



District of Columbia Economic and Revenue Trends: April 2019

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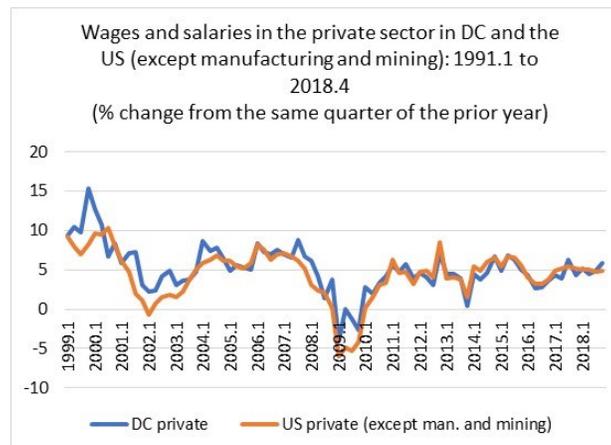
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DC’s exposure to negative impacts from a US recession is probably growing

DC’s private sector is now a larger share of the economy and cannot count on increased federal spending to offset slowing

The US economy is about to enter the longest period of economic expansion in its history as it passes the 10-year mark in June. Although one appears not to be evident at this time, at some point a recession is likely. When that happens, the negative impact on DC’s economy would depend on the nature and severity of the recession. However, as explained below, DC’s economy is not insulated from recessions, and exposure to the negative impacts from a recession is probably growing, however mild or severe that recession may be.

- The negative impacts on jobs and wages in DC’s private sector in the past two recessions were similar to, although somewhat less severe, than the impact on the private sector nationally when manufacturing and mining are excluded from the calculation. (See graph of wages below.) There is no obvious reason to expect this to relationship to be significantly different in a future recession.
- Federal spending gave a disproportionate boost to DC’s economy in the past two recessions, mitigating some of the negative factors confronting DC’s private sector. Current federal fiscal policy makes it unlikely that such increases in federal spending can be counted on in the future.
- The share of DC’s economy represented by the private sector has been rising, increasing the economy’s exposure to a downturn.
- Jobs and incomes of DC residents were harder hit than those associated with jobs located in DC in the last two recessions. Being hit harder may not necessarily be true in another recession because DC’s economy has become stronger, but a substantial negative impact on residents would still be expected. *(Cont’d on p. 21.)*



Wage and salary employment

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

- February wage and salary employment in DC was up 4,900 (0.6%) from a year earlier as measured by the 3-month moving average.
- Federal government employment in DC for February was down by 2,600 (1.3%). The private sector gained 6,100 (1.1%).
- Total year-over-year DC metropolitan area employment increased 28,000 (0.9%) in February as measured by the 3-month moving average. Of the increase, 17.5% was in DC.
- Suburban Washington employment in February increased by 0.9% from a year earlier.
- Seasonally adjusted DC jobs fell by 300 in February from the prior month, and are 2,000 more than in September.

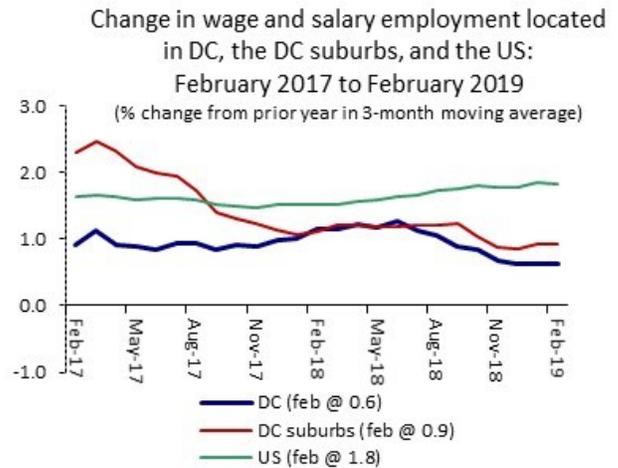


Table 1. Wage and salary employment in DC, the Washington metro area, and the US: February 2019

Jurisdiction	FY 2015	FY 2016	FY 2017	FY 2018	3-mo		
					12-mo avg	average	This month
District of Columbia	759,417	775,183	782,583	790,933	792,975	790,900	791,300
1 year change	12,975	15,767	7,400	8,350	6,933	4,900	3,400
% change	1.7	2.1	1.0	1.1	0.9	0.6	0.4
Washington metro area	3,128,000	3,203,450	3,257,800	3,295,517	3,306,375	3,296,767	3,289,800
1 year change	34,600	62,658	54,350	37,717	33,033	28,000	20,900
% change	1.1	2.0	1.7	1.2	1.0	0.9	0.6
Washington suburbs (% ch)	1.4	2.0	1.9	1.2	1.0	0.9	0.7
US (% ch)	2.1	1.8	1.6	1.6	1.7	1.8	1.7

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

Source: BLS. Reflects March revision to February data.

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

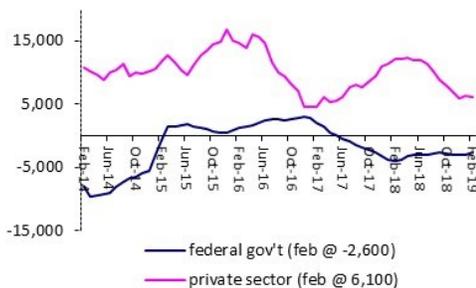


Table 2. Federal government and private sector wage and salary employment in DC: February 2019

Sector	FY 2016	FY 2017	FY 2018	3-month		
				12-mo avg	average	This month
Federal government	199,717	200,208	197,025	195,858	194,567	194,600
1 year ch.	1,692	492	-3,183	-2,883	-2,600	-1,900
% change	0.9	0.2	-1.6	-1.5	-1.3	-1.0
Private sector	535,125	541,250	552,183	554,717	554,200	554,700
1 year ch.	13,658	6,125	10,933	8,725	6,100	4,400
% change	2.6	1.1	2.0	1.6	1.1	0.8

Source: BLS. Not seasonally adjusted. Reflects March revision to February data.

