

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

District of Columbia Economic and Revenue Trends: June 2019

Muriel Bowser, Mayor Jeffrey S. DeWitt, Chief Financial Officer Fitzroy Lee, Deputy CFO & Chief Economist Stephen Swaim, Senior Economist

Highlights:

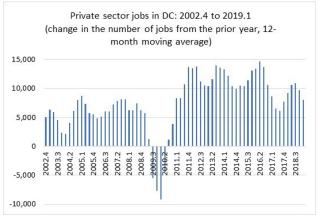
\Diamond	DC job growth continues to slow2
\Diamond	Resident employment growing faster3
\Diamond	Rise in housing per- mits8
\Diamond	Higher income tax collections16

tions16
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, & blog24
About this report24

DC's private sector job growth has slowed, but continues apace in higher wage industries

Over the last 3 years, the percentage growth in jobs in the higher wage sector has run close to the national average

In the five years before the Great Recession started, DC's private sector added 30,117 jobs, an average of about 6,000 per year. When the recession was over the pace of private sector job gains jumped to 12,000 per year, adding more than 61,200 from 2011 to 2016. Since 2016, however, private sector growth has been slower, dropping to an average of about 8,000 per year. The slowdown has not, however, been primarily in industrial sectors with the highest average wages.



Information, financial, professional, scientific, technical, and executive management services, which have average annual wages per job in excess of \$133,000, account for about 31 percent of all private sector jobs and half of all wages and salaries earned in DC's private sector. As overall private employment slowed over the latest three year period of 2016.1 to 2019.1, these higher wage industries fared much better than most other parts of DC's private economy.

As a group, the higher-wage sectors of DC's economy actually grew faster in the last 3 years (a time when the pri-High wage and all other jobs in DC: 2013.1 to

vate sector was slowing) than they did over the prior three. (Cont'd on p. 21.)

Change in DC private sector jobs: 2013.1 to 2019.1

	Numbe	r of jobs	% change			
	2013.1 to	2016.1 to	2013.1 to	2016.1 to		
	2016.1	2019.1	2016.1	2019.1		
High wage group	7,308	9,333	4.7	5.8		
Other private	29,925	16,558	8.9	4.5		
DC private sector	37,233	25,892	7.6	4.9		



ORA contact information......24

Wage and salary employment

Employment growing in DC at a rate one-quarter of the US average

- \bullet April wage and salary employment in DC was up 3,233 (0.4%) from a year earlier as measured by the 3-month moving average.
- Federal government employment in DC for April was down by 1,700 (0.9%). The private sector gained 3,933 (0.7%).
- •Total year-over-year DC metropolitan area employment increased 26,000 (0.8%) in April as measured by the 3-month moving average. Of the increase, 12.4% was in DC.
- •Suburban Washington employment in April increased by 0.9% from a year earlier.
- •Seasonally adjusted DC jobs decreased by 1,300 in April from the prior month, and are 2,600 more than in November.

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

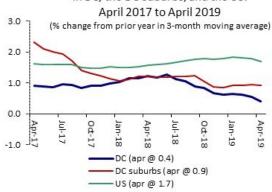


Table 1. Wage and salary employment in DC, the Washington metro area, and the US: April 2019

						3-mo	
Jurisdiction	FY 2015	FY 2016	FY 2017	FY 2018	12-mo avg	average	This month
District of Columbia	759,417	775,183	782,583	790,933	793,500	794,033	796,700
1 year change	12,975	15,767	7,400	8,350	5,925	3,233	3,400
% change	1.7	2.1	1.0	1.1	0.8	0.4	0.4
Washington metro area	3,128,000	3,203,450	3,257,800	3,295,517	3,311,133	3,308,700	3,326,900
1 year change	34,600	62,658	54,350	37,717	31,483	26,000	26,500
% change	1.1	2.0	1.7	1.2	1.0	0.8	0.8
Washington suburbs (% ch)	1.4	2.0	1.9	1.2	1.0	0.9	0.9
US (% ch)	2.1	1.8	1.6	1.6	1.8	1.7	1.7

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

Source: BLS. Reflects May revision to April data.

Federal gov. and private sector wage and salary employment in DC: Apr. 2014 to Apr. 2019 (Ch. from prior year in 3-month moving average)

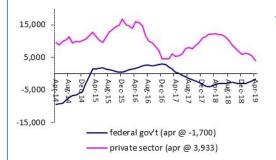


Table 2. Federal government and private sector wage and salary employment in DC: April 2019

					3-month	
Sector	FY 2016	FY 2017	FY 2018	12-mo avg	average	This month
Federal government	199,717	200,208	197,025	195,592	194,767	195,100
1 year ch.	1,692	492	-3,183	-2,650	-1,700	-1,300
% change	0.9	0.2	-1.6	-1.3	-0.9	-0.7
Private sector	535,125	541,250	552,183	555,333	557,233	559,600
1 year ch.	13,658	6,125	10,933	7,333	3,933	3,700
% change	2.6	1.1	2.0	1.3	0.7	0.7

Source: BLS. Not seasonally adjusted. Reflects May revision to April data.

Table 3. Seasonally adjusted DC Employment: November 2018 to April 2019

Indicator	November	December	January	February	March	April			
D.C. Wage and Salary employment	792,800	793,100	795,200	794,900	796,700	795,400			
change from prior month	-1,100	300	2,100	-300	1,800	-1,300			
% change from prior month	-0.1	0.0	0.3	0.0	0.2	-0.2			
Source: BLS seasonally adjusted. Reflects May revision to April data.									

Resident employment and unemployment

Resident employment has increased sharply the last few months

- •In April DC resident employment was up 4,073 (1.1%) from a year earlier (3-mo. moving average). The labor force grew by 4,072 (1.0%).
- •The seasonally adjusted unemployment rate was 5.7% in May, the same as a year earlier.
- •Seasonally adjusted resident employment in April was 1,489 more than in March, and 2,986 more than in November.
- •April initial unemployment insurance claims were up 48.4% from last year (3-month moving average).

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

April 2017 to April 2019 (% ch from prior yr. in 3-mo. moving avg.)

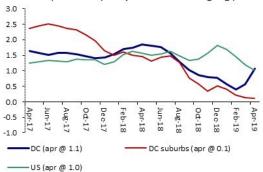




Table 4. Unemployment rates for DC, metro area, and US: May 2019

(percent of labor force)									
	Not seaso	nally adj.		Seasonally adj.					
Jurisdiction	May 2018	May 2019		May 2018	May 2019				
US	3.6	3.4		3.8	3.6				
DC	5.3	5.3		5.7	5.7				
DC metro area	3.2	3.1		na	na				
DC suburbs	2.9	2.8		na	na				
Source: U.S. BLS. na= data not available									

DC 163. Jobs (apr (@ 4,073)

Table 5. Resident employment and unemployment: April 2019

Indicator	FY 2015	FY 2016	FY 2017	FY 2018	12-mo avg	3-mo. avg.	This month
DC Labor force summary							
Resident employment	359,584	369,631	375,828	381,405	383,248	387,505	391,633
1 year change	13,081	10,048	6,197	5,578	3,862	4,073	6,783
% change	3.8	2.8	1.7	1.5	1.0	1.1	1.8
Labor Force	387,250	394,238	400,227	404,416	405,772	410,253	412,561
1 year change	10,863	6,988	5,989	4,189	2,419	4,072	6,777
% change	2.9	1.8	1.5	1.0	0.6	1.0	1.7
Unemployed	27,666	24,606	24,399	23,010	22,524	22,748	20,928
1 year change	-2,219	-3,060	-208	-1,388	-1,442	-1	-6
% change	-7.4	-11.1	-0.8	-5.7	-6.0	0.0	0.0
Unemployment rate	7.1	6.2	6.1	5.7	5.6	5.5	5.1
DC Unemployment insurance (state pr	ogram)						
Initial claims (monthly avg.)	1,596	1,472	1,505	1,611	2,212	1,719	1,765
1 year change	-255	-123	33	106	732	560	588
% change	-13.8	-7.7	2.2	7.1	49.4	48.4	50.0
Weeks compensated (mo. avg.)	32,811	30,261	31,355	30,429	29,215	27,663	28,169
1 year change	-9,322	-2,550	1,094	-926	-2,347	-1,728	729
% change	-22.1	-7.8	3.6	-3.0	-7.4	-5.9	2.7
Source: Labor force: BLS . Unemployment In:	surance: US D	ept of Labor.	Not seasonal	ly adj.			

Table 6. Seasonally adjusted DC Resident employment and unemployment: Nov. 2018 to Apr. 2019

Indicator	November	December	January	February	March	April		
DC Resident employment	381,835	381,907	382,041	382,337	383,332	384,821		
change from prior month	115	72	134	296	995	1,489		
% change from prior month	0.0	0.0	0.0	0.1	0.3	0.4		
DC Unemployment rate (%)	5.3	5.4	5.4	5.5	5.6	5.6		
Source: BLS seasonally adjusted. Reflects May revision to April data.								

Jobs by sectors of the economy

Information led DC job growth in A;pril

- •In April the information sector added 1,200 jobs to lead growth in the private sector. (3-month moving avg.)
- •In the private sector food services also grew by more than 1,000 jobs in April.
- •The sectors with the fastest rate of growth over the prior year in April were amusement and recreation (8.3%) and information (6.4%).
- •Private sector industries losing jobs included accomodations, retail trade, financial services, and business services.
- •Local government rose by by 1,000 (2.4%).
- •The federal government accounted for 24.5% of all DC jobs in April. 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: legal services, information, and amusement and recreation.

