% change	19.3	4.9	22.8	-7.4	3.2	7.7	3.7	8.2
Other taxes	580.8	616.4	610.6	630.9	602.1	334.4	163.7	67.5
1 year change	-70.4	35.6	-5.8	20.3	-23.0	-29.8	-15.4	-9.9
% change	-10.8	6.1	-0.9	3.3	-3.7	-8.2	-8.6	-12.8

^{*}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.

 $^{{\}it (2) Tax collections \ data \ subject \ to \ accounting \ adjustments.}$

⁽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.

Individual income tax collections running behind last year despite strong withholding

- For the 12 month period ending May, total tax collections (before earmarking) were \$267.4 million (3.8%) more than in the prior year. For the last 3 months they were 4.1% above last year.
- •Individual income tax collections were 0.8% below last year for the 12-months ending May but withholding was 5.2% higher. For the past 3 months, withholding was up 7.0% but all income tax collections were down 1.9%
- •General sales tax collections were 6.3% above last year for the 12-months ending May. For the past 3 months, they were 4.3% above last year.
- •Deed tax collections for the 12-months ending May were up 3.2% from last year; for the past 3 months they were up 3.7%.
- •Corporate income taxes in May were up 14.6% and unincorporated business income taxes rose 10.2% from last year (12mo. total).

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

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



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

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



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

May 2016 to May 2017

Withholding for the Individual Income tax:



General Sales tax and Withholding for the Individual Income tax:

May 2016 to May 2017



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

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



US economic forecasts

May Blue Chip forecast slightly reduced the moderate growth estimates of prior months

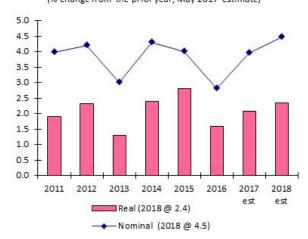
- •The May Blue Chip Indicators reduced GDP growth in FY 2017 to 2.1%, with growth to continue at 2.4% in FY 2018. Nominal growth is 4.0% for FY 2017 and 4.5% for FY 2018.
- •CBO's January economic and budget outlook: real growth rates of 2.2% in FY 2017 and 2.1% in FY 2018.
- •The Blue Chip Indicators May forecast reduced nflation (CPI): 2.3% for FY 2017 and 2.2% for FY 2018.
- •Global Insight and Moody's Analytics May forecasts for US Personal Income: below 4.5% in FY 2017; 5.0% or above in FY 2018
- •S&P 500 May baseline forecasts: Global Insight's outlook to the end of FY 2018 is more optimistic than Moody's. Global insight has an 12.4% annual gain in the 4th quarter of 2017, Moody's Analytics' gain is 5.4%.

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

(% change from prior fiscal year)

		real			nominal	
Fiscal year and date of forecast	Blue Chip	Moody's Analytics	IHS Global Insight	Blue Chip	Moody's Analytics	IHS Global Insight
FY 2014 Actual	2.4	2.4	2.4	4.3	4.3	4.3
FY 2015 Actual	2.8	2.8	2.8	4.0	4.0	4.0
FY 2016 Actual	1.6	1.6	1.6	2.8	2.8	2.8
FY 2017						
February	2.2	2.4	2.6	4.1	4.3	4.2
March	2.2	2.2	2.1	4.1	4.1	4.2
April	2.2	2.1	2.3	4.1	4.1	4.4
May	2.1	2.1	2.1	4.0	4.1	4.1
FY 2018						
February	2.4	2.9	2.5	4.6	5.4	4.7
March	2.4	2.9	2.6	4.6	5.5	4.9
April	2.4	2.5	2.6	4.6	4.9	5.0
May	2.4	2.5	2.6	4.5	4.9	4.9

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



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

Table 34. CBO estimates of GDP and other indicators: FY 2016 to FY 2019

Indicator	FY 2016	FY 2017	FY 2018	FY 2019
Real GDP (% ch from prior yr.)	1.6	2.2	2.1	1.8
Nominal GDP (% ch from prior yr.)	2.8	4.1	4.0	3.7
CPI (% ch from prior yr.)	0.9	2.2	2.3	2.3
10 yr. Treasury bond rate	1.9	2.2	2.5	2.7
Unemployment rate	4.9	4.7	4.5	4.5

