

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

#### District of Columbia Economic and Revenue Trends: November 2018

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#### Highlights:

<b>\</b>	Slower job growth2 and 4
<b>\</b>	Rise in new unemployment insurance claims3
<b>◊</b>	Slowing in demand for hotel rooms14
<b>◊</b>	Rise in federal spending15

♦ Rise in federal spend- ing15
Wage and salary employment2
Resident employment and unemployment3
Sectors of the economy 4
Income and population6
Multifamily housing and housing permits8
Commercial office space and property transfers10
Single family and condominium housing sales12
Hospitality14
US economy and federal government15
DC tax collections16
US and DC forecasts18
DC revenue estimate20
ORA reports , documents, & blog23

# DC's post-recession private sector job growth has slowed once more

A trend that bears watching because growth is now approaching the slowest rate since the recession ended

In October, the US Bureau of Labor Statistics (BLS) estimated there were 557,900 private sector wage and salary jobs in DC, an increase of 6,400 (1.2%) from a year earlier. This was the slowest job growth in both number and percentage terms in well over a year. (Jobs are measured here by the 3-month moving average of seasonally unadjusted data).

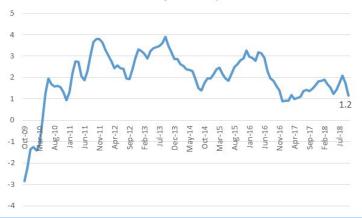
Since the end of the recession over 9 years ago, DC has experienced considerable growth in private sector employment. From October 2009 to October 2018 DC's private sector grew 21.8%, adding 100,000 jobs. The average annual compound growth rate over the period—2.2%—was greater than the US one (1.8%). However, year to year growth rates have fluctuated considerably as shown in the graph below. Year-over-year growth reached highs of about 4 % in November 2011 and September 2013, and a low of about 0.9% in December 2016.

DC's private sector has shown it can be competitive nationally and it is quite reasonable to anticipate further increases. However the current slowdown bears watching. The concern is not just that job growth slowed rather sharply in the last two months. DC's private sector wage and salary employment has been losing momentum over the past three years—both in absolute numbers and relative to the national rate of job growth.

In 2018 DC job growth peaked at about 2%. Growth rates in the prior peak periods of 2011, 2013, and 2016 were much higher—in the 3.2% to 3.9% range.

(Continued on p. 21)

DC private sector jobs: October 2009 to October 2018
(1 year % change in the 3-month moving average of seasonally unadjusted data)



About this report......23

ORA contact information......23

#### Wage and salary employment

#### Job growth slows in DC, rises in the suburbs

- •October wage and salary employment in DC was up by 4,367 (0.6%) from a year earlier as measured by the 3-month moving average.
- Federal government employment in DC for October was down by 3,300 (1.7%). The private sector gained 6,400 (1.2%).
- •Total year-over-year DC metropolitan area employment increased 69,533 (2.1%) in October as measured by the 3-month moving average. Of the increase, just 6.3% was in DC.
- •Suburban Washington employment in Otober increased by 2.5% from a year earlier.
- •Seasonally adjusted DC jobs increased by 400 in October from the prior month and are at the same level as May 2018.

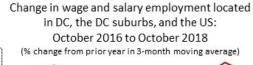




Table 1. Wage and salary employment in DC, the Washington metro area, and the US: October 2018

						3-mo	
Jurisdiction	FY 2015	FY 2016	FY 2017	FY 2018	12-mo avg	average	This month
District of Columbia	764,583	780,892	788,433	794,817	794,983	794,633	799,500
1 year change	12,992	16,308	7,542	6,383	5,883	4,367	2,000
% change	1.7	2.1	1.0	0.8	0.7	0.6	0.3
Washington metro area	3,133,800	3,209,608	3,264,825	3,312,542	3,317,600	3,344,467	3,339,600
1 year change	34,700	63,175	55,217	47,717	49,500	69,533	64,200
% change	1.1	2.0	1.7	1.5	1.5	2.1	2.0
Washington suburbs (% ch)	1.5	2.0	2.0	1.7	1.8	2.5	2.5
US (% ch)	2.1	1.8	1.6	1.6	1.6	1.7	1.7

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

Source: BLS. October 2018 is preliminary.

Federal gov. and private sector wage and salary employment in DC: Oct. 2013 to Oct. 2018 (Ch. from prior year in 3-month moving average)

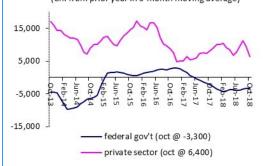


Table 2. Federal government and private sector wage and salary employment in DC: October 2018

					3-month	
Sector	FY 2015	FY 2016	FY 2017	12-mo avg	average	This month
Federal government	198,025	199,717	200,267	196,292	195,267	194,900
1 year ch.	-342	1,692	550	-3 <i>,</i> 750	-3,300	-3,300
% change	-0.2	0.9	0.3	-1.9	-1.7	-1.7
Private sector	527,033	541,258	547,417	556,858	557,900	562,800
1 year ch.	11,475	14,225	6,158	8,633	6,400	4,000
% change	2.2	2.7	1.1	1.6	1.2	0.7

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

Table 3. Seasonally adjusted DC Employment: May 2018 to October 2018

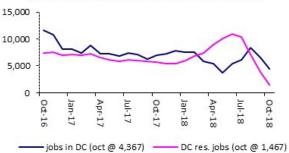
Indicator	May	June	July	August	September	October	
D.C. Wage and Salary employment	795,900	793,600	796,600	796,800	795,500	795,900	
change from prior month	600	-2,300	3,000	200	-1,300	400	
% change from prior month	0.1	-0.3	0.4	0.0	-0.2	0.1	
Source: BLS seasonally adjusted. October is preliminary.							

#### Resident employment and unemployment

## Slower growth in DC resident employment and rise in initial claims for unemployment insurance.

- •In Otober DC resident employment was up 1,467 (0.4%) from a year earlier (3-mo. moving average). The labor force grew by 205 (0.1%).
- •The seasonally adjusted unemployment rate fell slightly to 5.6% in October. The rate a year ago was 5.9%.
- •October initial unemployment insurance claims were up 29.2% from last year (3-month moving average).

Jobs located in DC and DC resident employment:
October 2016 to October 2018
(Change from prior year in 3-mo. moving average)



Resident employment in DC , the DC suburbs, and the US:

October 2016 to October 2018 (% ch from prior yr. in 3-mo. moving avg.)

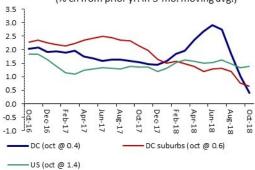


Table 4. Unemployment rates for DC, metro area, and US: October 2018

(percent of labor force)									
	Not seaso	nally adj.	Seasonally adj.						
Jurisdiction	Oct. 2017	Oct. 2018	Oct. 2017	Oct. 2018					
US	3.9	3.5	4.1	3.7					
DC	6.0	5.6	5.9	5.6					
DC metro area	3.5	3.2	na	na					
DC suburbs	3.2	2.9	na	na					
Source: U.S. BLS. na= data not available									

Table 5. Resident employment and unemployment: October 2018

Indicator	FY 2015	FY 2016	FY 2017	FY 2018	12-mo avg	3-mo. avg.	This month
DC Labor force summary							
Resident employment	358,531	368,776	375,280	382,177	382,373	377,215	379,699
1 year change	12,493	10,245	6,504	6,898	6,668	1,467	2,349
% change	3.6	2.9	1.8	1.8	1.8	0.4	0.6
Labor Force	386,144	393,316	399,638	405,150	405,222	400,802	402,104
1 year change	10,268	7,172	6,322	5,512	5,160	205	859
% change	2.7	1.9	1.6	1.4	1.3	0.1	0.2
Unemployed	27,614	24,540	24,359	22,973	22,849	23,586	22,405
1 year change	-2,224	-3,073	-182	-1,386	-1,508	-1,262	-1,490
% change	-7.5	-11.1	-0.7	-5. <i>7</i>	-6.2	-5.1	-6.2
Unemployment rate	7.2	6.2	6.1	5.7	5.6	5.9	5.6
DC Unemployment insurance (state p	rogram)						
Initial claims (monthly avg.)	1,596	1,472	1,505	1,649	1,704	1,877	1,554
1 year change	-255	-123	33	144	194	425	292
% change	-13.8	<i>-7.7</i>	2.2	9.6	12.8	29.2	23.1
Weeks compensated (mo. avg.)	32,811	30,261	31,355	32,113	31,892	29,468	25,737
1 year change	-9,322	-2,550	1,094	758	41	-3,070	-2,988
% change	-22.1	-7.8	3.6	2.4	0.1	-9.4	-10.4

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

Table 6. Seasonally adjusted DC Resident employment and unemployment: May 2018 to Oct. 2018

Indicator	May	June	July	August	September	October			
DC Resident employment	384,293	385,442	386,108	385,083	383,579	382,366			
change from prior month	1,655	1,149	666	-1,025	-1,504	-1,213			
% change from prior month	0.4	0.3	0.2	-0.3	-0.4	-0.3			
DC Unemployment rate (%)	5.6	5.6	5.6	5.6	5.7	5.6			
Source: BLS seasonally adjusted. October is preliminary.									

#### Jobs by sectors of the economy

#### Financial services led DC job growth in October

- $\bullet$ In October financial services added 1,500 jobs (3-month moving avg.)
- •In the private sector, professional and technical services (except legal) (1,467) and information (1,133) also grew by 1,000 or more jobs in October.
- •The sectors with the fastest rate of growth over the prior year in October were personal services (7.0%), other private services (6.7%) and information (6.3%).
- •Private sector industries losing jobs included health, business services, and wholesale trade.
- •Local government rose by by 1,267.
- •The federal government accounted for 24.6% of all DC jobs in September. Over the past year, DC's share of federal employment fell in both the metro area and the US.
- •Over the past year DC's share of jobs in the US rose in several sectors, including legal services, information, finance, amusement and recreation, accomodations, and personal services.