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

April 2017 to April 2019

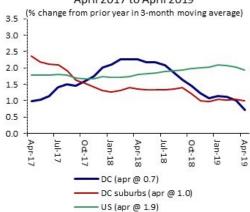


Table 7. Wage and salary employment located in DC: April 2019

	3-mo	nth moving	average		12-mo.		DC share (% 2019 of all se		2018 to Apr DC share o	
			1 year ch	ange	moving	Sector % of	in:		jobs in:	
Industry sector	Apr. 2018	Apr. 2019	Amount	%	avg: % change	all DC jobs, Apr. 2019	metro area	US	metro area	US
Federal government	196,467	194,767	-1,700	-0.9	-1.3	24.5	53.8	6.98	-0.3	-0.09
Local government	41,033	42,033	1,000	2.4	3.0	5.3	12.1	0.21	0.2	0.00
Legal services	28,133	28,533	400	1.4	0.6	3.6		2.51		0.03
Professional and tech. (except legal)	89,833	90,800	967	1.1	1.6	11.4	22.6	1.08	-0.2	-0.03
Employment services	13,433	13,700	267	2.0	1.2	1.7	30.5	0.38	-0.7	0.00
Business services (except employ.)	35,233	34,933	-300	-0.9	-0.2	4.4	17.9	0.44	-0.2	-0.01
Information	18,767	19,967	1,200	6.4	7.8	2.5	27.0	0.71	1.8	0.05
Finance	29,567	29,467	-100	-0.3	0.5	3.7	19.1	0.34	0.4	-0.01
Organizations	67,267	67,633	367	0.5	1.4	8.5	36.5	2.25	-0.2	-0.01
Education	62,333	62,600	267	0.4	1.4	7.9	50.4	1.59	-0.9	-0.02
Health	70,667	71,167	500	0.7	1.2	9.0	22.0	0.35	0.0	-0.01
Food service	54,400	55,500	1,100	2.0	2.8	7.0	22.4	0.46	-0.5	0.00
Accomodations	15,567	15,300	-267	-1.7	-1.0	1.9	34.3	0.77	0.3	-0.02
Amusement and recreation	9,200	9,967	767	8.3	6.4	1.3	21.5	0.43	-0.7	0.02
Retail trade	22,867	22,467	-400	-1.7	-2.2	2.8	8.5	0.14	0.1	0.00
Wholesale trade	4,833	4,900	67	1.4	1.2	0.6	7.8	0.08	0.0	0.00
Construction	15,767	15,333	-433	-2.7	-0.3	1.9	9.8	0.21	-0.3	-0.01
Personal and miscellaneous ser.	8,800	8,200	-600	-6.8	-2.0	1.0		0.29		-0.03
Other private	6,633	6,767	133	2.0	3.1	0.9	5.5	0.04	0.0	0.00
Total	790,800	794,033	3,233	0.4	0.8	100.0	24.0	0.53	-0.1	-0.01
Public sector	237,500	236,800	-700	-0.3	-0.6	29.8	33.4	1.04	-0.2	-0.01
Private sector	553,300	557,233	3,933	0.7	1.3	70.2	21.4	0.44	0.0	-0.01

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 Apr

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 March the federal government accounted for 24.7% of all jobs and 30.9% of all wages and salaries paid in DC. Over the past year, however, federal jobs fell and the sector accounted for just 7.9% of wage increases.
- •Professional and business services accounted for 27.6% of the net gain in employment and 36.0% of the gain in wages paid in DC for the year ending March.
- •Information and finance accounted for 24.0% of the increase in jobs and 8.3% of the gain in wages over the past year.
- Education and health services accounted for 29.5% of last year's net job increases and 12.6% of the increase in wages.
- •Trade and hospitality accounted for 24.4% of the increase in jobs over the past year and 8.7% of the increase in wages.

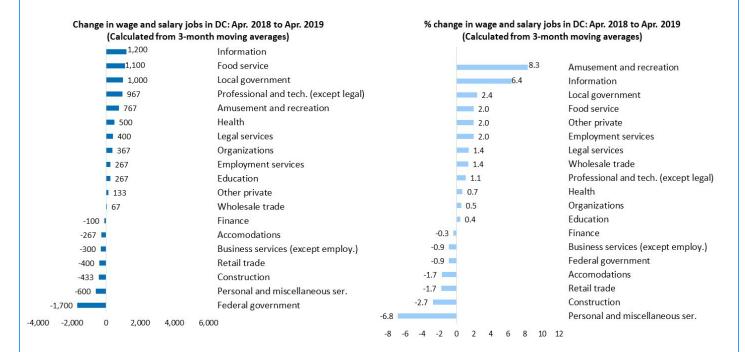


Table 8. Employment and income by sector of the DC economy: 12 mo average ending Mar. 2019 (2019.1)

	_	12 mo. average wage and salary employment in DC ending March			12 mo avg. wages and salaries earned in DC ending			Percentage Distributions			
	. ,	2019			March 2019			yment	Wa	Wages	
		Change			Ch. from					_	
		from Mar			Mar 2018			Ch from		Ch from	
Sector	Level	2018	% change	Level (\$B)	(\$B)	% change	Mar 19	Mar 2018	Mar 19	Mar 2018	
Total	793,217	6,500	0.8	76.08	2.71	. 3.7	100.0	100.0	100.0	100.0	
Federal government	195,700	-2,750	-1.4	23.50	0.22	0.9	24.7	-42.3	30.9	7.9	
Local government	42,492	1,233	3.0	3.57	0.32	9.7	5.4	19.0	4.7	11.7	
Business and professional services	168,300	1,792	1.1	20.19	0.98	5.1	21.2	27.6	26.5	36.0	
Information and financial services	49,300	1,558	3.3	6.75	0.23	3.5	6.2	24.0	8.9	8.3	
Education and health services	131,083	1,917	1.5	7.79	0.34	4.6	16.5	29.5	10.2	12.6	
Trade and hospitality services	107,825	1,583	1.5	5.12	0.24	4.8	13.6	24.4	6.7	8.7	
Organizations and personal services	76,175	917	1.2	7.24	0.33	4.7	9.6	14.1	9.5	12.0	
Other private	22,342	250	1.1	1.91	0.07	4.1	2.8	3.8	2.5	2.8	
Private sector	555,025	8,017	1.5	49.00	2.18	4.7	70.0	123.3	64.4	80.4	
Government	238,192	-1,517	-0.6	27.08	0.53	2.0	30.0	-23.3	35.6	19.6	

Wages and income

DC's $Personal\ Income\ growth\ slightly\ below\ the\ US$ average

- Wages and salaries earned in the District of Columbia were 3.7% higher in the March quarter compared to the same quarter of 2018.
- \bullet Wages earned by DC residents grew an estimated 3.5% in the March quarter compared to last year.
- •In the March quarter, DC Personal Income grew 3.7%, compared to 3.8% for the US average.
- $\bullet \mbox{The growth rate of proprietors' income was 6.3% in the March quarter.$
- •Pensions and other transfers grew 4.7% over last year in the March quarter; property income grew 2.4%.

Wages earned in DC, wages earned by DC residents, and wages earned in the US: 2016.1 to 2019.1

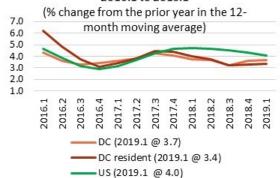


Table 9. DC Wages and Personal Income: March 2019 (2019.1)

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

	1	•			4-qtr. moving	Latest qtr.
Indicator	' FY 2015	FY 2016	FY 2017	FY 2018	avg.	(Mar.)
Wages and salaries earned in DC	67.06	69.26	72.23	74.55	76.08	77.30
1 year change	3.19	2.20	2.97	2.32	2.71	2.77
% change	5.0	3.3	4.3	3.2	3.7	3.7
Supplements to wages & salaries	17.66	18.33	19.14	19.49	19.77	19.99
% change	4.7	3.8	4.4	1.8	2.3	2.8
Income earned in DC**	82.22	85.42	89.49	92.42	94.30	95.72
% change	6.0	3.9	4.8	3.3	3.7	3.8
Net resident adjustment***	-47.50	-49.00	-51.07	-52.53	-53.60	-54.42
% change	3.6	3.1	4.2	2.9	3.5	3.6
Income earned by DC residents**	34.72	36.43	38.42	39.90	40.70	41.30
% change	9.4	4.9	5.5	3.9	3.9	3.9
Wages and salaries of DC residents****	24.66	25.59	26.72	27.58	28.08	28.50
change from one year ago	1.72	0.93	1.13	0.86	0.92	0.95
% change	7.5	3.8	4.4	3.2	3.4	3.5
Proprietors' income earned by DC residents*	7.09	7.73	8.44	9.06	9.34	9.52
% change	17.4	9.0	9.2	7.3	6.9	6.3
Property income of DC residents	9.38	9.54	9.87	10.33	10.49	10.53
% change	6.4	1.7	3.4	4.7	3.8	2.4
Pensions and other transfers for DC residents	6.02	6.45	6.64	6.73	6.85	7.03
% change	1.2	7.1	3.0	1.3	2.5	4.7
DC Personal Income	50.12	52.42	54.93	56.96	58.03	58.86
1 year change	3.61	2.30	2.51	2.03	2.08	2.12
% change	7.8	4.6	4.8	3.7	3.7	3.7
US Personal income (% change from prior year)	5.6	2.8	4.0	4.5	4.3	3.8
US Wages and salaries (% change from prior year)	5.5	3.2	4.3	4.5	4.0	3.4
Addendum:						
DC res. wages as % of wages earned in DC	36.8	36.9	37.0	37.0	36.9	36.9
DC Personal Income as % of US	0.32	0.33	0.33	0.33	0.33	0.31

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

Source: BEA; data released June 25, 2019

^{**}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

DC's population is growing faster than the national average, but per capita income is growing more slowly

- For 2018, population increased 6,764 (1.0%) and wage and salary employment increased by 7,658 (1.0%).
- $\bullet \mbox{In } 2018$ population and jobs grew below their 5 year average amount from 2013 to 2018.
- •In the March quarter, DC's per capita income grew at a 2.8% rate compared to 3.2% in the US.
- $\bullet In$ the December quarter wages per job in DC grew faster than in the US (3.1% v 1.6%).

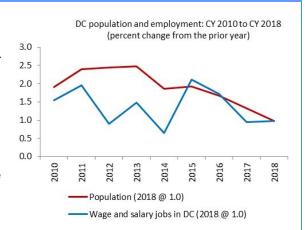




Table 10. DC Population and wage and salary employment located in DC: 2010 to 2018

		Population		Wage and salary employment				
Calendar		Change from	prior yr.		Change from	n prior yr.		
year	Number	Number	%	Number	Number	%		
2010	605,085	11,285	1.9	712,208	10,533	1.5		
2011	619,602	14,517	2.4	726,075	13,867	1.9		
2012	634,725	15,123	2.4	732,550	6,475	0.9		
2013	650,431	15,706	2.5	743,375	10,825	1.5		
2014	662,513	12,082	1.9	748,150	4,775	0.6		
2015	675,254	12,741	1.9	763,975	15,825	2.1		
2016	686,575	11,321	1.7	777,117	13,142	1.7		
2017	695,691	9,116	1.3	784,492	7,375	0.9		
2018	702,455	6,764	1.0	792,150	7,658	1.0		
Ch. from 201	3 to 2018	52,024	8.0		48,775	6.6		
Avg. anı	nual ch.	10,405			9,755			
Source: U.S. Co	ensus Bureau (population), B	LS (jobs)					

Source: U.S.Census Bureau and BLS

Table 11. Per capita income and wages per job in DC and the US: FY 2016 to March 2019

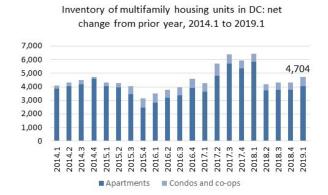
•	<u> </u>	•								
			DC					US		
				12-mo					12-mo	
				avg					avg	
	FY 2016	FY 2017	FY 2018	(Mar)	2019.1	FY 2016	FY 2017	FY 2018	(Mar)	2019.1
Per capita income	76,661	79,210	81,277	82,414	83,291	49,606	51,227	53,192	54,095	54,730
% ch in per capita income	2.7	3.3	2.6	2.7	2.8	2.1	3.3	3.8	3.6	3.2
% ch in population	1.8	1.4	1.1	1.0	1.0	0.7	0.7	0.6	0.6	0.6
% ch in personal income	4.6	4.8	3.7	3.7	3.7	2.8	4.0	4.5	4.3	3.8
Wages per job	89,377	92,264	94,241	95,871	97,158	55,726	57,187	58,835	59,378	59,762
% ch in wages per job	1.2	3.2	2.1	2.8	3.1	1.3	2.6	2.9	2.3	1.6
% ch in wages and salary jobs	2.1	1.0	1.0	0.9	0.6	1.8	1.6	1.6	1.7	1.8
% ch in total wages	3.3	4.3	3.2	3.7	3.7	3.2	4.3	4.5	4.0	3.4
US Consumer price index						0.9	2.1	2.4	2.3	1.6

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

New housing permits continue to increase at record levels

- •According to CoStar, in March the inventory of apartments and condominiums increased by 4,704 (2.5%) from a year earlier.
- For the 12-month period ending May 6,685 housing permits were issued, up 37.7% from last year. The 3-month total (1,421 was 166.1% above the same period as last year.
- •Of the increase in inventory of multifamily units over the 12-months ending 2019.1, 85.9% were in apartments. Of the housing permits issued over the past year, 96.6% were included in 45 buildings with 5 or more units.
- •As of the end of the March quarter 13,757 multi-family units were under construction in 87 buildings. Of the construction, apartments accounted for 74.7% of the buildings and 93.3% of the units.