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

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

Forecast	% char	nge from	prior fisc	al year		% chan	ge from	prior fisca	al year
date	2016	2017	2018	2019		2016	2017	2018	2019
	Glo	bal Insig	ht			Moo	dy's Anal	ytics	
Feb	3.6	4.1	5.0	5.3	_	3.6	4.3	5.4	5.4
Mar	3.6	4.2	5.0	5.2		3.6	4.3	5.4	5.3
Apr	3.6	4.2	5.0	5.4		3.6	4.4	5.3	5.2
May	3.6	4.2	5.0	5.4		3.6	4.4	5.3	5.2

 ${\it Source: IHS~Global~Insight~,~Moody's~Analytics.~Baseline~forecasts}$

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

	% change f	% change f	from prior				
	ye	ar		ye	ar		
Forecast date	2016.4	2017.4	2018.4	2016.4	2017.4	2018.4	
	GI	obal Insigh	nt	Moody's Analytics			
February	6.4	8.9	3.6	6.4	1.8	-2.1	
March	6.4	11.4	3.6	6.4	4.8	-2.4	
April	6.4	11.1	3.6	6.4	5.4	-2.4	
May	6.4	12.4	3.6	6.4	5.4	-2.4	

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

Table 37. Blue Chip forecasts for CPI and 10 year Treasury interest rate: FY 2016 to FY 2018

(% change for	rom prior f	iscal year)					
Forecast		CPI		10 yr Treasury rate				
date	2016	2017	2018	2016	2017	2018		
Feb	0.9	2.4	2.4	1.9	2.5	3.0		
Mar	0.9	2.4	2.3	1.9	2.5	3.1		
Apr	0.9	2.4	2.3	1.9	2.5	3.1		
May	0.9	2.3	2.2	1.9	2.4	3.0		

Source: Blue Chip Indicators

Global Insight and Moody's Analytics forecast slower population and job growth

- •Both expect DC job growth in FY 2018 to be only about 1/4 of what it was in FY 2016, and expect population growth to exceed job growth.
- ullet Gradual slowdown in annual population growth. FY 2018 Personal Income estimate of 4.2% growth in FY 2018 is slightly less than its estimate for the US.
- *Moody's Analytics*: Sharper drop in population growth than Global Insight. Personal Income growth falls to 1.5% in FY 2018, well below the estimate for the US.

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

		FY 2015	FY 2016	G	ilobal Insig	ht	Mo	Moody's Analytics		
	_	actual	actual	FY 2017	FY 2018	FY 2019	FY 2017	FY 2018	FY 2019	
Jobs in DC	Level	764,508	780,000	788,206	791,895	796,614	788,975	792,500	796,900	
	1 yr, ch	12,908	15,492	8,206	3,689	4,720	9,000	3,525	4,400	
	1 yr % ch.	1.7	2.0	1.1	0.5	0.6	1.2	0.4	0.6	
Population	Level	668,919	679,804	690,072	699,362	707,546	687,025	692,500	697,125	
	1 yr, ch	11,048	10,885	10,267	9,291	8,183	7,250	5,475	4,625	
	1 yr % ch.	1.7	1.6	1.5	1.3	1.2	1.1	0.8	0.7	

Source: May 2017 baseline forecasts from Global Insight and Moody's Analytics

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

		FY 2015 FY	7 2016	(Global Insig	ht	Mo	Moody's Analytics			
		actual a	ctual	FY 2017	FY 2018	FY 2019	FY 2017	FY 2018	FY 2019		
DC resident jobs	1 yr, ch	12,323	9,709	7,353	7,549	7,091	6,625	3,925	3,900		
Households	1 yr, ch	4,656	4,253	2,920	3,043	3,846	2,525	2,300	2,650		
Housing starts		3,966	4,494	5,235	3,333	2,943	3,465	3,224	3,440		

Source: May 2017 baseline forecasts from Global Insight and Moody's Analytics

Table 40. Forecasts of DC Personal Income to FY 2019

Date of estimate	FY 2015	FY 2016	Global Insight			ht Moody's Anal		
	actual	actual	FY 2017	FY 2018	FY 2019	FY 2017	FY 2018	FY 2019
February	6.7	4.7	5.5	4.8	6.2	2.6	1.6	3.5
March	6.7	4.7	5.5	4.9	6.2	2.6	1.6	3.5
April	6.7	4.7	4.7	4.5	5.8	3.1	1.5	3.4
May	6.7	4.7	4.8	4.2	5.5	3.1	1.5	3.4