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

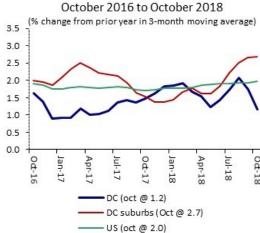


Table 7. Wage and salary employment located in DC: October 2018

	1 year change m		12-mo. moving	DC share (%) 2018 of all set Sector % of in:		ctor jobs DC share of sector jobs in:		f sector		
la disabas as abou	Oat 2017	Oat 2010	A	0/	avg:	all DC jobs,		uc	metro	uc
Industry sector	Oct. 2017	Oct. 2018	Amount	%	% change	Oct. 2018	metro area	US	area	US
Federal government	198,567	195,267	-3,300	-1.7	-1.9	24.6	54.1	6.97	-0.1	-0.10
Local government	40,200	41,467	1,267	3.2	2.4	5.2	12.3	0.33	0.1	0.12
Legal services	28,000	28,633	633	2.3	0.1	3.6		2.52		0.06
Professional and tech. (except legal)	88,933	90,400	1,467	1.6	2.5	11.4	22.6	1.11	-0.5	-0.02
Employment services	14,200	13,733	-467	-3.3	-4.3	1.7	31.4	0.36	0.3	-0.02
Business services (except employ.)	35,633	34,667	-967	-2.7	-2.0	4.4	17.2	0.42	-0.8	-0.02
Information	18,067	19,200	1,133	6.3	5.8	2.4	26.0	0.69	1.5	0.04
Finance	30,267	31,767	1,500	5.0	2.6	4.0	19.7	0.37	0.6	0.01
Organizations	65,867	66,133	267	0.4	1.0	8.3	35.8	2.19	-0.1	-0.01
Education	63,933	64,233	300	0.5	0.8	8.1	53.6	1.74	0.4	-0.02
Health	70,233	69,533	-700	-1.0	0.4	8.8	21.4	0.35	-0.7	-0.01
Food service	53,667	54,500	833	1.6	3.9	6.9	22.2	0.45	-0.4	0.00
Accomodations	14,867	15,300	433	2.9	-0.9	1.9	34.3	0.73	2.2	0.01
Amusement and recreation	8,867	9,267	400	4.5	5.1	1.2	17.8	0.38	-0.6	0.01
Retail trade	23,333	23,400	67	0.3	1.7	2.9	8.3	0.15	-0.1	0.00
Wholesale trade	4,933	4,767	-167	-3.4	0.5	0.6	7.5	0.08	-0.4	0.00
Construction	15,633	16,267	633	4.1	3.4	2.0	9.6	0.22	0.0	0.00
Personal and miscellaneous ser.	8,567	9,167	600	7.0	8.8	1.2		0.32		0.01
Other private	6,500	6,933	433	6.7	6.1	0.9	5.5	0.04	0.2	0.00
Total	790,267	794,633	4,367	0.6	0.7	100.0	23.8	0.53	-0.3	-0.01
Public sector	238,767	236,733	-2,033	-0.9	-1.1	29.8	33.9	1.53	-0.5	0.45
Private sector	551,500	557,900	6,400	1.2	1.6	70.2	21.1	0.44	-0.2	0.00

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

Change from Oct

#### Jobs and wages by sector

#### The business and professional services sector was the largest source of wage growth in DC over the past year

- For the year ending June, the federal government accounted for 24.9% of all jobs and 31.4% of all wages and salaries paid in DC. Over the past year, however, federal jobs fell and the sector accounted for just 7.4% of wage increases.
- •Professional and business services accounted for 19.9 % of the net gain in employment and 31.3% of the gain in wages paid in DC for the year ending June.
- •Information and finance accounted for 21.7% of the increase in jobs and 20.7% of the gain in wages over the past year.
- Education and health services accounted for 14.2% of last year's net job increases and 6.8% of the increase in wages.
- •Trade and hospitality accounted for 43.2% of the increase in jobs over the past year and 10.2% of the increase in wages.

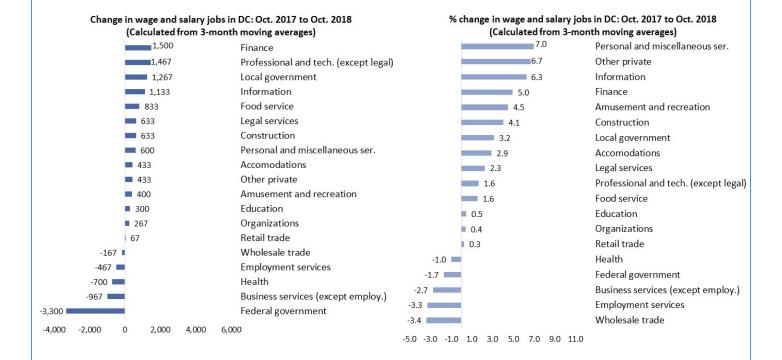


Table 8. Employment and income by sector of the DC economy: 12 mo average ending June 2018 (2018.2)

	12 mo. average wage and salary employment in DC ending June			12 mo avg. wages and salaries earned in DC ending			Percentage Distributions			
		2018			June 2018			yment	Wa	ges
		Change			Ch. from					
		from Jun		J	June 2017			Ch from		Ch from
Sector	Level	2017	% change	Level (\$B)	(\$B)	% change	Jun 2018	Jun 2017	Jun 2018	Jun 2017
Total	793,183	6,333	0.8	74.21	2.87	4.03	100.0	100.0	100.0	100.0
Federal government	197,400	-3,333	-1.7	23.33	0.21	0.92	24.9	-52.6	31.4	7.4
Local government	41,625	1,092	2.7	3.32	0.16	4.95	5.2	17.2	4.5	5.4
Business and professional services	166,950	1,258	0.8	19.52	0.90	4.84	21.0	19.9	26.3	31.3
Information and financial services	48,908	1,375	2.9	6.64	0.59	9.84	6.2	21.7	8.9	20.7
Education and health services	134,875	900	0.7	7.50	0.19	2.66	17.0	14.2	10.1	6.8
Trade and hospitality services	105,967	2,733	2.6	4.97	0.29	6.29	13.4	43.2	6.7	10.2
Organizations and personal services	75,183	1,375	1.9	7.08	0.38	5.69	9.5	21.7	9.5	13.3
Other private	22,275	933	4.4	1.86	0.14	8.11	2.8	14.7	2.5	4.9
Private sector	554,158	8,575	1.6	47.56	2.50	5.56	69.9	135.4	64.1	87.1
Government	239,025	-2,242	-0.9	26.65	0.37	1.41	30.1	-35.4	35.9	12.9
Source: BLS and BEA. Federal government wage:	s and salaries includ	es military.								

### Wages and income

### DC's Personal Income growth is a little less than the US average

- Wages and salaries earned in the District of Columbia were 4.6% higher in the June quarter compared to the same quarter of 2017.
- $\bullet$  Wages earned by DC residents grew an estimated 4.2% in the June quarter compared to last year.
- •In the June quarter, DC Personal Income grew 4.0%, below the US average (4.6%).
- •The growth rate of proprietors' income was 7.3% in the June quarter.
- •Pensions and other transfers grew 0.2% over last year in the June quarter; property income grew 4.5%.

Wages earned in DC, wages earned by DC residents, and wages earned in the US: 2015.2 to 2018.2

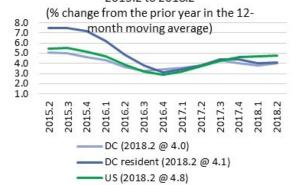


Table 9. DC Wages and Personal Income: June 2018 (2018.2)

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

I	l				4-qtr. moving	Latest qtr.
Indicator	FY 2014	FY 2015	FY 2016	FY 2017	avg.	(Jun.)
Wages and salaries earned in DC	63.88	67.06	69.26	72.23	74.21	75.36
1 year change	1.80	3.19	2.20	2.97	2.87	3.29
% change	2.9	5.0	3.3	4.3	4.0	4.6
Supplements to wages & salaries	16.86	17.66	18.33	19.14	19.44	19.59
% change	5.9	4.7	3.8	4.4	2.6	2.3
Income earned in DC**	77.59	82.22	85.42	89.49	91.93	93.33
% change	3.6	6.0	3.9	4.8	4.1	4.3
Net resident adjustment***	-45.85	-47.50	-49.00	-51.07	-52.32	-53.06
% change	1.9	3.6	3.1	4.2	3.7	4.2
Income earned by DC residents**	31.74	34.72	36.43	38.42	39.61	40.28
% change	6.2	9.4	4.9	5.5	4.6	4.5
Wages and salaries of DC residents****	22.94	24.66	25.59	26.72	27.45	27.85
change from one year ago	1.11	1.72	0.93	1.13	1.08	1.13
% change	5.1	7.5	3.8	4.4	4.1	4.2
Proprietors' income earned by DC residents*	6.04	7.09	7.73	8.44	8.89	9.17
% change	10.5	17.4	9.0	9.2	7.7	7.3
Property income of DC residents	8.82	9.38	9.54	9.87	10.23	10.38
% change	3.5	6.4	1.7	3.4	4.8	4.5
Pensions and other transfers for DC residents	5.95	6.02	6.45	6.64	6.68	6.66
% change	1.1	1.2	7.1	3.0	0.7	0.2
DC Personal Income	46.51	50.12	52.42	54.93	56.52	57.32
1 year change	2.22	3.61	2.30	2.51	2.25	2.19
% change	5.0	7.8	4.6	4.8	4.1	4.0
US Personal income (% change from prior year)	4.0	5.6	2.8	4.0	4.5	4.6
US Wages and salaries (% change from prior year)	4.0	5.5	3.2	4.3	4.8	4.9
Addendum:						
DC res. wages as % of wages earned in DC	35.9	36.8	36.9	37.0	37.0	37.0
DC Personal Income as % of US	0.32	0.32	0.33	0.33	0.33	0.31

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

Source: BEA; data released September 25, 2018

<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

### DC's per capita income has grown more slowly than the US average over the past year

- For 2017, population increased 9,636 (1.4%) and wage and salary employment increased by 7,458 (1.0%).
- $\bullet \mbox{In } 2017$  population and jobs grew below their 5 year average amount from 2012 to 2017.
- •In the June quarter, DC's per capita income grew at a 2.5% rate compared to 3.9% in the US.
- $\bullet In$  the June quarter wages per job in DC grew faster than in the US (3.9% v 3.2%).