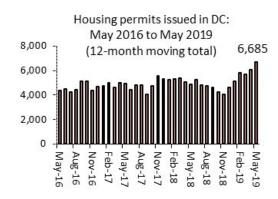


Table 12. Estimated DC households: 2012 to 2018

Table 13. Housing unit building permits issued in DC: May 2019

date		pop/hh	Estimated		
CY	Population	ratio	households	1 yr ch	
2012	634,725	2.259	281,000	6,217	Total units
2013	650,431	2.260	287,793	6,793	change from 1 yr ag
2014	662,513	2.261	292,976	5,183	% change from 1 yea
2015	675,254	2.263	298,441	5,466	Multi-family projects
2016	686,575	2.267	302,854	4,412	5 or more units
2017	695,691	2.271	306,278	3,424	number
2018	702,455	2.276	308,636	2,358	average size
Source: 1)	Population: IIS C	ancus Ruraai	(2) nonulation/ho	usehold	Units in small projects

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.

				12-mo.	3-mo.	
				moving	moving	This
	FY 2016	FY 2017	FY 2018	total	total	month
Total units	5,129	4,026	4,640	6,685	1,421	698
change from 1 yr ago	998	-1,103	614	1,832	887	586
% change from 1 year	24.2	-21.5	15.3	37.7	166.1	523
Multi-family projects with 5 or more units						
number	40	38	46	58	13	3
average size	128	106	101	115	109	229
Units in small projects						
with up to 4 units	333	376	179	231	74	12
% of all units	6.5	9.3	3.9	3.5	5.2	1.7
C		-1		decentes as as a set a set)		

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

Table 14. Inventory and construction for private sector apartments and condominiums in DC: 2013 to 2019.1

	Inventory									Under construction						
	Al	l Units		A	Apartments	i	Condominiums				Apartments			Condominiums		
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.	
2013	166,740	4,046	2.5	2,743	124,947	3,830	600	32,972	216	35	6,774	194	13	297	23	
2014	171,466	4,726	2.8	2,761	129,541	4,594	607	33,104	132	42	6,764	161	38	972	26	
2015	174,632	3,166	1.8	2,782	132,031	2,490	638	33,780	676	57	10,015	176	42	1,066	25	
2016	179,211	4,579	2.6	2,804	135,939	3,908	671	34,451	671	61	11,031	181	34	1,375	40	
2017	185,144	5,933	3.3	2,828	141,298	5,359	684	35,001	550	59	11,627	197	33	1,531	46	
2018	189,446	4,302	2.3	2,850	145,057	3,759	697	35,544	543	62	12,840	207	25	1,127	45	
2019.1	190,750	4,704	2.5	2,855	146,159	4,043	700	35,746	661	65	12,832	197	22	925	42	
1 Q ch.	1,085			6	906		3	179		0	933		-2	-170		

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 April 17, 2019. All units includes cooperative apartments, not shown separately. In 2019.1 there were 123 co-op buildings with 8,845 units with an average building size of 72.

Increases in occupied units have slowed a little over the past year, and the vacancy rate has edged up

- According to CoStar, for the the 12-month period ending March occupied apartments rose by 3,992 (3.0%) from the prior year. The overall vacancy rate was 6.7% and average rents were 3.0% higher.
- Class A units accounted 26.3% of all units in the city and 44.6% of vacant ones. They also accounted for 97.4% of the net additions to apartment inventory over the past year, 92.8% of the increase in occupied units, and 81.2% of the new construction.
- \bullet Over the past year effective rent in all classes of apartments increased: Class A by 3.1%, Class B by 3.2%, and Class C by 2.6%.

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

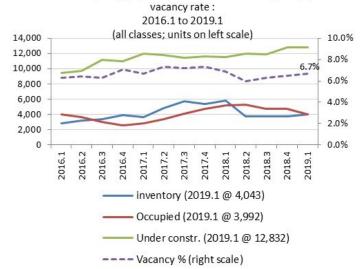
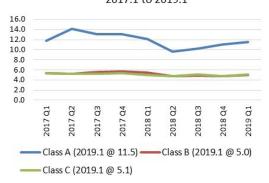


Table 15. Apartment units in DC: 2013 to 2019.1

Source: CoStar, as of April 17, 2019.

		Leve			Cha	nge from	prior pe	eriod		Average	1 yr ch in		
		number			Inventory Occupied			pied	Vac	ant	Effective rent 1 yr %		units under
	Inventory	Occupied	Vacant	% vacant	units	% ch	units	% ch	units	% ch	per unit	change	constr.
2013	124,947	115,251	9,696	7.8	3,830	3.2	2,198	1.9	1632	20.2	\$1,619	2.1	-1,317
2014	129,541	119,438	10,103	7.8	4,594	3.7	4,187	3.6	407	4.2	\$1,684	4.0	-10
2015	132,031	123,719	8,312	6.3	2,490	1.9	4,281	3.6	-1791	-17.7	\$1,764	4.8	3,251
2016	135,939	126,314	9,625	7.1	3,908	3.0	2,595	2.1	1313	15.8	\$1,811	2.7	1,016
2017	141,298	131,058	10,240	7.2	5,359	3.9	4,744	3.8	615	6.4	\$1,830	1.0	596
2018	145,057	135,765	9,292	6.4	3,759	2.7	4,707	3.6	-948	-9.3	\$1,875	2.5	1,213
2019.1 1 Q ch	146,159 <i>906</i>	136,377 <i>642</i>	9,782 <i>264</i>	6.7	4,043	2.8	3,992	3.0	51	0.5	\$1,896 -\$7	3.0	1,343

Vacancy rates in DC apartments by class: 2017.1 to 2019.1



1-year % change in average effective rent in DC apartments by class: 2017.1 to 2019.1



Table 16. Market rate apartment units in DC, Classes A, B, and C: 2019.1

Inventory					Occupied units			Effective mor	nthly rent	Under construction			
Class			Un	nits									
	Buildings N	Number	1 yr ch	% ch	% vacant	Number	1 yr ch	% ch	\$ per month	1 yr % ch	Buildings	Units	Avg. size
Class A	182	38,135	3,936	11.5	11.5%	33,771	3,706	12.3	\$2,570	3.1	41	10,419	254
Class B	815	49,517	498	1.0	5.0%	47,081	575	1.2	\$1,818	3.2	23	2,404	105
Class C	1,848	58,387	-240	-0.4	5.1%	55,419	-288	-0.5	\$1,357	2.6	1	9	

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 Apr. 17, 2019. 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, and so is the vacancy rate

- According to CoStar, for the 12-month period ending March occupied office space increased by 0.26 million sq. ft. from the prior year while inventory rose by 1.36 msf. The vacancy rate rose to 11.1% (including sublet) and average base rent rose 4.6%.
- •The vacancy rate for class A space was 12.8% in March up from 11.8% a year ago. Class A rent rose 4.6% over the past year.
- •Space under construction in March 2019 (5.94 million square feet in 26 buildings) was 0.38 msf (6.0%) less than a year earlier.
- For Class B and Class C properties, inventory and occupancy declined slightly over the past year. Rents for Class B properties increased more than in Class A ones, but Class C rents declined.

DC commercial office space: (1) 1 yr change in inventory and occupied space, (2) under construction, and (3) vacancy rate: 2017.1 to 2019.1 (million square feet)

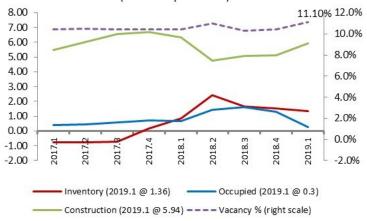
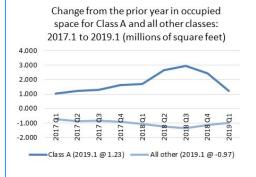


Table 17. DC commercial office space: 2013 to 2019.1

				•			_								
Inventory Occupied spa				ace				Base rent (d	direct)	Under constr.					
CY (year	Build-	Level	1 yr ch	1 yr %	Level	1 yr ch		Level	Direct	Total	\$	1 yr	Build-		Avg. sf per
end)	ings	(msf)	(msf)	ch	(msf)	(msf)	% ch	(msf)	only %	%	per sq ft.	% ch	ings	msf	bldg
2013	2,385	151.82	0.68	0.5	137.48	0.70	0.5	14.3	8.9	9.4	\$47.16	0.2	12	2.13	177,126
2014	2,379	152.31	0.49	0.3	137.68	0.20	0.1	14.6	9.1	9.6	\$47.69	1.1	14	2.41	172,489
2015	2,371	152.75	0.44	0.3	137.08	-0.60	-0.4	15.7	9.8	10.3	\$48.34	1.4	17	3.43	201,556
2016	2,368	153.25	0.50	0.3	136.80	-0.28	-0.2	16.5	10.1	10.7	\$49.99	3.4	22	5.63	255,746
2017	2,364	153.44	0.19	0.1	137.53	0.73	0.5	15.9	9.7	10.4	\$51.08	2.2	24	6.67	278,034
2018	2,365	154.95	1.51	1.0	138.83	1.30	0.9	16.1	9.7	10.4	\$52.24	2.3	21	5.10	242,814
2019.1	2,369	155.31	1.36	0.9	138.15	0.26	0.2	17.2	10.4	11.1	\$53.31	4.6	26	5.94	228,450
1 Q ch	4	0.36			-0.68				0.7	0.7	\$1.07		5	0.84	

Source: CoStar, all classes and sizes. Data as of April 17, 2019





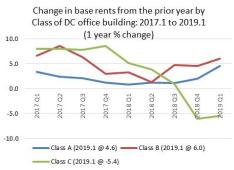


Table 18. DC Class A, B, and C commercial office space: 2019.1

		Inver	ntory		Occ	upied spa	ace	V	acant spa	ace	Base rent (direct)	Under	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	317	87.29	2.48	2.9	76.07	1.23	3 1.6	11.2	12.0	12.8	\$56.77	4.6	20	5.62
Class B	945	57.81	-1.06	-1.8	52.33	-0.93	3 -1.7	5.5	9.0	9.5	\$49.61	6.0	6	0.14
Class C	1,102	10.20	-0.06	-0.5	9.74	-0.04	1 -0.4	0.5	4.2	4.5	\$35.20	-5.4	0	
Source: Co	Star. Data	as of April	17. 2019											

The value of real property transfers leveled off the last three months

- •The value of May property transfers rose by 4.7% to \$15.32 billion from last year as measured by the 12-month moving total. The 3-month moving total, \$3.20 billion, was 0.2% below last year.
- •Over the 12 month period ending May, the estimated value of brokered home sales fell 2.2% while the value of all other real property transfers rose 9.8%. For the last 3 months, the value of non-home transfers was 4.3% below last year.
- •Over the past 12 months ending May a measure of major construction activity—the amount by which deed recordation tax collections exceeds deed transfer collections—declined 23.6%. For the last 3 months, it was down 12.5%.