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

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

(percent change from prior year)

(percent change from	i piloi y	eai j						
	N	∕loody's	Analytic	S				
Indicator	2016	2017	2018	2019	2016	2017	2018	2019
Wage and salary jobs								
DC	2.0	1.1	0.5	0.6	2.0	1.2	0.4	0.6
Metro area					2.0	1.5	1.4	1.1
US	1.8	1.6	1.4	1.2	1.8	1.6	1.3	1.1
Personal Income								
DC	4.7	4.8	4.2	5.5	4.7	3.1	1.5	3.4
Metro area					4.0	4.9	5.0	4.5
US	3.6	4.2	5.0	5.4	3.6	4.4	5.3	5.2
Source: IHS Global Insight	and Moo	dy's And	lytics. B	aseline foi	recasts			

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

	Global I	nsight			Moody's A	nalytics	
2016	2017	2018	2019	2016	2017	2018	2019
Wages ar	nd salarie	s earned	in DC				
4.6	4.8	4.0	4.6	4.6	4.3	3.4	4.4
DC reside	nt wage:	and sala	ries				
4.6	4.5	3.8	5.8	4.6	1.6	-0.3	3.2
DC Unem	ploymen	t rate (le	vel)				
6.2	5.7	5.4	5.2	6.2	5.8	6.3	6.6
Source: IH.	S Global Ir	sight and	Moody's Ai	nalytics . Ba	seline forec	asts.	

DC revenue estimate

The February estimate for tax revenue (before implementation of scheduled tax cuts); \$127 million more in FY 2017 than in FY 2016, followed by a \$196 million increase in FY 2018

- •Anticipated tax revenue increase (before earmarks) is 1.8% in FY 2017, followed by a 2.7% increase in FY 2018. The estimates reflect growth in the DC economy and the effects of past scheduled tax cuts—but not new ones set for FY 2018 and beyond.
- •Real property tax growth of \$133 million in FY 2017 offsets net decreases in other taxes in that year. Real property and individual income are the leading source of revenue gain in FY 2018. Individual income tax revenue is estimated to grow 1.6% in FY 2017 and 3.8% in FY 2018.
- •The General sales tax is estimated to grow 5.0% in FY 2017 and 3.3% in FY 2018.
- •Deed taxes are estimated to decline 8.5% in FY 2017 and increase 1.5% in FY 2018.
- •As a share of DC Personal Income, tax revenue in FY 2017 is expected to fall to 13.8% from 14.2% in FY 2016.

Table 43. DC Tax Revenue (before earmarks and triggered tax cuts) for FY 2016 through FY 2019: February 2017 revenue estimate

Tax		FY level (\$	million)		Chan	Change from prior year (\$ M)				% change from prior year		
	2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019
Real property	2,357.5	2,490.1	2,560.1	2,654.9	163.0	132.6	70.1	94.7	7.4	5.6	2.8	3.7
Deed taxes	445.2	407.3	413.6	424.1	-35.4	-37.9	6.3	10.6	-7.4	-8.5	1.5	2.6
General sales	1,343.1	1,410.6	1,457.0	1,509.4	27.8	67.5	46.4	52.4	2.1	5.0	3.3	3.6
Individual income	1,907.9	1,938.9	2,012.7	2,096.6	39.8	31.0	73.8	84.0	2.1	1.6	3.8	4.2
Withholding	1,627.6	1,687.4	1,760.6	1,844.1	74.4	59.8	73.3	83.5	4.8	3.7	4.3	4.7
non-withholding	280.3	251.5	252.0	252.5	-34.5	-28.8	0.5	0.5	-11.0	-10.3	0.2	0.2
Business income	556.5	523.9	529.6	546.0	108.7	-32.6	5.8	16.4	24.3	-5.9	1.1	3.1
Other	630.9	597.8	591.2	598.8	20.3	-33.1	-6.5	7.6	3.3	-5.3	-1.1	1.3
Total	7,241.0	7,368.4	7,564.2	7,829.9	324.2	127.4	195.8	265.6	4.7	1.8	2.7	3.5

Source: ORA. February 28, 2017 revenue estimate under existing legislation before triggered tax cuts. Deed taxes include economic interest. The table includes tax revenue only, before all earmarks, and excludes all non-tax revenues, lottery, and "O-type" earmarked revenues. FY 2015 is from the CAFR.