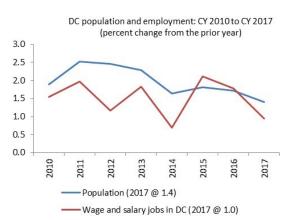


Table 10. DC Population and wage and salary employment located in DC: 2010 to 2017

		Population		Wage and salary employment				
Calendar		Change from	prior yr.		n prior yr.			
year	Number	Number	%	Number	Number	%		
2010	605,040	11,240	1.9	712,133	10,517	1.5		
2011	620,336	15,296	2.5	726,208	14,075	2.0		
2012	635,630	15,294	2.5	734,717	8,508	1.2		
2013	650,114	14,484	2.3	748,108	13,392	1.8		
2014	660,797	10,683	1.6	753,283	5,175	0.7		
2015	672,736	11,939	1.8	769,242	15,958	2.1		
2016	684,336	11,600	1.7	782,925	13,683	1.8		
2017	693,972	9,636	1.4	790,383	7,458	1.0		
Ch. from 201	2 to 2017	58,342	9.4	9.4		7.7		
Avg. annual ch.		11,668	11,668		11,133			
Source:U.S. Bureau of the Census (population), BLS								

Table 11. Per capita income and wages per job in DC and the US: FY 2015 to June 2018

			DC					US		
				12-mo					12-mo	
				avg					avg	
	FY 2015	FY 2016	FY 2017	(Jun)	2018.2	FY 2015	FY 2016	FY 2017	(Jun)	2018.2
Per capita income	74,814	76,920	79,414	80,860	81,598	48,569	49,555	51,148	52,580	53,342
% ch in per capita income	5.9	2.8	3.2	2.7	2.5	4.8	2.0	3.2	3.7	3.9
% ch in population	1.8	1.7	1.5	1.4	1.4	0.8	0.7	0.7	0.7	0.7
% ch in personal income	7.8	4.6	4.8	4.1	4.0	5.6	2.8	4.0	4.5	4.6
Wages per job	87,712	88,698	91,613	93,557	94,799	55,001	55,721	57,189	58,514	59,171
% ch in wages per job	3.2	1.1	3.3	3.2	3.9	3.3	1.3	2.6	3.2	3.2
% ch in wages and salary jobs	1.7	2.1	1.0	0.8	0.6	2.1	1.8	1.6	1.5	1.6
% ch in total wages	5.0	3.3	4.3	4.0	4.6	5.5	3.2	4.3	4.8	4.9
US Consumer price index						0.3	0.9	2.1	2.3	2.7

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

#### Multifamily-unit housing and housing permits

### Even though 1,023 housing permits were issued in October, the number for the past 12 months is down 10% from a year earlier

- •According to CoStar, in September the inventory of apartments and condominiums increased by 4,730 (2.6%) from a year earlier.
- For the 12-month period ending October 4,268 housing permits were issued, down 10.0% from last year. The 3-month total (1,591 was 26.4% below the same period as last year.
- •Of the increase in inventory of multifamily units over the 12-months ending 2018.3, 90.2% were in apartments. Of the housing permits issued over the past year, 96.1% were included in 46 buildings with 5 or more units.
- •As of September, 12,680 multi-family units were under construction in 89 buildings. Of the construction, apartments accounted for 68.5% of the buildings and 89.3% of the units.





Table 12. Estimated DC households: 2012 to 2017

date		pop/hh	Estimated	
CY	Population	ratio	households	1 yr ch
2012	635,630	2.259	281,401	6,618
2013	650,114	2.260	287,653	6,252
2014	660,797	2.261	292,217	4,564
2015	672,736	2.263	297,328	5,112
2016	684,336	2.267	301,866	4,538
2017	693,972	2.271	305,521	3,655

Source: 1) Population: US Census Bureau 2) population/household ratio estimated by ORA based on Office of Planning estimates for 2010, 2015, and 2020 3) households: calculated from population using the pop/hh ratio.

Table 13. Housing unit building permits issued in DC: October 2018

				12-mo.	3-mo.	
				moving	moving	This
	FY 2016	FY 2017	FY 2018	total	total	month
Total units	5,129	4,026	4,640	4,268	1,591	1,023
change from 1 yr ago	998	-1,103	614	-474	-570	-372
% change from 1 year	24.2	-21.5	15.3	-10.0	-26.4	-27
Multi-family projects with						
5 or more units						
number	40	38	46	46	13	5
average size	128	106	101	93	122	202
Units in small projects						
with up to 4 units	333	376	179	173	49	15
% of all units	6.5	9.3	3.9	4.1	3.1	1.5

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

Table 14. Inventory and construction for private sector apartments and condominiums in DC: 2012 to 2018.3

					Inventory					1		Under co	nstructio	n	
	Al	l Units		F	Apartments		Cor	ndominiur	ns		Apartmen	ts	Co	ndomini	ums
CY		1 year c	h.	build-			build-			build-		units per	build-		units per
	number	number	%	ings	units	1 yr ch	ings	units	1 yr ch	ings	units	bldg.	ings	units	bldg.
2012	162,791	2,073	1.3	2,729	121,135	2,044	601	32,835	29	34	7,837	231	2	244	122
2013	166,584	3,793	2.3	2,742	124,712	3,577	602	33,051	216	35	6,807	194	13	297	23
2014	171,356	4,772	2.9	2,761	129,352	4,640	609	33,183	132	42	6,764	161	38	972	26
2015	174,522	3,166	1.8	2,781	131,842	2,490	641	33,859	676	57	9,977	175	41	1,058	26
2016	179,101	4,579	2.6	2,804	135,758	3,916	673	34,522	663	63	11,394	181	34	1,374	40
2017	185,279	6,178	3.4	2,828	141,362	5,604	686	35,072	550	60	11,459	191	33	1,531	46
2018.3	188,626	4,730	2.6	2,843	144,408	4,268	695	35,373	462	61	11,320	186	28	1,360	49
1 Q ch.	2,048			9	1,925		2	123		-2	-654		-1	-96	

Source: CoStar. Includes units in privately-owned buildings with 5 or more units. CY amounts are last quarter of the year. Includes affordable units. Data is as of Nov. 8, 2018. All units includes cooperative apartments, not shown separately. In 2018.3 there were 123 co-op buildings with 8,845 units with an average building size of 72.

#### Apartment occupancy continues to increase

- According to CoStar, for the the 12-month period ending September occupied apartments rose by 5,221 (3.8%) from the prior year. The overall vacancy rate was 6.3% and average rents were 2.0% higher.
- Class A units accounted 24.3% of all units in the city and 36.4% of vacant ones. They also accounted for 91.6% of the additions to apartment inventory over the past year, 80.6% of the increase in occupied units, and 82.2% of the new construction.
- Over the past year, Class A rents increased by 1.3%, Class B rose 2.7%, and Class C rose 1.9%.
- $\bullet$  Vacancy rates in September: Class A 10.9%, Class B 4.9%, and Class C 4.9%.

DC Apartment units: (1) 12-month change in inventory and occupancy, (2) number under construction, and (3)

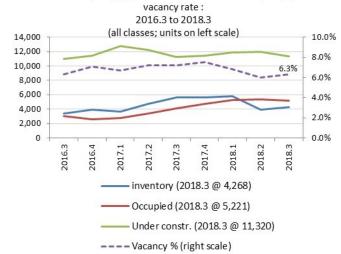


Table 15. Apartment units in DC: 2012 to 2018.3

	•	Leve	I			Cha	nge from	prior pe	eriod		Average	rent	1 yr ch in
		number			Inven	tory	Occu	oied	Vac	ant	Effective rent	1 yr %	units under
	Inventory	Occupied	Vacant	% vacant	units	% ch	units	% ch	units	% ch	per unit	change	constr.
2012	121,135	113,029	8,106	6.7	2,044	1.7	1,805	1.6	239	3.0	\$1,584	4.1	2798
2013	124,712	115,063	9,649	7.7	3,577	3.0	2,034	1.8	1543	19.0	\$1,617	2.1	-1030
2014	129,352	119,287	10,065	7.8	4,640	3.7	4,224	3.7	416	4.3	\$1,682	4.0	-43
2015	131,842	123,545	8,297	6.3	2,490	1.9	4,258	3.6	-1768	-17.6	\$1,762	4.8	3213
2016	135,758	126,140	9,618	7.1	3,916	3.0	2,595	2.1	1321	15.9	\$1,798	2.0	1417
2017	141,362	130,891	10,471	7.4	5,604	4.1	4,751	3.8	853	8.9	\$1,808	0.6	65
2018.3	144,408	•	,	6.3	4,268	3.0	5,221	4.0	-953	-9.6	\$1,861	2.0	-65
1 Q ch	1925	1449	476								\$2		

Source: CoStar, as of Nov 8, 2018.