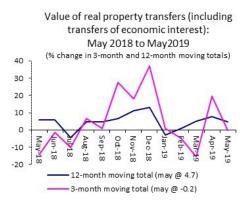


Table 19. Market Value of Real Property transfers subject to the Deed Transfer or Economic Interest tax: May 2019

						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	15,322.6	3,199.8	1,350.5
change from one year ago (\$M)	505.8	3,196.5	-1,730.3	962.6	647.8	693.6	-5.0	-16.4
% change from 1 year ago	4.6	27.6	-11.7	7.4	4.6	4.7	-0.2	-1.2

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).

Estimated value of homes sold through brokers and all other DC real property transfers: May 2017 to May 2019 (% change in 12-month moving totals)



deed transfer taxes (a measure of construction activity): May 2011 to May 2019

(\$ million, 12-month moving total)

80.0

70.0

80.0

70.0

90.0

10.0

90.0

10.0

90.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

10.0

Amount by which deed recordation taxes exceed

3-month

Table 19A. Value of (1) brokered home sales and (2) all other real property subject to the Deed Transfer and Economic Interest taxes: FY 2016 to May 2019

					3-month
				12-mo	moving
	FY 2016	FY 2017	FY 2018	moving total	total
Brokered home sales (\$M)	5,465.4	5,823.2	6,184.2	6,030.8	1,770.5
All other property transfers (\$M)	7,570.5	8,175.4	8,462.1	9,291.8	1,429.3
% change from 1 year ago					
Brokered home sales	8.0	6.6	6.2	-2.2	3.4
All other property transfers	-22.0	8.0	3.5	9.8	-4.3
Sources: Brokered sales of single family	homes and co	ondominium	units are fr	om MRIS data (see Table

Sources: Brokered sales of single family homes and condominium units are from MRIS data (see Table 20); Other property transfers equals the difference between the value of all real property transfers calcuated from deed tax collections reported by the OCFO (see table 19) and the value of brokered home sales.

Table 19B. A deed tax measure of construction activity (the amount by which recordation taxes exceed transfer taxes): FY 2016 to May 2019

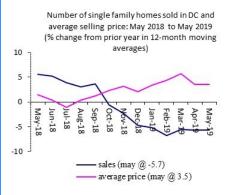
					3-month
				12-mo	moving
	FY 2016	FY 2017	FY 2018	moving total	total
Amount of diffference (\$M)	74.9	62.8	56.2	48.7	15.6
ch. from one year ago (\$M)	15.8	-12.1	-6.5	-15.0	-2.2
% change from 1 year ago	26.8	-16.2	-10.4	-23.6	-12.5

Source: OCFO/Recorder of Deeds and OCFO/ORA. Deed recordation and deed transfer tax rates are the same (1.45% for property valued over \$400,000). Recordation collections typically exceed those from transfers largely due to recordation of construction loans.

Single family and condominium housing

Home sales up modestly over the past three months

- •The 3-month moving total of single family home sales in May was up 3.6% from a year earlier, while the average selling price was 0.4% higher. The year-to-date median sales price of detached homes (\$747,500) was 8.3% less than the prior year, while the median price of attached homes (\$725,250) was 8.0% higher.
- •May condominium sales were up 1.5% from last year as measured by the 3-month moving total, while the average selling price was 0.9% higher. The year-to-date median sales price (\$472,025) was 1.6% higher than last year.
- •The total value of all home sales in May was up 3.4% from last year as measured by the 3-month moving total. For the past 12-months the total was down by 2.2%.







12-mo moving 3-mo moving

Table 20. D.C. Residential Real Estate Indicators: May 2019

						total or	total or	
Indicator	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	average	average	This month
Number of sales (settled contracts)								
Single family	4,024	4,097	4,385	4,552	4,717	4,495	1,278	480
1 year change	45	73	288	167	165	-272	44	-10
% change	1.1	1.8	8.7	3.8	3.6	-5.7	3.6	-2.0
Condo	3,592	3,832	3,955	4,046	4,240	4,071	1,196	446
1 year change	105	240	123	91	194	-138	18	-13
% change	3.0	6.7	5.6	2.3	4.8	-3.3	1.5	-2.8
Total	7,616	7,929	8,340	8,598	8,957	8,566	2,474	926
1 year change	150	313	411	258	359	-410	62	-23
% change	2.0	4.1	7.2	3.1	4.2	-4.6	2.6	-2.4
Average prices of units sold								
Single family (\$)	736,362	767,870	794,668	824,857	835,130	859,039	868,410	900,308
1 year change	23,563	31,508	26,798	30,189	10,273	29,015	3,789	-793
% change	3.3	4.3	5.8	3.8	1.2	3.5	0.4	-0.1
Condo (\$)	472,419	499,650	500,824	511,247	529,463	532,894	552,431	552,637
1 year change	24,592	27,232	1,173	10,423	18,215	7,268	5,197	-1,191
% change	5.5	5.8	2.2	2.1	3.6	1.4	0.9	-0.2
Total value of all sales (\$ million)	4,660.0	5,060.6	5,465.4	5,823.3	6,184.2	6,030.8	1,770.5	678.6
1 year change	262.2	400.6	404.8	357.9	361.0	-138.3	59.0	-17.1
% change	6.0	8.6	12.4	6.5	6.2	-2.2	3.4	-2.5
Ratio: active inventory to sales								
Single family	1.6	1.5	1.6	1.6	1.6	1.5	1.4	1.5
Condo	1.9	1.7	1.8	1.8	1.8	1.7	1.3	1.5

Median contract prices, CY to date (May): single family detached $$747,500 (-8.3\% \ 1 \ yr \ ch)$; single-family attached $$725,250 (8.0\% \ 1 \ yr \ ch)$; condominium and co-ops $$472,025 (1.6\% \ 1 \ yr \ ch)$.

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

Source: MarketStats by ShowingTime, accessed by Bright MLS and (for median contract prices) GCAAR.

Single family and condominium housing

Growth in FHFA house price index for DC trails the US but exceeds the metro area average

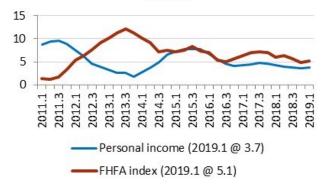
- •The percentage change in DC home prices increased 5.2% in the March quarter, according to the Federal Housing Finance Agency Index of single-family same-property transactions. The US index was up 5.8%, and the Washington metropolitan area gain was 4.3%.
- •28.0% of all single family sales for the 12-months ending May were for properties greater than \$1 million.
- •In the December quarter, sales of new condominiums over the past 12 months were 4.5% less than a year earlier.

Table 21. Federal Housing Finance Agency Price Index for single family property in DC. DC metro area. and US: March 2018 (2019.1)

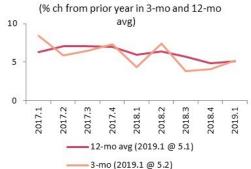
Fiscal year average Las								
		riscai yea	Last 2	z Q S				
Indicator	FY 2015	FY 2016	FY 2017	FY 2018	2018.4	2019.1		
% change from prior year in value of index								
DC	8.3	5.0	7.1	5.7	4.1	5.2		
DC metro area	3.3	2.6	4.4	4.7	4.1	4.3		
US	5.5	5.5	6.4	7.1	6.5	5.8		

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: 2011.1 to 2019.1 (% change from prior year in 12-month moving average)



FHFA Expanded-data housing price index for DC: 2017.1 to 2019.1



FHFA expanded-data housing price index for DC, the Washington Metropolitan area, and the US: 2016.1 to 2019.1

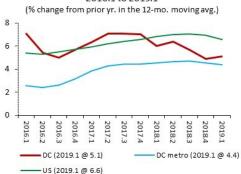


Table 22. D.C. Single family and condominium home sales at prices of \$1 million or more: May 2019

				12-mo	3-mo	
				moving	moving	This
Category	FY 2016	FY 2017	FY 2018	total	total	month
Single family homes	936	1,057	1,192	1,228	358	145
1 year change	171	121	135	55	23	3
% change	30.5	12.9	12.8	4.7	6.9	2.1
percent of all single family sales	21.3	23.2	25.3	27.3	28.0	30.2
Condominiums	167	189	222	216	74	30
1 year change	7	22	33	-1	12	6
% change	21.9	13.2	17.5	-0.5	19.4	25.0
percent of all condominium sales	4.2	4.7	5.2	5.3	6.2	6.7
	11 0:1:446	- 1				

Source: MarketStats by ShowingTime, accessed by Bright MLS. 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 2018.4

in DC: FY 2013 to 2018.4									
		Condo.							
	Permits	Sales							
FY 2013	368	442							
FY 2014	267	516							
FY 2015	293	483							
FY 2016	283	680							
FY 2017	367	482							
FY 2018	133	525							
12-mo. ending:									
2018.4	112	470							
1 yr ch	-223	-22							
% ch.	-66.6	-4.5							

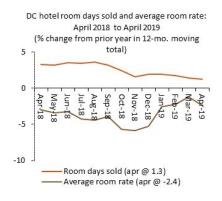
Source: Census Bur. (permits), and Delta Associates (condo sales)

Hospitality

Hotel revenue down slightly

- For the past 3 months, the number of room-days sold in April was 0.3% more than a year ago, the average room rate was down 1.3%, and hotel revenues were 1.0% lower. The 12-month moving total for hotel room-days sold was 1.3% above a year earlier, and revenues were 1.1% lower.
- Employment in food services was 2.0% more in April than a year earlier as measured by the 3-month moving average. Hotel employment was 1.7% lower.
- •March airline traffic into the DC area was down 0.2% compared to a year earlier as measured by the 3-month moving total. Reagan National was up 1.3%. For the past 12-months, total traffic into the DC area was 1.5% more than the prior year.