Table 44. DC population and employment: FY 2016 to FY 2019

		,		_
item	2016	2017	2018	2019
Wage and salary				
employment	774,817	782,650	787,221	791,827
1 year change	10,458	7,833	4,572	4,606
% change	1.4	1.0	0.6	0.6
DC population	679,804	688,797	696,209	702,655
1 year change	10,885	8,992	7,412	6,446
% change	1.6	1.3	1.1	0.9
Unemployment rate	6.3	6.0	6.0	5.9
Source: ORA February 2017	revenue estimat	e.		

Table 45. **DC Income and stock market assumptions:**

FY 2016 to FY 2019 (% change from prior year)						
item	2016	2017	2018	2019		
Wages and salaries						
earned in DC	4.6	4.0	4.6	4.5		
Wages and salaries						
earned by DC residents	4.6	4.7	5.1	4.9		
DC Personal income	4.7	5.0	5.0	5.0		
S and P 500 stock index	6.4	2.2	1.0	1.7		
Source: ORA February 2017 revenue estimate. Stock index on a CV hasis				ic		

represents the % ch. from the December quarter of the prior yr.

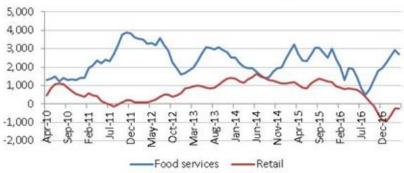
Table 46. DC tax revenue (before earmarks) and DC Personal Income: FY 2010 to FY 2019

Table 46. DC tax revenue (befo	re earmari	ks) and DO	Personal	Income: I	-Y 2010 to	FY 2019				
item	2010	2011	2012	2013	2014	2015	2016	2017 est	2018 est	2019 est
Tax revenue (\$ million)										
Level	5,005	5,325	5,853	6,100	6,290	6,917	7,241	7,368	7,564	7,830
Change from prior year	-47	320	528	247	189	627	324	127	196	266
Percent change from prior year	r									
Tax revenue	-0.9	6.4	9.9	4.2	3.1	10.0	4.7	1.8	2.7	3.5
Personal Income	3.0	9.1	4.5	2.8	5.7	6.7	4.7	5.0	5.0	5.0
Tax revenue as percent of										
Personal Income	13.6	13.3	14.0	14.2	13.8	14.2	14.2	13.8	13.5	13.3

Source: ORA. February 28, 2017 revenue estimate before tax cut triggers under existing legislation. The table includes tax revenue only, before all earmarks, and excludes all non-tax revenues, lottery, and "O-type" earmarked revenues.

In the years since the Great Recession, there have been ups and downs in food service and retail employment growth. For example, the pace of food services growth hit a high of 3,867 in December 2011, and fell by more than half (to 1,600) a year later. Retail job growth was slightly negative for a brief period in the summer of 2011 and then rose steadily to a gain of 1,433 in June 2014, But the drop in 2016 was the most significant since 2010.

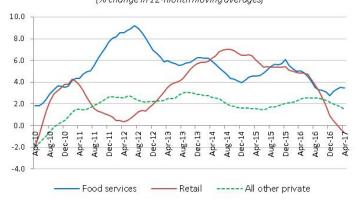
Change in retail and food services jobs in DC:
April 2010 to April 2017
{change in number of jobs from the same period of the prior year,
calculated from 3-month moving averages}



Measured as percent change over the prior year, growth in both food services and retail has been greater over most of the post-recession period than for the rest of DC's private sector. Only toward the end of 2016 did the rates begin to converge.

Outlook. For the three months ending April, the increase in food service jobs over the prior year, 2,700, was slightly above the average for the past seven years, and the percent change, 5.3%, was slightly below the 5.7% average annual growth over that time. The sector would therefore seem to be poised to add additional jobs if DC's population, employment, and income continue to grow along the lines of the prior year.

Percent change from prior year in food services, retail, and all other private sector jobs in DC: April 2010 to April 2017 (% change in 12-month moving averages)

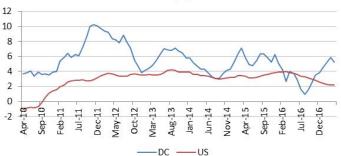


On the other hand, food services employment in the US has been slowing over the past year, falling from a 3.9% rate of growth in April 2016 to 2.2% in April 2017. Although the percentage growth of the sector in DC has gen-

erally been above the US average for most of the past decade, DC's rate of growth last summer declined much faster than the national one. By August 2016 DC's increase in food services jobs was just 1% while the US rate was over 3%. If the rate of increase in US food services continues to slow or stays at a low level, it remains to be seen whether DC food services jobs can continue to outpace the US as it has over the past several months.