1-year change in average effective rent in DC

Table 16. Market rate apartment units in DC, Classes A, B, and C: 2018.3

		In	ventory			Occu	ipied units		Effective mor	thly rent	Under	construc	tion
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	168	35,068	3,911	12.6	10.9	31,260	4,209	15.6	\$2,523	1.3	40	9,310	233
Class B	818	51,153	377	0.7	4.9	48,712	757	1.6	\$1,839	2.7	20	2,001	100
Class C	1,849	58,079	-20	0.0	4.8	55,318	253	0.5	\$1,318	1.9	0		

Source: CoStar. Includes units in private sector buildings with 5 or more units. Includes affordable units. Vacancy rate is unoccupied units as % of inventory. Data as of Nov. 8, 2018. The total amounts for apartments in table 15 includes a small number of units not shown here.

#### Commercial office space

### Occupied space and rents are up, vacancy rate is down

- According to CoStar, for the the 12-month period ending September occupied office space increased by 2.60 million sq. ft. from the prior year while inventory rose by 2.30 msf. The vacancy rate edged down to 10.5% (including sublet) and average base rent rose 2.6%.
- •The vacancy rate for class A space was 11.6% in June, down from 12.5% a year ago. Class A rent rose 0.6% over the past year.
- •Space under construction in June 2018 (4.62 million square feet in 15 buildings) was 1.86 msf (28.8%) less than a year earlier.
- •For Class B and Class C properties, inventory and occupancy declined slightly over the past year. Rents for these properties increased more than in Class A, and the vacancy rate for Class B properties fell to 9.9%.

DC commercial office space: (1) 1 yr change in inventory and occupied space, (2) under construction, and (3) vacancy rate: 2016.3 to 2018.23 (million square feet)

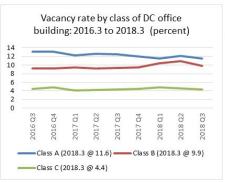


Table 17. DC commercial office space: 2012 to 2018.3

	InventoryOccupied space		ace	Vacant space			Base rent (d	direct)	Under constr.						
CY (year	Build-	Level	1 yr ch	1 yr %	Level	1 yr ch		Level		Direct	\$	1 yr	Build-		Avg. sf per
end)	ings	(msf)	(msf)	ch	(msf)	(msf)	% ch	(msf)	Total %	only %	per sq ft.	% ch	ings	msf	bldg
2012	2,398	153.42	-0.17	-0.1	138.90	1.46	1.1	14.5	8.8	9.5	\$46.82	0.9	8	2.21	276,436
2013	2,393	154.10	0.68	0.4	139.56	0.66	0.5	14.5	8.9	9.4	\$46.90	0.2	12	2.13	177,126
2014	2,387	154.59	0.49	0.3	139.15	-0.40	-0.3	15.4	9.5	10.0	\$47.43	1.1	14	2.43	173,914
2015	2,379	155.03	0.44	0.3	138.11	-1.05	-0.8	16.9	10.5	10.9	\$48.09	1.4	17	3.45	202,730
2016	2,375	155.19	0.16	0.1	137.80	-0.31	-0.2	17.4	10.6	11.2	\$49.75	3.5	21	5.53	263,407
2017	2,373	155.51	0.33	0.2	138.95	1.15	0.8	16.6	9.9	10.6	\$50.76	2.0	22	6.52	296,155
2018.3	2,375	157.31	2.30	1.5	140.72	2.60	1.9	16.6	9.7	10.5	\$51.72	2.6	15	4.62	307,906
1 Q ch	-1	-0.30			0.94				-0.9	-0.8	\$0.30		0	0.00	

Source: CoStar, all classes and sizes. Data as of November 8, 2018





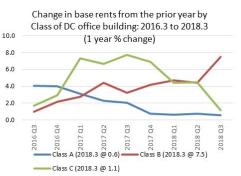


Table 18. DC Class A, B, and C commercial office space: 2018.3

		Inven	itory		Осс	upied spa	ce	V	acant spa	ace	Base rent (	direct)	Under o	constr.
	Build-	Level	1 yr ch	1 yr %	Level	1 yr ch		Level			\$	1 yr	build-	
Class	ings	(msf)	(msf)	ch	(msf)	(msf)	% ch	(msf)	Total %	Direct %	per sq ft.	% ch	ings	msf
Class A	350	94.64	2.64	2.9	83.67	3.21	4.0	11.0	10.6	11.6	\$54.85	0.6	14	4.54
Class B	914	52.22	-0.32	-0.6	47.06	-0.59	-1.2	5.2	9.3	9.9	\$47.85	7.5	1	0.08
Class C	1,109	10.44	-0.03	-0.3	9.98	-0.03	-0.3	0.5	3.9	4.4	\$36.08	1.1	0	0.00
Source: Co	Star. Data	as of Nove	mber 8, 20	18										

#### Value of all property transfers + long term view

#### The value of real property transfers has risen sharply over the past three months

- •The value of October property transfers rose by 27.4% from last year as measured by the 3-month moving total. The 12-month moving total, \$14.82 billion, was 6.5% above last year.
- For the first time since the US recession, occupied office space in DC is once again increasing at a rate greater than the increase in DC jobs.
- •Since 2010, the inventory of housing units in multi-family buildings has grown at a faster rate than DC population.





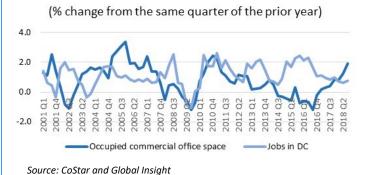
Table 19. Market Value of Real Property transfers subject to the Deed Transfer or Economic Interest tax: October 2018

							3-111011111	
						12-mo	moving	
	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	moving total	total	This month
All property transfers (\$ million)	11,569.8	14,766.3	13,035.9	13,998.6	14,646.3	14,815.2	4,575.1	1,713.5
change from one year ago (\$M)	505.8	3,196.5	-1,730.3	962.6	647.8	906.1	983.7	168.8
% change from 1 year ago	4.6	27.6	-11.7	7.4	4.6	6.5	27.4	10.9

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).

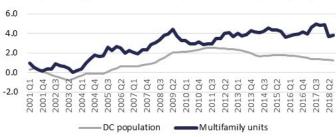
Longer term view of occupied office space, multifamily housing units, jobs, and population in DC: 2001.1 to 2018.3



Occupied commercial office space and jobs located

in DC: 2001.1 to 2018.3

Inventory of multifamily units and DC population: 2001.1 to 2018.3 (% change from the same quarter of the prior year)



Source: CoStar and Global Insight

3-month

#### Single family and condominium housing

#### In the past 3 months the number of housing units sold was slightly less than last year

- •The 3-month moving total of single family home sales in September was down 3.5% from a year earlier, and the average selling price was 3.3% higher. The year-to-date median sales price (\$723,450) was 5.6% higher than the prior year.
- September condominium sales were up 3.2% from last year as measured by the 3-month moving total, while the average selling price was 2.2% higher. The year-to-date median sales price (\$463,000) was up 2.9% from last year.
- •The total value of all home sales in September was up 1.7% from last year as measured by the 3-month moving total. For the past 12-months the increase was 6.2%.

Number of single family homes sold in DC and average selling price: Sep. 2017 to Sep. 2018 (% change from prior year in 12-month moving averages)

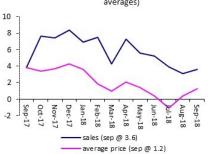








Table 20. D.C. Residential Real Estate Indicators: September 2018

Indicator	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	12-mo moving total or average	3-mo moving total or average	This month
Number of sales (settled contracts)	112013	112011	112013	112010	112017	total of average	average	71113 111011611
Single family	3,979	4,024	4,097	4,385	4,552	4,717	1,174	308
1 year change	416	45	73	288	167	165	-42	-17
% change	11.7	1.1	1.8	8.7	3.8	3.6	-3.5	-5.2
Condo	3,487	3,592	3,832	3,955	4,046	4,240	1,103	280
1 year change	703	105	240	123	91	194	34	-6
% change	25.3	3.0	6.7	5.6	2.3	4.8	3.2	-2.1
Total	7,466	7,616	7,929	8,340	8,598	8,957	2,277	588
1 year change	1,119	150	313	411	258	359	-8	-23
% change	17.6	2.0	4.1	7.2	3.1	4.2	-0.4	-3.8
Average prices of units sold								
Single family (\$)	712,799	736,362	767,870	794,668	824,857	835,130	842,585	774,570
1 year change	82,690	23,563	31,508	26,798	30,189	10,273	27,179	32,247
% change	13.1	3.3	4.3	5.8	3.8	1.2	3.3	4.3
Condo (\$)	447,827	472,419	499,650	500,824	511,247	529,463	509,360	492,666
1 year change	18,216	24,592	27,232	1,173	10,423	18,215	10,921	7,605
% change	4.2	5.5	5.8	2.2	2.1	3.6	2.2	1.6
Total value of all sales (\$ million)	4,397.8	4,660.0	5,060.6	5,465.4	5,823.3	6,184.2	1,551.0	376.5
1 year change	956.7	262.2	400.6	404.8	357.9	361.0	26.7	-3.5
% change	27.8	6.0	8.6	12.4	6.5	6.2	1.7	-0.9
Ratio: active inventory to sales								
Single family	1.6	1.6	1.5	1.6	1.6	1.3	1.7	1.9
Condo	1.7	1.9	1.7	1.8	1.8	1.8	2.2	2.6

**Median contract prices, CY to date in September 2018**: single family \$723,450 (5.6% 1 yr ch); condo \$463,000 (2.9% 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

#### Growth in FHFA house price index for DC increased in the June quarter

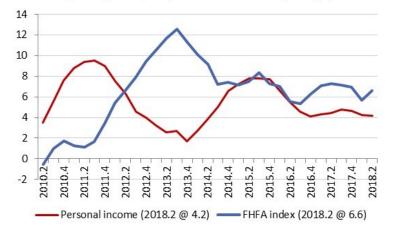
- •The percentage change in DC home prices increased in the June quarter, according to the Federal Housing Finance Agency Index of single-family same-property transactions. DC's gain over the prior year was 8.4%. The US index was up 6.9%, and the Washington metropolitan area gain was 4.9%.
- •25.3% of all single family sales for the 12-months ending September were for properties greater than \$1 million.
- •In the June quarter, sales of new condominiums over the past 12 months were 14.2% lower than a year earlier.