3-month

moving

12-month

moving

Table 27. Hospitality Industry: April 2019

							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)	apr	8.197	8.332	8.740	9.021	9.015	2.306	0.861
	1 yr ch		0.328	0.135	0.408	0.281	0.112	0.008	0.016
	1 yr % ch		4.2	1.3	4.9	3.2	1.3	0.3	1.9
Average room rate	\$	apr	215.34	221.19	233.03	223.92	220.63	241.60	260.86
	1 yr ch		5.46	7.18	11.84	-9.11	-5.32	-3.29	-14.90
	1 yr % ch		2.6	3.3	5.4	-3.9	-2.4	-1.3	-5.4
Occupancy rate	%	apr	77.5	78.0	78.5	78.1	76.7	79.3	86.9
(average)	1 yr ch		0.9	0.5	0.5	-0.4	-1.5	-2.3	-1.8
	1 yr % ch		1.2	0.7	0.6	-0.6	-1.9	-2.8	-2.0
Room revenue	(\$M)	apr	1,765.1	1,843.0	2,036.7	2,020.0	1,989.0	557.1	224.7
	1 yr ch		113.6	83.2	193.7	-16.7	-22.8	-5.6	-8.3
	1 yr % ch		6.9	4.7	10.5	-0.8	-1.1	-1.0	-3.6
Airline passengers									
DCA	1 yr % ch	mar	10.3	2.8	3.2	-1.2	-0.6	1.3	4.2
IAD	1 yr % ch	mar	0.3	-0.1	5.0	4.1	4.8	3.2	4.3
BWI	1 yr % ch	mar	4.1	6.0	5.6	4.5	0.5	-4.2	-2.2
Total	1 yr % ch	mar	4.8	3.0	4.6	2.5	1.5	-0.2	1.9
Employment									
Accommodations	level ('000)	apr	15.2	14.9	15.0	14.8	15.4	15.3	15.4
	1 yr ch		0.0	-0.3	0.1	-0.2	-0.2	-0.3	-0.2
	1 yr % ch		-0.2	-1.9	0.6	-1.3	-1.0	-1.7	-1.3
Food and bev	level ('000)	apr	49.7	51.5	52.0	54.3	55.2	55.5	56.6
	1 yr ch		2.7	1.7	0.6	2.2	1.5	1.1	0.6
	1 yr % ch		5.6	3.5	1.1	4.3	2.8	2.0	1.1
* Total for hotel rooms sold a	and room revenue.								

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

Federal non-defense spending continues to fall relative to GDP growth

- \bullet Compared to the same quarter a year ago, in the March quarter Nominal GDP growth was 5.1% and real growth was 3.2%
- •During the March quarter, quarterly GDP growth was 3.1% (real) and 3.8% (nominal) (annualized growth rates).
- •Federal government non-defense spending for consumption and investment increased by 1.9% in the 2019.1 quarter from a year earlier. The growth rate has been falling and is less than 40 percent of the growth rate for nominal GDP (5.1%) and less than 30 percent of the growth rate for defense spending (6.7%).

Table 29. Federal government consumption and investment, US GDP accounts: 2019.1

(percent change from same period of prior year) 12-mo Indicator FY 2015 FY 2016 FY 2017 FY 2018 2019.1 avg Non-defense 4.1 2.9 3.2 4.0 3.3 1.9 Compensation of employees 4.6 4.2 4.1 1.2 1.7 2.1 Purchases of goods and services 6.1 3.8 1.7 9.0 4.5 -2.9 Gross investment 3.6 1.4 3.0 2.7 3.1 4.5 -2.4 -0.4 1.7 3.7 5.6 6.7 Defense -0.4 0.9 2.0 Compensation of employees 1.2 1.7 0.4 Purchases of goods and services -5.4 -0.5 1.2 8.5 13.7 14.4 Gross investment -2.5 -1.4 4.3 4.6 4.6 6.9 All federal consumption and invest. 0.1 0.9 2.3 3.9 4.6 4.7

Source: BEA (June 27, 2019). Nominal values.

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

Table 30. Qtr. to Qtr. ch. in US GDP: 2018.1 to 2019.1

(% ch. from previous quarter at seasonally adj. annual rates)								
Indicator	2018.1	2018.2	2018.3	2018.4	2019.1			
US GDP real	2.2	4.2	3.4	2.2	3.1			
US GDP nominal	4.3	7.6	4.9	4.1	3.8			
Wages and salaries	5.7	2.8	4.9	2.0	3.8			
Personal income	5.1	3.4	4.4	4.0	3.2			

Note: GDP=Gross Domestic Product Source: BEA, updated June 27, 2019.

Federal non-defense spending and US GDP: 2015.1 to 2019.1 (1 year % change)

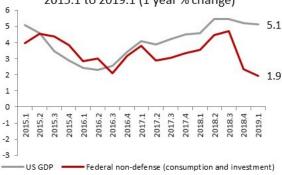


Table 28. US GDP, income, and inflation: 2019.1

(percent change from same period of prior year)

					12-mo	
Indicator	FY 2015	FY 2016	FY 2017	FY 2018	avg	2019.1
GDP real	3.1	1.6	2.1	2.7	3.0	3.2
GDP nominal	4.4	2.5	3.9	5.0	5.3	5.1
Personal Income	5.5	2.8	4.0	4.5	4.3	3.8
Consumption	4.4	4.0	4.3	4.7	4.6	4.1
Investment	7.2	-1.3	5.0	7.7	8.3	7.9
Corporate profits*	1.3	2.9	4.2	6.7	7.1	5.4
S and P stock index	9.7	0.4	13.8	16.2	7.5	-0.4
US CPI	0.3	0.9	2.1	2.4	2.4	2.6
C DEA /1 27 20	1401 DIC F					

Source: BEA (June 27, 2019), BLS, Fred.

Defense and non-defense federal spending: 2015.1 to 2019.1 (1 Year % change)



Table 31. Monthly selected US Indicators: January 2019 to May 2019

	C	Quarte	erly ch	_	in US 17.1 to		nd No	minal	GDP:	
8 T	(9	6 char	nge fro	m the p	oreviou	us qua	rter at	annual	rates)	
6 +					/	/\				
4 +	_	_	_		/	П		_	_	
2 +		5000								
0 +	2	21	21	21	2	21	21	2	21	1
	2017.1	2017.2	2017.3	2017.4	2018.1	2018.2	2018.3	2018.4	2019.1	
				Re	al (201	19.1 @	3.1)			
			<u> </u>	— No	minal	(2019.	1@3.	8)		

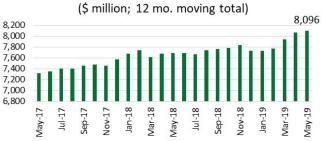
Indicator	January	February	March	April	May
S and P stock index (level)	2607	2755	2804	2904	2855
% change from prior month	1.6	5.7	1.8	3.6	-1.7
% change from 1 year ago	-6.5	1.8	3.7	9.4	5.7
10 yr. Treasury Interest rate (level)	2.71	2.68	2.58	2.53	2.40
CPI % ch from prior month (seasonally adjusted)	-0.02	0.17	0.41	0.32	0.08
CPI % ch from prior year (seasonally adjusted)	1.38	1.40	1.88	1.98	1.84
Jobs (seasonally adjusted level, in millions)	150.59	150.64	150.80	151.02	151.10
change from prior month (thousands)	312	56	153	224	75
% change from prior month	0.2	0.0	0.1	0.1	0.0
Resident employment (season. adj. level, in mil.)	156.69	156.95	156.75	156.65	156.76
change from prior month (thousands)	-251	255	-201	-103	113
% change from prior month	-0.2	0.2	-0.1	-0.1	0.1
Unemployment rate (seasonally adj.)	4.0	3.8	3.8	3.6	3.6
Source: BLS and Fred (Federal Reserve data base)	1				

^{*}Before tax, with IVA and CCAdj.

DC tax collections

):

DC tax collections (before earmarking):
May 2017 to May 2019



One year change in 12-mo. moving total DC tax collections: May 2018 to May 2019 (\$M)

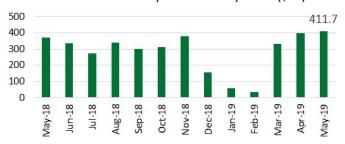


Table 32. Tax Collections (before earmarking): May 2019 (Preliminary)

(\$ million)		Revenue (fro	om CAFR)			Tax coll	ections	
					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	7,472.9	7,771.3	8,095.9	5,029.7	2,839.2	455.2
1 year change	626.9	324.2	239.3	298.5	411.7	338.8	325.3	24.0
% change	10.0	4.7	3.3	4.0	5.4	7.2	12.9	5.6
Real property	2,194.5	2,357.5	2,473.3	2,554.2	2,596.8	1,383.4	1,348.8	19.2
1 year change	178.9	163.0	115.9	80.9	45.1	41.2	122.1	-13.1
% change	8.9	7.4	4.9	3.3	1.8	3.1	10.0	-40.6
General sales	1,315.3	1,343.1	1,419.2	1,492.6	1,526.5	1,036.0	387.0	138.4
1 year change	143.2	27.8	76.1	73.4	70.3	43.8	10.7	2.2
% change	12.2	2.1	<i>5.7</i>	5.2	4.8	4.4	2.9	1.6
Individual income	1,868.0	1,907.9	1,958.3	2,066.8	2,241.8	1,498.3	568.7	144.4
1 year change	188.9	39.8	50.4	108.6	203.7	152.1	131.6	6.9
% change	11.2	2.1	2.6	5.5	10.0	11.3	30.1	5.0
withholding	1,553.2	1,627.6	1,766.6	1,818.2	1,902.4	1,316.2	510.6	148.6
1 year change	80.3	74.4	139.0	51.6	94.9	69.6	40.1	7.2
% change	5.5	4.8	8.5	2.9	5.3	5.6	8.5	5.1
non-withholding	314.8	280.3	191.7	248.7	339.4	182.1	58.0	-4.2
1 year change	108.6	-34.5	-88.6	56.9	108.8	82.5	91.5	-0.3
% change	52.7	-11.0	-31.6	29.7	47.2	82.8	na	na
Corporate income	308.0	387.1	389.2	436.5	482.7	321.0	182.7	31.2
1 year change	27.8	79.1	2.1	47.3	92.2	68.4	34.0	26.9
% change	9.9	25.7	0.6	12.2	23.6	27.1	22.9	626.4
Unincorporated Bus.	139.8	169.4	165.0	138.2	130.2	90.9	62.1	1.2
1 year change	4.4	29.6	-4.4	-26.8	-10.7	-3.7	9.1	2.6
% change	3.2	21.2	-2.6	-16.2	-7.6	-3.9	17.2	-189.8
Deed taxes*	480.6	445.2	460.9	472.3	483.7	322.3	116.2	42.5
1 year change	89.4	-35.4	16.7	11.4	5.2	12.4	8.5	-3.3
% change	22.8	-7.4	3.8	2.5	1.1	4.0	7.9	-7.2
Other taxes	610.6	630.9	606.9	610.7	634.2	377.5	173.9	78.3
1 year change	-5.8	20.3	-17.6	3.7	5.8	24.7	9.2	1.7
% change	-0.9	3.3	-2.8	0.6	0.9	7.0	5.6	2.2

^{*}Deed taxes include deed recordation, deed transfer, and economic interest taxes on real property transactions.