Nationally, the rate of growth of retail employment has fallen over the past year, going from 1.6% in April 2016 to 0.5% in April 2017. DC's recent decline in re-

Percent change from the prior year in food services jobs in DC and the US: April 2010 to April 2017 (calculated from 3-month moving averages)



tail jobs is thus consistent with national trends, just more exaggerated. For most of the past decade, DC's rate of growth in retail jobs was well above the US average. Then over the past year DC's rate of growth fell from 3.8%—more than twice the US rate—to negative 1%. Looking ahead, in addition to factors such as population, employment, and income growth, the retail sector faces the twin headwinds of on-line commerce and checkout automation that could make it harder to sustain job increases in the retail sector.

Percent change from the prior year in retail jobs in DC and the US:
April 2010 to April 2017
(calculated from 3-month moving averages)



-Stephen Swaim, DC Office of Revenue Analysis

Change in DC food services and retail jobs from April 2016 to April 2017, and comparison with the average annual change from April 2010 to April 2017

	Number of	jobs	% chang	ge
		7 year		7 year
	Change from	average	Change from	average
	April 2016 to	annual	April 2016 to	annual
sector	April 2017	change	April 2017	change
Food services	2,700	2,467	5.3	5.7
Retail	-233	643	-1.0	3.2

Source: BLS wage and salary employment data. Data and all calculations are based on 3-month averages for dates shown. Reflects May 2017 revision to the April 2017 estimates.

ORA reports and documents. From time to time the Office of Revenue Analysis prepares revenue estimates, fiscal impact statements on pending legislation, reports, and other documents on subjects related to DC 's economy and taxes. These documents are posted on the OCFO web site (www.cfo.dc.gov) under subcategories of "Reports and Publications" and "Budget and Revenue."

District, Measured. Information on the economic and demographic trends taking shape in the city can be found on the ORA Blog, District, Measured (districtmeasured.com). You can sign up at the blog page to receive updates as new articles are posted.

Recent ORA reports:

Revised revenue estimate, February 28, 2017.

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

Tax Rates and Tax Burdens 2015 Nationwide. This annual publication compares DC tax rates and estimated DC tax burdens for households of different income levels with the rates and burdens of state and local taxes in the principal cities in all 50 states.

Tax Rates and Tax Burdens 2015 Washington Metropolitan Area. This annual publication compares DC tax rates and estimated DC tax burdens for households of different income levels with the rates and burdens of the surrounding jurisdictions in the DC metropolitan area.

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

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

About this report. District of Columbia Economic and Revenue Trends is generally issued toward the end of every month. Employment and most other DC information reported on a monthly basis is from one to two months prior to the Trends date. Lags can be greater with quarterly data such as Personal Income and commercial real estate. Data in the tables are believed to be reliable, but original sources are definitive. All data are subject to revision by the information source. The Trends report is available at the DC Chief Financial Officer web-site: www.cfo.dc.gov (click on Budget and Revenue/Economy/ Economic and Revenue Trends).

T-bl- 47 Inf					
Table 47. Information sources					
Indicator	Source	Period covered in this report	Next release		
D.C. Jobs and Labor Force information	BLS	April	June 16		
D.C. Personal Income	BEA	2016.4	June 27		
D.C. Tax Collections	OTR/ORA	May	c. July 15		
D.C. Housing Sales	MRIS*	May	c. July 10		
D.C. Commercial Office Building data	CoStar and Delta	2017.1	c. July 10		
DC Apartment data	CoStar and Delta	2017.1	c. July 10		
D.C. Hotel stay information	Smith Travel Research	April	c. June 20		
Consumer Price Index	BLS	May	July 14		
U.S. Jobs and Labor Force	BLS	April/May	July 7		
U.S. GDP and Personal Income	BEA	2017.1	June 29		
S and P 500 Stock Index	Financial press	May	July 1		
Interest rate on 10-Year Treasury Securities	Financial press	May	July 1		
IHS Global Insight D.C. forecast	Global Insight	May	c. June 15		
Moody's Analytics D.C. forecast	Moody's Analytics	May	c. June 25		
Blue Chip Economic Indicators for the U.S.	Aspen Publishers	May	c. June 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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