Table 21. Federal Housing Finance Agency Price Index for single family property in DC, DC metro area, and US: June 2018 (2018.2)

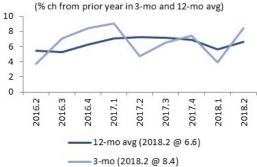
	Fiscal year average										
Indicator	FY 2014	FY 2015	FY 2016	FY 2017	2018.1	2018.2					
% change from prior year	6 change from prior year in value of index										
DC	7.2	8.4	5.3	7.2	4.0	8.4					
DC metro area	6.2	4.1	3.4	5.4	5.8	4.9					
US	6.3	5.5	5.6	6.6	7.5	6.9					

Source: 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.

DC Personal Income and FHFA Housing index: 2010.2 to 2018.2 (% change from prior year in 12-month moving average)



FHFA Expanded-data housing price index for DC: 2016.2 to 2018.2 (% ch 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: 2015.2 to 2018.2

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

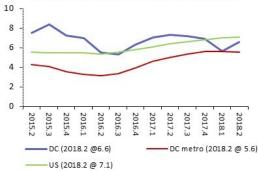


Table 22. D.C. Single family and condominium home sales at prices of \$1 million or more: September 2018

				12-mo	3-mo	
				moving	moving	This
Category	FY 2015	FY 2016	FY 2017	total	total	month
Single family homes	765	936	1,057	1,192	308	69
1 year change	31	171	121	135	32	9
% change	4.2	30.5	12.9	12.8	11.6	15.0
percent of all single family sales	18.7	21.3	23.2	25.3	26.2	22.4
Condominiums	160	167	189	222	51	11
1 year change	32	7	22	33	8	-2
% change	25.0	21.9	13.2	17.5	18.6	-15.4
percent of all condominium sales	4.2	4.2	4.7	5.2	4.6	3.9

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

Table 23. Single family housing permits and sales of new condo. units in DC: FY 2013 to 2018.2

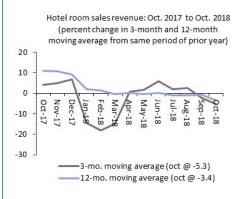
	Condo.
Permits	Sales
368	442
267	516
293	483
283	680
367	482
209	489
-119	-81
-36.3	-14.2
	368 267 293 283 367 209 -119

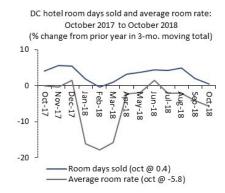
Source: Census Bur. (permits), and Delta Associates (condo sales)

#### **Hospitality**

#### Growth in hotel stays has slowed down and room rates are less than a year ago

- •In October the 12-month moving total for hotel room-days sold was 2.5% above a year earlier. For the past 3 months, compared to the prior year the number of room-days sold in October was 0.4% greater, the average room rate was 5.8% less, and hotel revenues were down by 5.3%.
- Employment in food services was 1.6% more in October than a year earlier as measured by the 3-month moving average. Hotel employment was 2.9% higher.
- •September airline traffic into the DC area was up 1.7% compared to a year earlier as measured by the 3-month moving total. Reagan National was down 1.7%. For the past 12-months, total traffic into the DC area was 2.5% more than the prior year.







3-month

moving

12-month

moving

Table 27. Hospitality Industry: October 2018

							moving	moving	
							total or	total or	
Indicator	Units	date	FY 2015	FY 2016	FY 2017	FY 2018	average*	average*	This month
Hotel stays									
Hotel room-days sold	('M)	oct	8.197	8.332	8.740	9.020	9.014	2.354	0.842
	1 yr ch		0.328	0.135	0.408	0.280	0.217	0.011	-0.006
	1 yr % ch		4.2	1.3	4.9	3.2	2.5	0.4	-0.7
Average room rate	\$	oct	215.34	221.19	233.03	223.93	221.32	215.887	255.300
	1 yr ch		5.46	7.18	11.84	-9.11	-13.37	-13.210	-27.540
	1 yr % ch		2.6	3.3	5.4	-3.9	-5. <i>7</i>	-5.8	<i>-9.7</i>
Occupancy rate	%	oct	77.5	78.0	78.5	78.1	77.9	80.015	85.000
(average)	1 yr ch		0.9	0.5	0.5	-0.5	-0.8	-2.133	-1.900
	1 yr % ch		1.2	0.7	0.6	-0.6	-1.1	-2.6	-2.2
Room revenue	(\$M)	oct	1,765.1	1,843.0	2,036.7	2,019.8	1,994.9	508.139	214.977
	1 yr ch		113.6	83.2	193.7	-16.9	-69.6	-28.684	-24.853
	1 yr % ch		6.9	4.7	10.5	-0.8	-3.4	<i>-5.3</i>	-10.4
Airline passengers		-							
DCA	1 yr % ch	sep	10.3	2.8	3.2	-1.2	-1.2	-1.7	-3.7
IAD	1 yr % ch	sep	0.3	-0.1	5.0	4.1	4.1	4.5	4.1
BWI	1 yr % ch	sep	4.1	6.0	5.6	4.5	4.5	2.2	2.1
Total	1 yr % ch	sep	4.8	3.0	4.6	2.5	2.5	1.7	0.9
Employment		-							
Accommodations	level ('000)	oct	15.2	14.9	15.0	14.8	14.8	15.3	15.4
	1 yr ch		0.0	-0.3	0.1	-0.2	-0.1	0.4	0.5
	1 yr % ch		-0.2	-1.9	0.6	-1.3	-0.9	2.9	3.4
Food and bev	level ('000)	oct	49.7	51.5	52.0	54.3	54.3	54.5	54.8
	1 yr ch		2.7	1.7	0.6	2.2	2.1	0.8	0.3
	1 yr % ch		5.6	3.5	1.1	4.3	3.9	1.6	0.6
* Total for hotel rooms sold o	and room revenue.								

<sup>\*</sup> Total for hotel rooms sold and room revenue.

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

#### US economy and the federal government sector

## Federal non-defense spending is rising, mostly for purchased goods and services

- $\bullet$  Compared to the same quarter a year ago, in the September quarter Nominal GDP growth was 5.5% and real growth was 3.0%
- •During the past quarter, quarterly GDP growth was 3.5% (real) and 5.0% (nominal) (annualized growth rates).
- $\bullet$ Federal government non-defense spending for consumption and investment increased by 4.7% in the 2018.3 quaarter from a year earlier. The growth rate has been rising, but is still less than the growth rate for nominal GDP (5.5%) and defense spending (also 5.5%).

Table 29. Federal government consumption and investment, US GDP accounts: 2018.3

(percent change from same period of prior year)											
					12-mo						
Indicator	FY 2015	FY 2016	FY 2017	FY 2018	avg	2018.3					
Non-defense	4.1	2.9	3.2	4.0	4.0	4.7					
Compensation of employees	4.6	4.2	4.1	1.2	1.2	1.5					
Purchases of goods and services	6.1	3.8	1.7	9.0	9.0	9.3					
Gross investment	3.6	1.4	3.0	2.7	2.7	3.3					
Defense	-2.4	-0.4	1.7	3.7	3.7	5.5					
Compensation of employees	-0.4	1.2	1.7	0.4	0.4	0.4					
Purchases of goods and services	-5.4	-0.5	1.2	8.5	8.5	15.3					
Gross investment	-2.5	-1.4	4.3	4.6	4.6	3.2					
All federal consumption and invest.	0.1	0.9	2.3	3.9	3.9	5.2					

Source: BEA (November 28, 2018). Nominal values.

Note: federal spending does not include social security, medicare, or grants.

#### Table 30. Qtr. to Qtr. ch. in US GDP: 2017.3 to 2018.3

(% ch. from previous quarter at seasonally adj. annual rates)										
Indicator	2017.3	2017.4	2018.1	2018.2	2018.3					
US GDP real	2.8	2.3	2.2	4.2	3.5					
US GDP nominal	4.8	5.1	4.3	7.6	5.0					
Wages and salaries	5.3	3.8	5.7	2.8	4.3					
Personal income	4.2	4.9	5.1	3.4	4.0					
Note: GDP=Gross Domestic P	roduct Sour	ce: BEA, up	dated Nov.	28, 2018.						

Federal non-defense spending and US GDP:

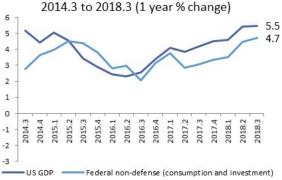


Table 28. US GDP, income, and inflation: 2018.3

(percent change from same period of prior year)

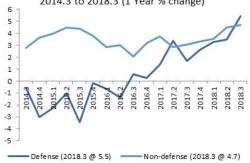
					12-mo	
Indicator	FY 2015	FY 2016	FY 2017	FY 2018	avg	2018.3
GDP real	3.1	1.6	2.1	2.7	2.7	3.0
GDP nominal	4.4	2.5	3.9	5.0	5.0	5.5
Consumption	4.4	4.0	4.3	4.7	4.7	5.2
Investment	7.2	-1.3	5.0	7.7	7.7	8.6
Corporate profits*	1.3	2.9	4.2	6.7	6.7	10.3
S and P stock index	9.7	0.4	13.8	16.2	16.2	15.5
US CPI	0.3	0.9	2.1	2.4	2.4	2.6

12-ma

Source: BEA (Novemer 28, 2018), BLS, Fred.