Note: (1) Revenues for the fiscal years 2015 through 2018 are based on the CAFR for those years.

⁽²⁾ Tax collections data subject to accounting adjustments.

⁽³⁾ This table and the graphs on the next page may include adjustments to the timing and consistency of collection reporting intended to make comparisons with prior year periods more meaningful. The data may therefore vary from other OCFO reports. Source: OCFO/ORA na = not meaningful due to negative numbers

Higher individual income tax collections

- For the 12 month period ending May total tax collections (before earmarking) were \$411.7 million (5.4%) more than in the prior year. For the last 3 months they were up 12.9% from last year.
- •Individual income tax collections were 10.0% above last year for the 12-months ending May and withholding was 5.3% higher. For the past 3 months, total income tax collections were up 30.1% and withholding was up 8.5%.
- •General sales tax collections were 4.8% above last year for the 12-months ending May. For the past 3 months, they were 2.9% above last year.
- •Deed tax collections for the 12-months ending May were up 1.1% from last year; for the past 3 months they were up 7.9%.
- Corporate income taxes for the 12 months ending May were up 23.6% while unincorporated business income taxes fell 7.6% from last year.

Total tax collections (before earmarks): May 2018 to May 2019



General Sales tax collections (before earmarks): May 2018 to May 2019

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



Withholding for the Individual Income tax: May 2018 to May 2019

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



General Sales tax and Withholding for the Individual Income tax: May 2018 to May 2019

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



Deed tax collections (before earmarks): May 2018 to May 2019

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



US economic forecasts

Blue Chip real GDP outlook for FY 2019 is slightly above FY 2018, with slowing in FY 2020

- •The May Blue Chip Indicators pegs real GDP growth for FY 2019 at 2.8%, falling to 2.0% in FY 2020. Nominal growth falls from 4.7% in FY 2019 to 4.1% in FY 2020.
- •CBO's January 2019 Economic and Budget outlook: nominal GDP growth rate of 5.0% in FY 2019 and 4.1% for FY 2020.
- •The Blue Chip Indicators May forecast for inflation (CPI): 1.9% in FY 2019 and 2.2% in FY 2020.
- •IHS Markit and Moody's Analytics May forecasts expect US Personal Income growth to hold steady between 4.2% and 4.7% in FY 2019 and FY 2020.
- •S&P 500 May baseline forecasts: For the 4th quarter of 2019, IHS Markit says the stock market will be 12.5% higher than a year earlier, Moody's says it will be 6.2% higher. By the 4th quarter of 2020, IHS Markit says it will grow another 6.1%, while Moody's expects a 6.2% decline.

Table 33. Forecasts for US nominal and real GDP: FY 2015 through FY 2020

(% change from prior fiscal year)

		real			nominal			
Fiscal year and date of forecast	Blue Chip	Moody's	IHS Markit	Blue Chip	Moody's Analytics	IHS Markit		
FY 2015 Actual	3.1	3.1	3.1	4.4	4.4			
FY 2016 Actual	1.6	1.6	1.6	5.5	5.5			
FY 2017 Actual	2.1	2.1	2.1	3.9	3.9			
FY 2018 Actual	2.7	2.7	2.7	5.0	5.0			
FY 2019								
February	2.8	2.9	2.6	4.9	5.3	4.7		
March	2.7	2.6	2.6	4.8	4.9	4.4		
April	2.6	2.6	2.5	4.6	4.7	4.6		
May	2.8	2.8	2.8	4.7	4.7	4.7		
FY 2020								
February	2.0	1.4	2.0	4.2	3.5	4.3		
March	2.0	1.9	2.2	4.2	3.8	4.3		
April	2.0	1.8	2.1	4.1	3.8	4.3		
May	2.0	2.0	2.2	4.1	4.0	4.5		

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

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	2.7	2.9	2.0
Nominal GDP (% ch from prior yr.)	3.9	5.0	5.0	4.1
Personal Income	4.0	4.4	4.9	4.9
CPI (% ch from prior yr.)	2.1	2.4	2.2	2.4
10 yr. Treasury bond rate	2.3	2.7	3.3	3.6
Unemployment rate	4.5	4.0	3.6	3.6

Source: Congressional Budget Office, An Update to The Budget and Economic Outlook: 2019 to 2029, January 2019

Table 36. Forecasts for S and P 500: 2018.4 to 2020.4

	% change f	% change f	from prior					
		ye	year					
Forecast date	2018.4	2019.4	2020.4	2018.4	2019.4	2020.4		
	IHS M	larkit		Moody's	Analytics			
February	3.3	8.5	2.1	3.3	-4.1	2.0		
March	3.3	10.3	1.0	3.3	1.8	-4.1		
April	3.3	10.1	3.6	3.3	3.1	-5.5		
May	3.3	12.5	6.1	3.3	6.2	-6.2		
Source: IHS Markit , Moody's Analytics. Baseline forecasts								

Blue Chip Indicators estimate of US Nominal and Real GDP: FY 2013 to FY 2020 (% change from the prior year; May 2019 estimate)

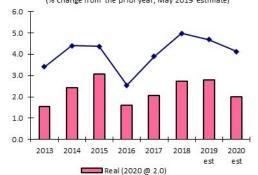


Table 34A. Alternate forecasts of nominal US GDP: FY 2017 to FY 2023 (% change from prior FY)

	2017	2018	2019	2020	2021	2022	2023
IHS Markit	3.9	5.0	4.7	4.5	4.4	4.1	3.9
Moody's Analytics	3.9	5.0	4.7	4.0	3.6	5.0	4.1
CBO	3.9	5.0	5.0	4.1	3.7	3.7	3.8

-Nominal (2020 @ 4.1)

Source: IHS Markit (May); Moody's Analytics (May); CBO (Jan)

Table 35. Forecasts for US Personal Income: FY 2018 to FY 2021

Forecast	f	iscal yr					yer			
date	2018	2019	2020	2021		2018	2019	2020	2021	
	IHS Markit					Moody's Analytics				
Feb	4.4	4.2	4.3	4.2		4.4	4.4	4.5	3.6	
Mar	4.5	4.4	4.4	4.5		4.5	4.5	4.7	3.7	
Apr	4.5	4.3	4.5	4.5		4.5	4.5	4.7	3.7	
May	4.5	4.2	4.6	4.8		4.5	4.4	4.7	3.8	

Source: IHS Markit, Moody's Analytics. Baseline forecasts

Table 37. Blue Chip forecasts for CPI and 10 year Treasury interest rate: FY 2018 to FY 2020

(% change from prior fiscal year)									
Forecast		CPI		10 yr	Treasury ra	ate			
date	2018	2019	2020	2018	2019	2020			
Feb	2.4	1.9	2.2	2.8	2.9	3.0			
Mar	2.4	1.9	2.2	2.8	2.9	3.0			
Apr	2.4	1.9	2.2	2.8	2.8	2.8			
May	2.4	1.9	2.2	2.8	2.7	2.8			
Source: Blue Chip Indicators									

IHS Markit and Moody's Analytics outlooks differ primarily for population and income

- Jobs: IHS Markit anticipates DC job growth dips to 5,114 in FY 2019 and then rise to 8,779 in FY 2020. Moody's has a similar outlook with less of a rebound in FY 2020.
- Population: IHS Markit anticipates a gradual slowdown in annual population growth; Moody's has a sharper decline which essentially cuts all net in-migration by 2019.
- Income: IHS Markit and Moody's both anticipate slower Personal Income growth in FY 2019 than the year before, slowing to 3.5% and 2.9%, respectively. In FY 2020 growth rises to 3.8% for IHS Markit but falls further to 2.8% for Moody's.
- 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 demand and supply are about equal for new office space.

				_	IHS	Markit		Mood	y's Analyti	CS	_		Table 39. DC reside and housing starts	•	iseriolus,
				FY	Level	1 yr ch	%ch	Level	1 yr ch	%ch			and nousing starts	1011 2022	
			Jobs	2017	782,867	7,909	1.0	782,875	7,925	1.0	0		FY	IHS Markit	Moody' Analytic
				2018	791,075	8,208	1.0	791,075	8,200	1.0	0		Resident jobs (1 ye		Allalytic
				2019	796,189	5,114	0.6	796,325	5,250	0.	7		2017	6,124	6,1
				2020	804,968	8,779	1.1	803,100	6,775	0.9	9		2018	5,682	5,7
				2021	810,674	5,706	0.7	804,175	1,075	0.:	1		2019	2,109	1,6
				2022	814,328	3,655	0.5	807,650	3,475	0.4	4		2020	9,252	3,2
		_											2021	7,213	-8
		Popul	lation	2017	694,405	9,382		694,575	9,350				2022	-,	1
				2018	701,607	7,202	1.0	701,600	7,025				Households (1 year	r change)	
				2019	708,285	6,678	1.0	705,975	4,375	0.0	6		2017	56	9,
				2020	714,768	6,482	0.9	709,825	3,850	0.	5		2018	454	3,
				2021	720,788	6,021	0.8	713,550	3,725	0.	5		2019	2,253	2,
				2022	726,286	5,498	0.8	717,675	4,125	0.0	6		2020	3,276	3,
		Source: N	1ay baseli	ne forecas	sts from IH	S Markit a	nd Moody	's Analytics					2021	3,375	3,
ole 40. I	orecasts	of DC P	ersonal I	ncome t	o FY 2022	2							2022	3,190	3,
e of est.				1arkit				Мо	ody's Ana	lvtics			Housing starts	5,250	٥,٠
,	FY 2017	FY 2018	FY 2019		FY 2021	FY 2022	FY 2017				FY 2021	FY 2022	2017	4,349	4,
													2018	4,796	4,
Feb.	4.8	3.6	3.0	3.8	5.5	4.3	4.8	3.6	2.4	2.7	3.0	4.2	2019	4,871	5,
Mar	4.8	3.6	3.2	4.0	5.9	4.5	4.8	3.6	2.2	2.9	3.0	4.2	2020	3,566	4,
Apr	4.8	3.7	3.7	3.7	5.2	4.5	4.8	3.7	3.0	2.8	2.9	4.2	2021	3,047	3,
•													2022	2,558	3,
May	4.8	3.7	3.5	3.8	5.5	4.4	4.8	3.7	2.9	2.8	2.9	4.2	Source: May baseline	forecasts	