\*Before tax, with IVA and CCAdj.

Defense and non-defense federal spending: 2014.3 to 2018.3 (1 Year % change)



Quarterly change in US Real and Nominal GDP: 2016.3 to 2018.3

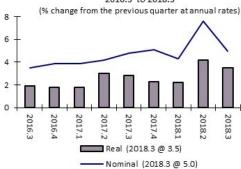


Table 31. Monthly selected US Indicators: June 2018 to October 2018

Table 31. Monthly Science 05 maleutors suite	2010 10 0011	, DC. 2010			
Indicator	June	July	August	September	October
S and P stock index (level)	2754	2794	2858	2902	2785
% change from prior month	2.0	1.4	2.3	1.5	-4.0
% change from 1 year ago	13.2	13.8	16.4	16.4	8.9
10 yr. Treasury Interest rate (level)	2.91	2.89	2.89	3.00	3.15
CPI % ch from prior month (seasonally adjusted)	0.13	0.17	0.22	0.06	0.33
CPI % ch from prior year (seasonally adjusted)	2.80	2.89	2.68	2.27	2.53
Jobs (seasonally adjusted level, in millions)	148.93	149.10	149.38	149.50	149.75
change from prior month (thousands)	208	165	286	118	250
% change from prior month	0.1	0.1	0.2	0.1	0.2
Resident employment (season. adj. level, in mil.)	155.58	155.97	155.54	155.96	156.56
change from prior month (thousands)	102	389	-423	420	600
% change from prior month	0.1	0.3	-0.3	0.3	0.4
Unemployment rate (seasonally adj.)	4.0	3.9	3.9	3.7	3.7
Source: BLS and Fred (Federal Reserve data base)					

#### DC tax collections

DC tax collections (before earmarking): October 2016 to October 2018 (\$ million; 12 mo. moving total)



One year change in 12-mo. moving total DC tax collections: Oct. 2017 to Oct. 2018 (\$M)

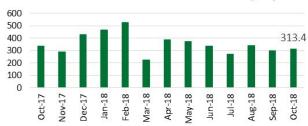


Table 32. Tax Collections (before earmarking): October 2018 (Preliminary)

(\$ million)	Reven	ue (from CA	FR)			Tax collections		
					12-month	FY 2019	3-month	
Tax	FY 2015	FY 2016	FY 2017	FY 2018	moving total	to date	moving total	This month
Total taxes	6,916.8	7,241.0	7,459.4	7,760.0	7,789.1	431.3	2,564.5	431.3
1 year change	626.9	324.2	346.7	300.6	313.4	29.1	118.4	29.1
% change	10.0	4.7	4.9	4.0	4.2	7.2	4.8	7.2
Real property	2,194.5	2,357.5	2,483.6	2,555.5	2,566.1	28.0	1,229.2	28.0
1 year change	178.9	163.0	136.1	71.9	83.8	10.6	18.3	10.6
% change	8.9	7.4	5.8	2.9	3.4	61.4	1.5	61.4
General sales	1,315.3	1,343.1	1,420.1	1,482.8	1,493.9	150.0	361.9	150.0
1 year change	143.2	27.8	119.4	62.7	74.0	11.1	25.4	11.1
% change	12.2	2.1	9.2	4.4	5.2	8.0	7.6	8.0
Individual income	1,868.0	1,907.9	1,915.6	2,089.7	2,097.9	159.9	551.1	159.9
1 year change	188.9	39.8	41.6	174.1	173.0	8.2	43.1	8.2
% change	11.2	2.1	2.2	9.1	9.0	5.4	8.5	5.4
withholding	1,553.2	1,627.6	1,744.5	1,832.8	1,827.5	144.5	444.7	144.5
1 year change	80.3	74.4	120.9	88.3	72.5	-5.3	11.7	-5.3
% change	5.5	4.8	7.4	5.1	4.1	-3.5	2.7	-3.5
non-withholding	314.8	280.3	171.2	256.9	270.3	15.5	106.3	15.5
1 year change	108.6	-34.5	-79.3	85.7	100.5	13.5	31.4	13.5
% change	52.7	-11.0	-31.7	50.1	59.2	672.6	41.9	672.6
Corporate income	308.0	387.1	404.1	414.3	414.0	13.9	105.4	13.9
1 year change	27.8	79.1	47.9	10.2	8.3	-0.3	12.8	-0.3
% change	9.9	25.7	13.4	2.5	2.0	-2.3	13.9	-2.3
Unincorporated Bus.	139.8	169.4	163.6	133.9	127.4	-4.4	21.2	-4.4
1 year change	4.4	29.6	5.4	-29.7	-33.9	-6.5	-6.3	-6.5
% change	3.2	21.2	3.4	-18.2	-21.0	na	-22.7	na
Deed taxes*	480.6	445.2	460.9	471.3	472.6	48.6	142.6	48.6
1 year change	89.4	-35.4	16.7	10.5	3.9	1.3	21.9	1.3
% change	22.8	-7.4	3.8	2.3	0.8	2.6	18.1	2.6
Other taxes	610.6	630.9	611.4	612.5	617.3	35.4	153.2	35.4
1 year change	-5.8	20.3	-20.5	1.1	4.2	4.8	3.1	4.8
% change	-0.9	3.3	-3.2	0.2	0.7	15.8	2.1	15.8

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

Note: (1) Revenues for the fiscal years 2014 through 2017 are based on the CAFR for those years.

Source: OCFO/ORA

<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.

#### Withholding growth has slowed

- For the 12 month period ending October total tax collections (before earmarking) were \$313.4million (4.2%) more than in the prior year. For the last 3 months they were up 4.8% from last year.
- •Individual income tax collections were 9.0% above last year for the 12-months ending October and withholding was 4.1% higher. For the past 3 months, withholding was up 2.7%.
- •General sales tax collections were 5.2% above last year for the 12-months ending October. For the past 3 months, they were 7.6% above last year.
- Deed tax collections for the 12-months ending October were up 0.8% from last year; for the past 3 months they were up 18.1%.
- •Corporate income taxes for the 12 months ending October were up 2.0% while unincorporated business income taxes fell 21.0% from last year.

#### Total tax collections (before earmarks): September 2017 to September 2018



#### General Sales tax collections (before earmarks): October 2017 to October 2018

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



#### Withholding for the Individual Income tax: October 2017 to October 2018

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



#### General Sales tax and Withholding for the Individual Income tax: October 2017 to October 2018

(% change from prior year in the 12-month moving total)

8.0

6.0

4.0

2.0

May 18

May 18

May 18

May 18

May 18

General sales (oct @ 5.2)

Withholding (oct @ 4.1)

#### Deed tax collections (before earmarks): October 2017 to October 2018



#### US economic forecasts

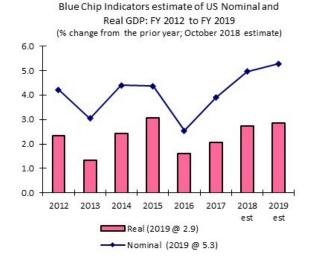
#### Forecasts anticipate faster GDP growth in FY 2019

- •The October Blue Chip Indicators raised real GDP growth in FY 2019 to 2.9%. Nominal growth stayed at 5.3% for FY 2019.
- •CBO's August 2018 economic and budget outlook: nominal GDP growth rate of 5.1% in FY 2019.
- •The Blue Chip Indicators October forecast for inflation (CPI): 2.4% for FY 2019.
- •Global Insight and Moody's Analytics October forecasts expect US Personal Income growth to be in the 4.4% to 5.0% range for FY 2019 and FY 2020.
- •S&P 500 September baseline forecasts: For the 4th quarter of 2018, Global Insight says the stock market will be 12.6% higher than a year earlier, Moody's says it will be 10.6% higher. Global Insight has small (2.5%) additional gain by the 4th quarter of 2019, while Moody's anticipates a sharp decline (-12.6%).

Table 33. Forecasts for US nominal and real GDP: FY 2014 through FY 2019

(% change from prior fiscal year)

	real				nominal	
Fiscal year and date of forecast	Blue Chip	Moody's Analytics	IHS Global	Blue Chip	Moody's	IHS Global
			Insight	•	Analytics	Insight
FY 2014 Actual	2.4	2.4		4.4	4.4	
FY 2015 Actual	3.1	3.1	3.1	4.4	4.4	4.4
FY 2016 Actual	1.6	1.6	1.6	2.6	2.6	2.6
FY 2017 Actual	2.1	2.1	2.1	3.9	3.9	3.9
FY 2018						
July	2.8	2.8	2.7	4.9	4.9	5.2
August	2.7	2.7	2.7	5.0	5.0	5.0
September	2.7	2.7	2.7	5.0	5.0	5.0
October	2.7	2.7	2.7	5.0	5.0	5.0
FY 2019						
July	2.7	2.9	3.0	5.0	5.7	7.0
August	2.8	3.1	3.0	5.2	5.8	5.3
September	2.8	3.0	2.9	5.3	5.8	5.3
October	2.9	3.1	2.9	5.3	5.8	5.4



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

Table 34.CBO estimates of US economic indicators: FY 2017 to FY 2020

Indicator	FY 2017	FY 2018	FY 2019	FY 2020
Real GDP (% ch from prior yr.)	2.1	2.9	3.0	2.1
Nominal GDP (% ch from prior yr.)	3.8	4.9	5.1	4.3
CPI (% ch from prior yr.)	2.1	2.4	2.3	2.4
10 yr. Treasury bond rate	2.3	2.8	3.5	3.8
Unemployment rate	4.5	4.0	3.4	3.5