Table 41. May forecasts for employment and Personal Income for DC, the metro area, and the US: FY 2018 to FY 2021

Source: Baseline forecasts from IHS Markit and Moody's Analytics

(percent change from prior year)

		IHS N	1arkit		M	oody's	Analyti	cs
Indicator	2018	2019	2020	2021	2018	2019	2020	2021
Wage and salary jobs								
DC	1.0	0.6	1.1	0.7	1.0	0.7	0.9	0.1
Metro area					1.1	1.0	1.3	0.0
US	1.6	1.7	1.3	0.8	1.6	1.7	1.2	0.0
Personal Income								
DC	3.7	3.5	3.8	5.5	3.7	2.9	2.8	2.9
Metro area					3.8	3.6	4.2	2.8
US	4.5	4.2	4.6	4.8	4.5	4.4	4.7	3.8
Source: IHS Markit and M								

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 surrounding metro area: Mar. 2019 to Mar. 2022

Indicator	DC	No VA	Sub MD	Total	DC % of total
Inventory March 2019					_
Inventory (msf)	27,494	68,289	38,552	134,335	20.5
Estimated net activity to	March 202	22			
new supply (msf)	16,679	13,060	8,576	38,316	43.5
new demand (msf)	11,550	9,350	6,600	27,500	42.0
Source: Delta Associates					

Table 42. May DC forecasts for wages and unemployment: FY 2018 to FY 2021 (% change from prior year)

H	HS Markit	:		1	Mood	ly's Analy	tics	
2018	2019	2020	2021	2	2018	2019	2020	2021
Wages a	nd salarie	es earned	d in DC					
3.3	4.0	4.3	4.9		3.3	4.3	5.0	2.7
DC reside	ent wage 3.6	s and sal 3.5	aries 6.4		3.3	4.1	5.4	3.8
DC Unen	nploymer	nt rate (le	evel)					
5.7	5.4	5.1	4.9		5.7	5.3	5.1	5.5

Source: IHS Markit and Moody's Analytics . Baseline forecasts.

DC and the surrounding metro area: Mar. 2019 to Mar. 2021

_	Indicator	DC	No VA	Sub MD	Total	DC % of total
	Inventory March 2019					
5	Inventory (msf)	145.9	185.4	85.7	417.0	35.0
	Estimated net activity to	March 2021				
5	new supply (msf)	3.6	1.8	2.5	7.9	45.6
)	new demand (msf)	3.5	1.6	2.3	7.3	47.9
	Source: Delta Associates m	sf = million squ	are feet			

DC revenue estimate

The June revenue estimate for FY 2020 and subsequent years was unchanged from February's. FY 2019 tax revenue is now expected to be \$116.6 million higher, but no changes were made for subsequent years due principally to uncertainty about federal spending. Under current law, sequestration will return in FY 2020, reducing federal spending significantly, and no deal has yet been struck.

- •The tax revenue increase (before earmarks) of 4.0% in FY 2018 is estimated to be followed by a 3.1% increase in FY 2019, and a 3.7% increase in FY 2020.
- •Real property tax growth of \$80.9 million in FY 2018 accounted for 27.1% of the net increase in taxes for that year. Real property's share of the increase for FY 2019 is 58.9% and for FY 2019 is 24.0%.
- •Individual income tax revenue rose 5.5% in FY 2018, and is expected to grow 3.4% in FY 2019 and 4.5% in FY 2020.
- •The General sales tax, which grew 5.2% in FY 2018, is estimated to grow 3.9% in FY 2019 and 7.3% in FY 2020.
- •Deed taxes grew 2.5% in FY 2018, and are estimated to rise 2.2% in FY 2019 and 2.8% in FY 2020.

Table 45. DC Tax Revenue (before earmarks) for FY 2018 through FY 2021: February 2019 revenue estimate

Tax		FY level (\$	million)		Char	ige from pr	ior year (\$ I	M)	%	change fro	om prior ye	ar
	2018	2019	2020	2021	2018	2019	2020	2021	2018	2019	2020	2021
Real property	2,554.2	2,696.8	2,768.9	2,857.5	80.9	142.6	72.0	88.7	3.3	5.6	2.7	3.2
Deed taxes	472.3	482.7	496.2	516.4	11.4	10.5	13.5	20.2	2.5	2.2	2.8	4.1
General sales	1,492.6	1,551.1	1,664.5	1,735.2	73.4	58.6	113.4	70.7	5.2	3.9	7.3	4.2
Individual income	2,066.8	2,136.5	2,232.4	2,319.7	108.6	69.7	95.9	87.3	5.5	3.4	4.5	3.9
Withholding	1,818.2	1,873.6	1,965.3	2,048.5	51.6	55.4	91.8	83.2	2.9	3.0	4.9	4.2
non-withholding	248.7	263.0	267.1	271.1	56.9	14.3	4.1	4.1	29.7	5.8	1.6	1.5
Business income	574.7	540.4	554.0	564.1	20.5	-34.3	13.6	10.0	3.7	-6.0	2.5	1.8
Other	610.7	605.9	597.4	602.4	3.7	-4.8	-8.5	5.0	0.6	-0.8	-1.4	0.8
Total	7,771.3	8,013.5	8,313.4	8,595.3	298.5	242.2	299.8	281.9	4.0	3.1	3.7	3.4

Source: ORA. Feb. 28, 2019 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 2018 is from the CAFR.

Table 46. DC population and	employment: FY 2018 to FY 2021

item	2018	2019	2020	2021					
Wage and salary									
employment	794,792	798,647	804,643	810,300					
1 year change	6,217	3,856	5,995	5,658					
% change	0.8	0.5	0.8	0.7					
DC population	701,610	707,155	713,873	721,277					
1 year change	7,206	5,545	6,717	7,404					
% change	1.0	0.8	0.9	1.0					
Unemployment rate	5.7	5.6	5.5	5.4					
Source: ORA February 2019 revenue estimate.									

Table 47. DC Income and stock market assumption

FY 2017 to FY 2020 (% cna	inge from	prior year	7)	
item	2018	2019	2020	2021
Wages and salaries earned in DC	3.0	2.9	3.6	3.8
Wages and salaries earned by DC residents	3.1	3.5	4.1	4.3
DC Personal income	3.6	4.3	4.5	4.4
S and P 500 stock index	3.6	3.1	3.1	3.1
Course ODA Fohrugry 2010 rouge	una actionata	Ctack inda	CV h	_!_

Source: ORA February 2019 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 2012 to FY 202

Table 48. DC tax revenue (befor	e earmari	ks) and DC	. Personai	income: i	-Y 2012 to	FY 2021				
item _	2012	2013	2014	2015	2016	2017	2018	2019 est	2020 est	2021 est
Tax revenue (\$ million)										
Level	5,853	6,100	6,290	6,917	7,234	7,473	7,771	8,014	8,313	8,595
Change from prior year	528	247	189	627	317	239	298	242	300	282
Percent change from prior year										
Tax revenue	9.9	4.2	3.1	10.0	4.6	3.3	4.0	3.1	3.7	3.4
Personal Income	4.6	2.7	5.0	7.8	4.6	4.8	3.6	4.3	4.5	4.4
Tax revenue as percent of										
Personal Income	13.6	13.8	13.5	13.8	13.8	13.6	13.7	13.5	13.4	13.3

Source: ORA. February 2019 revenue estimate. The table includes tax revenue only, before all earmarks, and excludes all non-tax revenues, lottery, and "O-type" earmarked revenues.

- The net slowdown in job growth from 2016.1 to 2019.1 was quite pronounced for the rest of DC's private sector—growth was only about half of what it was in the prior three year period.
- Over the past 3 years, DC's higher wage industries have grown at a rate close to the national average for those industries.
- The rest of DC's private sector grew a little more slowly over the past 3 years than the comparable part of the national economy.

Higher wage and other industries in DC's private sector. Information, financial, professional, technical, scientific, and management services constitute a higher wage group of industries. In March 2019 the average annual wage in the group ranged from \$133,561 (information) to \$267,461 (executive management). There were 170,783 employees in this group in March 2019 accounting for 30.8% of private sector jobs in DC and for 49.9% of private sector wages. Over the past 6 years, the higher wage portion of jobs in DC has declined slightly and the portion of wages and salaries is about the same. One industry within this group, financial services, grew more slowly from 2016.1 to 2019.1 than in the prior 3 years. (See Appendix 1 for detail by industry.)

Higher wage private sector industries in DC: 2013.1 to 2019.1

	Level (12	Level (12-month moving avg.)		Amount o	f change	% change		
				2013.1 to	2016.1 to	2013.1 to	2016.1 to	
	2013.1	2016.1	2019.1	2016.1	2019.1	2016.1	2019.1	
Jobs in DC	154,142	161,450	170,783	7,308	9,333	4.7	5.8	
Wages (\$B)	18.80	21.29	24.45	2.49	3.16	13.2	14.9	
Average wage (\$)	121,963	131,850	143,171	9,887	11,321	8.1	8.6	

Source: BLS (jobs); BEA (wages and salaries). Average wage is calculated by dividing total wages by the number of jobs. All data are 12-month moving averages for the date shown. Higher wage industries are information, financial services, professional and technical services, and management of companies and enterprises.

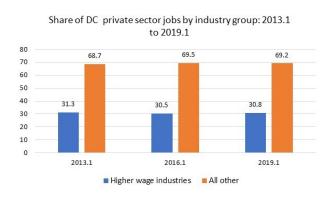
In March 2019, 384,208 persons were employed in all of the other industries in DC's private sector, which accounted for 69.2% of DC's private sector jobs and 50.1% of all private sector wages and salaries. The largest industries in this group are organizations and other services, accommodation and food services, health, education, and business services. Although the group as a whole grew more slowly in the 2016.1 to 2019.1 period than in the prior three years, this was not true of all of the industries; arts and organizations grew faster in the last 3 years, as did the very small manufacturing and wholesale trade industries. (See Appendix 2 for detail by industry.)

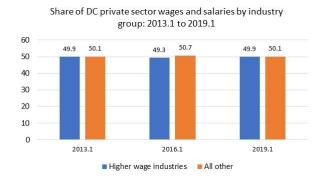
All other private sector industries in DC: 2013.1 to 2019.1

	Level (12	Level (12-month moving avg.)		Amount o	f change	% change		
				2013.1 to	2016.1 to	2013.1 to	2016.1 to	
	2013.1	2016.1	2019.1	2016.1	2019.1	2016.1	2019.1	
Jobs in DC	337,758	367,683	384,241	29,925	16,558	8.9	4.5	
Wages (\$B)	18.87	21.88	24.55	3.01	2.67	15.9	12.2	
Average wage (\$)	55,874	59,501	63,892	3,626	4,392	6.5	7.4	

Source: BLS (for jobs); BEA (for wages and salaries). Average wage is calculated by dividing total wages by the number of jobs. All data are based on 12-month averages for the dates shown.