Source: Congressional Budget Office, An Update to <u>The Budget and Economic Outlook: 2018 to 2028</u>, August 2018

Table 36. Forecasts for S and P 500: 2017.4 to 2019.4

	% chang	ge from pri	or year	% chan	ge from pri	or year
Forecast date	2017.4	2018.4	2019.4	2017.4	2018.4	2019.4
	GI	obal Insigh	nt	Mod	ody's Analy	tics
July	19.2	8.7	-0.9	19.2	1.8	-11.1
August	19.2	8.7	-0.9	19.2	5.7	-11.3
September	19.2	11.4	0.9	19.2	10.4	-12.7
October	19.2	12.6	2.5	19.2	10.6	-12.6

Table 35. Forecasts for US Personal Income: FY 2017 to FY 2020

Forecast	% change from prior fiscal yr					% change from prior fiscal			al yer
date	2017	2018	2019	2020		2017	2018	2019	2020
,	Global Insight						Moody's	Analytics	;
Jul	2.6	4.5	4.5	4.8		2.6	4.2	5.0	4.3
Aug	4.0	4.5	4.5	4.8		4.0	4.6	5.0	4.4
Sep	4.0	4.5	4.6	4.9		4.0	4.6	4.9	4.4
Oct	4.0	4.5	4.5	5.0		4.0	4.6	4.8	4.4

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

Table 37. Blue Chip forecasts for CPI and 10 year Treasury interest rate: FY 2017 to FY 2019

(% change from prior fiscal year)										
Forecast	CPI			10 y	10 yr Treasury rate					
date	2017	2018	2019	2017	2018	2019				
Jul	2.0	2.5	2.3	2.3	2.8	3.3				
Aug	2.0	2.4	2.3	2.3	2.8	3.3				
Sep	2.0	2.4	2.3	2.3	2.8	3.3				
Oct	2.0	2.4	2.4	2.3	2.8	3.3				
Source: Blue Chip Indicators										

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

#### Global Insight and Moody's Analytics have different views of DC population, job growth, and income over the next several years.

- Jobs: Global Insight anticipates DC job growth will rise to 9,077 in FY 2020, while Moody's says it will be less than half that.
- Population: Global Insight anticipates a gradual slowdown in annual population growth; Moody's has a sharper decline which essentially cuts all net in-migration by 2019.
- •Income: Global Insight raised slightly its estimate of FY 2019 Personal Income growth to 4.0%; Moody's cut its estimate to 3.2%.
- Apartments and office space. Delta Associates anticipates that the supply of new Class A apartment space will outpace demand over the next several years, but new demand and supply are equal for office space.

Table 38. Forecasts of DC jobs and population to FY 2020

	_	Glob	al Insight		Mood	y's Analyti	ics
			1 year ch	nange		1 year c	hange
	FY	Level	amount	%	Level	amount	%
Jobs	2017	788,575	7,692	1.0	788,550	7,675	1.0
	2018	794,931	6,356	0.8	794,875	6,325	0.8
	2019	802,878	7,947	1.0	801,225	6,350	0.8
	2020	811,956	9,077	1.1	805,550	4,325	0.5
Population	2017	692,750	9,987	1.5	692,800	9,900	1.4
	2018	701,886	9,136	1.3	699,125	6,325	0.9
	2019	710,056	8,169	1.2	703,450	4,325	0.6
	2020	717,284	7,228	1.0	707,500	4,050	0.6

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

Table 40. Forecasts of DC Personal Income to FY 2020

Date of est.		Global I	nsight		Moody's Analytics			
	FY 2017	FY 2018	FY 2019	FY 2020	FY 2017	FY 2018	FY 2019	FY 2020
July	3.0	2.9	4.9	5.2	2.6	4.2	5.0	4.3
August	3.0	2.7	3.1	3.9	3.0	3.0	4.1	3.9
September	3.0	2.7	3.2	4.5	3.0	2.9	3.8	3.9
October	4.8	3.8	4.0	4.8	4.8	3.8	3.2	2.6

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

Table 39. Forecasts of DC resident jobs, households, and housing starts to FY 2020

		Global	Moody's
	FY	Insight	Analytics
Resident	jobs (1 y	ear change	)
	2017	6,483	6,500
	2018	6,473	6,575
	2019	8,805	7,275
	2020	7,248	1,675
Househol	<b>ds</b> (1 yea	ar change)	
	2017	3,815	9,125
	2018	3,976	3,800
	2019	3,797	3,625
	2020	3,694	3,600
Housing s	tarts		
	2017	4,353	4,111
	2018	4,924	4,133
	2019	3,196	3,805
	2020	2,849	3,964

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

Table 41. Oct. forecasts for employment and Personal Income for DC, the metro area, and the US: FY 2017 to FY 2020

(percent change from prior year) Global Insight Moody's Analytics Indicator 2017 2018 2019 2020 Wage and salary jobs 1.0 0.8 1.0 1.1 1.0 0.8 0.8 0.5 DC. 1.8 1.5 1.7 0.7 Metro area 1.6 1.5 1.2 1.5 0.7 Personal Income 3.8 3.2 2.6 DC Metro area 4.1 3.9 4.2 3.5 US 4.0 4.5 4.5 5.0 4.0 4.6 4.8 Source: IHS Global Insight and Moody's Analytics. Baseline forecasts

surrounding metro area: Sep. 2018 to Sep. 2021

Indicator	DC	No VA	Sub MD	Total	DC % of total					
Inventory September 2018										
Inventory (msf)	26,978	68,796	38,347	134,121	20.1					
Estimated net activity to September 2021										
new supply (msf)	15,649	13,121	8,370	37,140	42.1					
new demand (msf)	11,340	8,910	6,750	27,000	42.0					
Source: Delta Associates										

Table 42. Oct. DC forecasts for wages and unemployment: **FY 2017 to FY 2020** (% change from prior year)

	Global	Insight		Moody's Analytics					
2017	2018	2019	2020		2017	2018	2019	2020	
Wages a	nd salari	es earne	d in DC						
4.3	3.6	4.2	4.7		4.3	3.6	4.9	4.3	
DC reside	ent wage	es and sal	laries						
5.5	4.0	3.8	4.3		4.4	3.5	4.3	4.8	
DC Unen	nployme	nt rate (l	evel)						
6.1	5.7	5.3	4.8		6.2	6.1	5.7	5.5	

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

Table 43. Delta Associates outlook for Class A apartments in DC and the Table 44. Delta Associates outlook for Class A commercial office space in DC and the surrounding metro area: Sep. 2018 to Sep. 2020

Indicator	DC	No VA	Sub MD	Total	DC % of total				
Inventory September 2018									
Inventory (msf)	144.2	183.4	85.5	413.1	34.9				
Estimated net activity to September 2020									
new supply (msf)	4.2	1.5	2.7	8.3	50.6				
new demand (msf)	4.2	4.0	3.1	11.3	37.2				
Source: Delta Associates msf = million square feet									

#### DC revenue estimate

### The September estimate for tax revenue (before earmarks): \$294 million more in FY 2018 than in FY 2017, followed by an additional \$309 million increase in FY 2019

- •The tax revenue increase (before earmarks) of 3.3% in FY 2017 is estimated to be followed by a 3.9% increase in FY 2018, and a 4.0% increase in FY 2019.
- •Real property tax growth of \$115.9 million in FY 2017 accounted for 48.4% of the net increase in taxes for that year. Real property's share of the increase for FY 2018 is 38.0% and for FY 2019 is 41.3%.
- •Individual income tax revenue rose 2.6% in FY 2017, and is expected to grow by 5.8% in FY 2018 and 4.8% in FY 2019.
- •The General sales tax, which grew 5.7% in FY 2017, is estimated to grow 4.8% in FY 2018 and 7.0% in FY 2019.
- •Deed taxes grew 3.8% in FY 2017, and are estimated to rise 4.8% in FY 2018 and decrease 1.1% in FY 2019.
- •As a % of DC Personal Income, tax revenue is expected to fall slightly from 14.0% in FY 2017 and 2018 to 13.9% in 2019.

Table 45. DC Tax Revenue (before earmarks) for FY 2017 through FY 2020: September 2018 revenue estimate

Tax	FY le	vel (\$ millio	n)		Change fro	om prior ye	ar (\$ M)		% chang	e from pri	om prior year		
	2017	2018	2019	2020	2017	2018	2019	2020	2017	2018	2019	2020	
Real property	2,473.3	2,585.1	2,713.0	2,803.0	115.9	111.8	127.9	90.0	4.9	4.5	4.9	3.3	
Deed taxes	460.9	482.8	477.4	478.2	16.7	22.0	-5.4	0.8	3.8	4.8	-1.1	0.2	
General sales	1,419.2	1,487.3	1,591.4	1,666.1	76.1	68.1	104.1	74.7	5.7	4.8	7.0	4.7	
Individual income	1,958.3	2,072.3	2,171.6	2,257.7	50.4	114.0	99.3	86.1	2.6	5.8	4.8	4.0	
Withholding	1,766.6	1,863.7	1,943.2	2,030.8	139.0	97.2	79.5	87.7	8.5	5.5	4.3	4.5	
non-withholding	191.7	208.6	228.4	226.9	-88.6	16.9	19.8	-1.6	-31.6	8.8	9.5	-0.7	
Business income	554.2	531.9	513.5	534.6	-2.2	-22.4	-18.4	21.1	-0.4	-4.0	-3.5	4.1	
Other	606.9	607.3	609.3	599.3	-17.6	0.4	2.0	-10.0	-2.8	0.1	0.3	-1.6	
Total	7,472.9	7,766.8	8,076.1	8,338.8	239.3	293.9	309.4	262.7	3.3	3.9	4.0	3.3	

Source: ORA. Sep. 28, 2018 revenue estimate. 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 2017 is from the CAFR. FY 2018 reflects full implementation of DC tax cut legislation.

Table 46. DC population and employment: FY 2017 to FY 2020

		,		-
item	2017	2018	2019	2020
Wage and salary				
employment	788,575	794,960	802,871	809,059
1 year change	7,692	6,385	7,911	6,188
% change	1.0	0.8	1.0	0.8
DC population	692,750	702,247	711,354	719,943
1 year change	9,987	9,497	9,107	8,589
% change	1.5	1.4	1.3	1.2
Unemployment rate	6.1	5.7	5.6	5.6
Source: ORA September 2018	revenue estim	ate.		

Table 47. DC Income and stock market assumptions:

FY 2017 to FY 2020 (% change from prior year)									
item	2017	2018	2019	2020					
Wages and salaries									
earned in DC	3.0	4.6	4.2	4.0					
Wages and salaries									
earned by DC residents	3.8	5.1	4.7	4.3					
DC Personal income	3.7	4.1	4.6	4.4					
S and P 500 stock index	19.2	3.9	1.7	1.7					
Source: ORA September 2018 reve	enue estimat	e. Stock inc	lex, on a CY	basis,					

Source: ORA September 2018 revenue estimate. Stock index, on a CY basis, represents the % ch. from the December quarter of the prior yr.

Table 48. DC tax revenue (before earmarks) and DC Personal Income: FY 2011 to FY 2020

able 48. DC tax revenue (before earmarks) and DC refsonal income. Fr 2011 to Fr 2020										
item	2011	2012	2013	2014	2015	2016	2017	2018 est	2019 est	2020 est
Tax revenue (\$ million)										
Level	5,325	5,853	6,100	6,290	6,917	7,234	7,473	7,767	8,076	8,339
Change from prior year	320	528	247	189	627	317	239	294	309	263
Percent change from prior yea	r									
Tax revenue	6.4	9.9	4.2	3.1	10.0	4.6	3.3	3.9	4.0	3.3
Personal Income	9.1	4.5	2.8	5.1	7.9	5.1	3.7	4.1	4.6	4.4
Tax revenue as percent of										
Personal Income	13.3	14.0	14.2	13.9	14.2	14.1	14.0	14.0	13.9	13.8

Source: ORA. September 2018 revenue estimate. The table includes tax revenue only, before all earmarks, and excludes all non-tax revenues, lottery, and "O-type" earmarked revenues.

Private sector jobs growth in DC and the US: October 2018 (% change from prior yr. in 3-month moving avg.)

(% change from prior yr. in 3-month moving avg.)

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(% change from prior yr. in 3-month moving avg.)

(% change from prior yr. in 3-month moving avg.)

(% change from prior yr. in 3-month moving avg.)

- Peak growth rates for DC jobs in 2018 were just slightly above the US averages for those months. By contrast, DC 's rates of increase in the 2011, 2013, and 2016 peak periods were from 1.1% to 1.8% higher than the US averages at that time.
- DC's share of all US private sector jobs has fallen in the past 3 years, having risen in the first six years of the recovery period.



The slowing momentum of DC job growth over the past 3 years can be illustrated by comparing job growth in October 2015 (the last year in which DC's share of the nation's private sector jobs increased) with that of October 2018. From October 2014 to October 2015 DC added 14,600 jobs, well over twice the 6,400 added from October 2017 to October 2018.

- 80% of the growth in 2015—11,832—was in three sectors: education and health; professional and technical services; and leisure and hospitality. In 2018 the net increase in those sectors was down to 3,367. In 2018 education and health lost jobs; the increase in professional and technical services was half that in 2015, and leisure and hospitality growth was about two-thirds of the amount in 2015.
- In 2015 DC's rate of increase in the professional and technical sectors exceeded the national rate (4.0% v 3.3%). In 2018 it was considerably less than the US rate (1.8% to 2.8%).
- DC's rate of increase in leisure and hospitality jobs remained above the US one in 2018 (2.2% v 1.7%), but the national growth rate in 2018 was only about half of what it was in 2015 (3.3% in 2015 v 1.7% in 2018).
- The one bright spot is in the "all other" sector where DC job growth was slightly higher in 2018 than in 2015.

Change from the prior year in DC private sector jobs: Oct. 2015 and Oct. 2018

	Number	of jobs	% change		
	Oct 2014 to	Oct 2017 to	Oct 2014 to	Oct 2017 to	
	Oct 2015	Oct 2018	Oct 2015	Oct 2018	
Education and health	4,933	-400	3.9	-0.3	
Professional and technical	4,333	2,100	4.0	1.8	
Leisure and hospitality	2,566	1,667	3.6	2.2	
subtotal	11,832	3,367	3.9	1.0	
All other	2,768	3,033	1.3	1.4	
Total	14,600	6,400	2.8	1.2	

Source: BLS. Calculated from 3-month moving averages of seasonally unadjusted data.

Looking ahead, DC's private sector has shown considerable resiliency in the post-recession period and additional job growth can be expected. Yet given the longer slowing trend the current slowdown certainly bears watching over the coming months. Expectations of future job growth also need to take into consideration both the length of the current recovery in the US economy and uncertainty about federal spending in DC.

The US economy is now well into its 10th year of recovery from the Great Recession and is soon to be the longest expansion at least since World War II. If the US economy slows or falls into recession DC's private sector will be adversely affected as well. If US job growth slows, DC's can continue to grow at the same pace only if its share of US jobs increased, which would require reversing the trend over the past 3 years.

Second, DC's private sector is influenced by the federal spending as both wages of federal employees and procurement contracts are major sources of demand in the District's economy. The 2013 decline in DC's private sector employment no doubt reflects the cutback in federal spending due to sequestration.

—Stephen Swaim, DC Office of Revenue Analysis

#### **Appendix**

#### Private sector jobs in DC: October 2009 to October 2018

	October	October				Avg. % ch.
sector	2009	2018	9 yr ch	% ch	Avg. per yr	per yr.
Education and health	103,833	133,767	29,934	28.8	3,326	2.9
Professional and technical	100,867	119,033	18,166	18.0	2,018	1.9
Leisure and hospitality	58,533	79,067	20,534	35.1	2,282	3.4
subtotal	263,233	331,867	68,634	26.1	7,626	2.6
All other	194,634	226,033	31,399	16.1	3,489	1.7
total	457,867	557,900	100,033	21.8	11,115	2.2

Source: BLS. 3-month moving averages for the period shown. The amounts for the month of October 2018 used in the calculation are preliminary.

#### Private sector jobs in DC: October 2014 to October 2015

#### Private sector jobs in DC: October 2017 to October 2018 October October October sector 2017 sector 2014 2015 ch % ch Education and health 134,167 Education and health 125,967 130,900 4,933 3.9 116,933 Professional and technical 108,400 112,733 4.0 Professional and technical 4,333 Leisure and hospitality 77,400 Leisure and hospitality 71,067 73,633 2,566 3.6 subtotal 328,500 3.9 subtotal 305,434 317,266 11,832 All other 214,733 2,768 1.3 217,501 All other total 520,167 14,600 2.8 total 534,767

Source: BLS. 3-month moving averages for the period shown.

#### 223,000 226,033 3,033 1.4 557,900 6,400 551.500 1.2

October

2018

133,767

119,033

79,067

331,867

1 yr ch

-400

2,100

1,667

3,367

% ch

-0.3

1.8

2.2

1.0

Source: BLS. 3-month moving averages for the period shown. The amounts for the month of October 2018 used in the calculation are preliminary.

#### DC and US private sector job growth rates from the prior year: October 2015 and October 2018

	Oct 2014 to Oct 2015		Oct 2017 to Oct 2018	
	DC	US	DC	US
Education and health	3.9	2.8	-0.3	2.1
Professional and technical	4.0	3.3	1.8	2.8
Leisure and hospitality	3.6	3.3	2.2	1.7
All other	1.3	1.7	1.4	1.9
total	2.8	2.2	1.2	2.0

Source: BLS. Calculated from 3-month moving averages of seasonally unadjusted data.

About the data. DC private sector wage and salary information is released each month for the District of Columbia (along with all states) based on an employer survey. For the month of October 2018 the data is preliminary and may be revised when the November data is released. Annual revision to the data occurs annually and will next occur in March 2019. All calculations here are based on 3-month moving averages of seasonallyunadjusted data (e.g., October 2018 is the average of August, September, and October as reported by BLS).

**ORA reports and documents.** From time to time the Office of Revenue Analysis prepares revenue estimates, fiscal impact statements on pending legislation, reports, and other documents on subjects related to DC 's economy and taxes. These documents are posted on the OCFO web site (www.cfo.dc.gov) 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 28, 2018.

DC Tax Facts, 2018. Details on all DC taxes.

Tax Rates and Tax Burdens 2016 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 2016 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.

Review of economic development tax expenditures. November 2018. Comprehensive description and analysis of DC tax expenditures related to economic development incentives.

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	October	December 21
D.C. Personal Income	BEA	2018.2	December 20
D.C. Tax Collections	OTR/ORA	October	c. December 15
D.C. Housing Sales	MRIS*	September	c November 10
D.C. Commercial Office Building data	CoStar and Delta	2018.3	c. January 10
DC Apartment data	CoStar and Delta	2018.3	c. January 10
D.C. Hotel stay information	Smith Travel Research	October	c. December 20
Consumer Price Index	BLS	October	December 12
U.S. Jobs and Labor Force	BLS	October	December 7
U.S. GDP and Personal Income	BEA	2018.3	December 21
S and P 500 Stock Index	Fred	October	December 1
Interest rate on 10-Year Treasury Securities	Fred	October	November 1
IHS Global Insight D.C. forecast	Global Insight	October	c. November 20
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. November10

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 (<a href="mailto:sww.cfo.dc.gov">sww.cfo.dc.gov</a>).

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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