Private sector jobs in DC by industry grouping: 2013.1 to 2019.1 Private sector wages and salaries in DC by industry grouping: 2013.1 to 2019.1 Level (12-month moving avg.) Change from: Level (\$B, 12 mo. moving avg.) Change from: 2013.1 to 2016.1 to 2013.1 to 2016.1 to 2013.1 2016.1 2019.1 2016.1 2019.1 2013.1 2016.1 2019.1 2016.1 2019.1 Higher wage 154,142 161,450 170,783 7,308 9,333 Wages in DC 337,758 367,683 384,241 29,925 Other private 16,558 Higher wage 18.80 21.29 24.45 2.49 3.16 25,892 2.67 Total 491,900 529,133 555,025 37,233 Other private 18.87 21.88 24.55 3.01 Total 37.67 43.16 49.00 5.49 5.84 Percent share of private sector: Percent share of private sector: 30.5 Higher wage 31.3 30.8 19.6 36.0 49.9 49.3 49.9 45.3 54.2 Higher wage 68.7 69.5 80.4 Other private 69.2 63.9 Other private 50.1 50.7 50.1 54.7 45.8 Total 100.0 100.0 100.0 100.0 100.0 Total 100.0 100.0 100.0 100.0 100.0 Source: BLS. 12-month average for periods shown. The total for 2019.1 includes 6 iobs not shown above. Detail may not add due to rounding. Source: BEA, 12-month average for periods shown. Detail may not add due to rounding

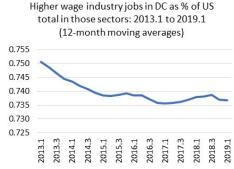




Comparisons to job growth in comparable portions of the US economy over the past six years. For

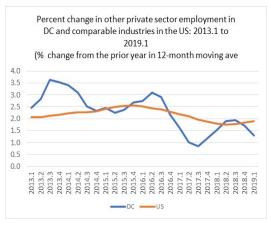
the three years from 2013.1 to 2016.1, the percentage growth in DC's higher wage industries was close to half the US rate. Over the past three years , however, DC's growth rate increased, with annual percentage changes moving up to be close the US rate. The share of US employment in the high wage sector declined in the 2013.1 to 2016.1 period, but has since been fairly stable and is only slightly lower in 2019.1 than in 2016.1.

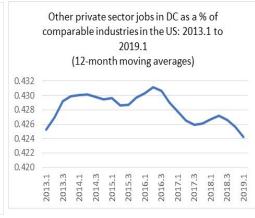




The year to year percentage growth in the all other private sector group in DC exceeded that of the US for most of the period from 2013.1 to 2016.1, and was below the US for most of the next three year period. (The other pri-

vate sector category for the US excludes manufacturing, mining, and farming). The share of US employment in the other private sector category rose in the 2013.1 to 2016.1 period, and fell over the next three years.





— Stephen Swaim, DC Office of Revenue Analysis

About the data: The wage and salary employment data for DC and the US are from the US Bureau of Labor Statistics (BLS). The data shown here are 12-month averages calculated from data that is not seasonally adjusted. The other private sector category for the US excludes manufacturing, mining, and farming. It should be noted that the higher wage group is based on average wages; this means not everybody in the group is paid high wages, and there are people in the other private category who have high wages.

Data on wages and salaries earned in in DC and the US are from the quarterly Personal Income accounts compiled for states and the US by the US Bureau of Economic Analysis. All data shown here are based on 12-month averages calculated from seasonally adjusted quarterly data. Average wages by sector are calculate by dividing total wages by the BLS employment numbers for each industry. All of the data are subject to further revision.

Appendix table 1. Higher wage employment industries in DC's Private Sector: 2013.1 to 2019.1

	Level		Amount o	Amount of change:		% change:	
				2013.1 to	2016.1 to	2013.1 to	2016.1 to
	2013.1	2016.1	2019.1	2016.1	2019.1	2016.1	2019.1
Jobs							
Information	17,383	17,258	19,600	-125	2,342	-0.7	13.6
Finance	27,758	29,225	29,700	1,467	475	5.3	1.6
Professional, scientific, and tech	106,983	112,825	119,025	5,842	6,200	5.5	5.5
Management of companies and orgs	2,017	2,142	2,458	125	317	6.2	14.8
Total for the higher wage group	154,142	161,450	170,783	7,308	9,333	4.7	5.8
Wages and salaries (\$ billion)							
Information	2.02	2.11	2.62	0.08	0.51	4.2	24.2
Finance	3.04	3.71	4.13	0.67	0.43	21.9	11.5
Professional, scientific, and tech	13.29	14.84	17.04	1.55	2.20	11.6	14.9
Management of companies and orgs	0.45	0.64	0.66	0.19	0.02	42.6	3.4
Total for the higher wage group	18.80	21.29	24.45	2.49	3.16	13.2	14.9
Average wage per job							
Information	116,406	122,118	133,561	5,712	11,443	4.9	9.4
Finance	109,521	126,814	139,182	17,293	12,367	15.8	9.8
Professional, scientific, and tech	124,226	131,511	143,182	7,285	11,671	5.9	8.9
Management of companies and orgs	221,041	296,809	267,461	75,768	-29,349	34.3	-9.9
Average for the higher wage group	121,963	131,850	143,171	9,887	11,321	8.1	8.6

Source: BLS (jobs) and BEA (wages and salaries). Average wage per job calculated by dividing wages by the number of jobs. All data are 12-month moving averages.

Appendix table 2. Other industries in DC's Private Sector: 2013.1 to 2019.1

Appendix table 2. Other industries in DC's	Private Sector: 2	013.1 to 20	19.1				
		Level		Amount of		% cha	
				2013.1 to	2016.1 to	2013.1 to	2016.1 to
	2013.1	2016.1	2019.1	2016.1	2019.1	2016.1	2019.1
Jobs							
Construction	13,808	15,158	15,593	1,350	435	9.8	2.9
Manufacturing	1,000	1,100	1,325	100	225	10.0	20.5
Wholesale trade	4,967	4,833	4,900	-133	67	-2.7	1.4
Retail trade	19,208	22,725	22,758	3,517	33	18.3	0.1
Transportation and utilities	4,175	4,833	5,417	658	583	15.8	12.1
Business services	45,708	47,883	46,817	2,175	-1,067	4.8	-2.2
Education	50,417	58,358	59,917	7,942	1,558	15.8	2.7
Health	64,167	68,117	71,167	3,950	3,050	6.2	4.5
Arts, entertainment, and recreation	7,050	7,700	9,600	650	1,900	9.2	24.7
Accomodation and food services	58,875	65,775	70,567	6,900	4,792	11.7	7.3
Organizations and other services	68,383	71,200	76,175	2,817	4,975	4.1	7.0
Total for other sectors	337,758	367,683	384,241	29,925	16,558	8.9	4.5
Wages and salaries (\$ billion)							
Construction	0.90	0.98	na	0.09	na	9.7	na
Manufacturing	0.11	0.11	na	0.00	na	3.3	na
Wholesale trade	0.58	0.58	0.60	0.00	0.02	-0.5	3.4
Retail trade	0.68	0.78	0.89	0.10	0.11	15.5	14.0
Transportation and utilities	0.48	0.54	0.64	0.07	0.10	13.9	18.0
Business services	2.17	2.45	2.49	0.29	0.04	13.3	1.5
Education	2.45	2.87	3.15	0.42	0.29	17.0	10.1
Health	3.66	4.17	4.63	0.51	0.46	13.9	11.1
Arts, entertainment, and recreation	0.36	0.65	0.87	0.28	0.22	77.4	34.3
Accomodation and food services	1.94	2.37	2.77	0.43	0.40	22.2	16.8
organizations and other services	5.55	6.38	7.24	0.82	0.86	14.8	13.5
Total for other sectors	18.87	21.88	24.55	3.01	2.67	15.9	12.2
Average wage per job (\$)							
Construction	64,914	64,876	na	-38	na	-0.1	na
Manufacturing	106,733	100,275	na	-6,458	na	-6.1	na
Wholesale trade	117,345	119,967	122,299	2,622	2,332	2.2	1.9
Retail trade	35,143	34,321	39,073	-821	4,752	-2.3	13.8
Transportation and utilities	113,921	112,092	118,017	-1,829	5,925	-1.6	5.3
Business services	47,368	51,218	53,190	3,850	1,972	8.1	3.9
Education	48,575	49,112	52,647	537	3,535	1.1	7.2
Health	57,086	61,237	65,126	4,151	3,888	7.3	6.3
Arts, entertainment, and recreation	51,615	83,858	90,313	32,243	6,455	62.5	7.7
Accomodation and food services	32,964	36,053	39,244	3,088	3,192	9.4	8.9
organizations and other services	81,214	89,539	94,994	8,325	5,456	10.3	6.1
Average for other sectors	55,874	59,501	63,892	3,626	4,392	6.5	7.4
	•						
Source: BLS (jobs) and BEA (wages and salaries). Average	e wuge per job calcu	utea by aividii	iy wages by the	e number of Jobs	Ali uata are 12-n	nontn moving ave	ruyes. rne

Source: BLS (jobs) and BEA (wages and salaries). Average wage per job calculated by dividing wages by the number of jobs. All data are 12-month moving averages. The job total for 2019.1 contains 6 jobs not included in the detail above. na=data not reported by BEA for the sector.

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:

June revenue estimate. June 28, 2019.

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

Tax Rates and Tax Burdens 2017 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 2017 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	April	July 19
D.C. Personal Income	BEA	2019.1	September 24
D.C. Tax Collections	OTR/ORA	May	c. July 15
D.C. Housing Sales	MarketStats by ShowingTime*	May	c July 10
D.C. Commercial Office Building data	CoStar and Delta	2019.1	c. July 10
DC Apartment data	CoStar and Delta	2019.1	c. July 10
D.C. Hotel stay information	Smith Travel Research	April	c. June 20
Consumer Price Index	BLS	May	July 11
U.S. Jobs and Labor Force	BLS	May/June	July 5
U.S. GDP and Personal Income	BEA	2019.1	July 26
S and P 500 Stock Index	FRED (St. Louis Fed Reserve)	May	July 1
Interest rate on 10-Year Treasury Securities	FRED (St. Louis Fed Reserve)	May	July 1
IHS Markit D.C. forecast	IHS Markit	May	c. July 20
Moody's Analytics D.C. forecast	Moody's Analytics	May	c. July 20
Blue Chip Economic Indicators for the U.S.	Wolters Kluwer	May	c. July 10

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.

Fitzroy Lee, Deputy Chief Financial Officer and Chief Economist Office of Revenue Analysis 1101 4th St., SW, Suite W770 Washington D.C. 20024 202-727-7775