Table 3. Seasonally adjusted DC Employment: September 2018 to February 2019

Indicator	September	October	November	December	January	February
D.C. Wage and Salary employment	792,900	793,900	792,800	793,100	795,200	794,900
change from prior month	200	1,000	-1,100	300	2,100	-300
% change from prior month	0.0	0.1	-0.1	0.0	0.3	0.0

Source: BLS seasonally adjusted. Reflects March revision to February data.

Resident employment and unemployment

The rate of growth of resident employment continues to slow

- In February DC resident employment was up 1,552 (0.4%) from a year earlier (3-mo. moving average). The labor force grew by 1,289 (0.3%).
- The seasonally adjusted unemployment rate rose slightly to 5.5% in February. The rate a year ago was 5.8%.
- Seasonally adjusted resident employment in February was 296 more than in January, and 663 more than in September.
- February initial unemployment insurance claims were up 112% from last year (3-month moving average), still reflecting the impact of January's federal shutdown.

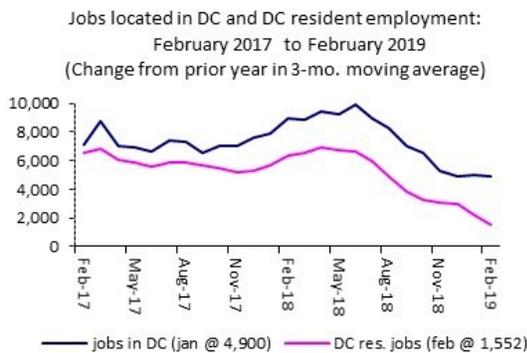
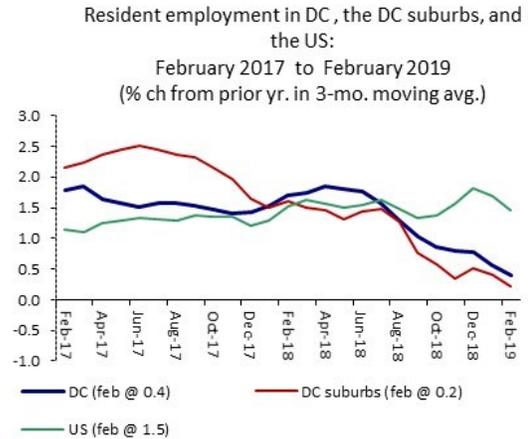


Table 4. Unemployment rates for DC, metro area, and US: February 2019

Jurisdiction	Not seasonally adj.		Seasonally adj.	
	Feb. 2018	Feb. 2019	Feb. 2018	Feb. 2019
US	4.4	4.1	4.1	3.8
DC	5.9	6.0	5.8	5.5
DC metro area	3.7	3.5	na	na
DC suburbs	3.4	3.2	na	na

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

Table 5. Resident employment and unemployment: February 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	382,302	381,980	383,439
1 year change	13,081	10,048	6,197	5,578	4,060	1,552	866
% change	3.8	2.8	1.7	1.5	1.1	0.4	0.2
Labor Force	387,250	394,238	400,227	404,416	404,860	404,853	407,959
1 year change	10,863	6,988	5,989	4,189	2,476	1,289	1,263
% change	2.9	1.8	1.5	1.0	0.6	0.3	0.3
Unemployed	27,666	24,606	24,399	23,010	22,557	22,873	24,520
1 year change	-2,219	-3,060	-208	-1,388	-1,584	-263	397
% change	-7.4	-11.1	-0.8	-5.7	-6.6	-1.1	1.6
Unemployment rate	7.1	6.2	6.1	5.7	5.6	5.6	6.0
DC Unemployment insurance (state program)							
Initial claims (monthly avg.)	1,596	1,472	1,505	1,611	2,119	3,146	1,715
1 year change	-255	-123	33	106	615	1,665	567
% change	-13.8	-7.7	2.2	7.1	40.9	112.4	49.4
Weeks compensated (mo. avg.)	32,811	30,261	31,355	30,429	29,465	31,209	28,663
1 year change	-9,322	-2,550	1,094	-926	-2,268	-1,686	-2,188
% change	-22.1	-7.8	3.6	-3.0	-7.1	-5.1	-7.1

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

Table 6. Seasonally adjusted DC Resident employment and unemployment: Sep. 2018 to Feb. 2019

Indicator	September	October	November	December	January	February
DC Resident employment	381,674	381,720	381,835	381,907	382,041	382,337
change from prior month	-121	46	115	72	134	296
% change from prior month	0.0	0.0	0.0	0.0	0.0	0.1
DC Unemployment rate (%)	5.4	5.3	5.3	5.4	5.4	5.5

Source: BLS seasonally adjusted. Reflects March revision to February data.

Jobs by sectors of the economy

Professional and technical services (except legal) led DC job growth in February

● In February professional and technical services (not including legal) added 1,600 jobs to lead growth in the private sector. (3-month moving avg.)

● In the private sector information and food service also grew by more than 1,000 jobs in February.

● The sectors with the fastest rate of growth over the prior year in February were information (7.6%) and amusement and recreation (6.9%).

● Private sector industries losing jobs included accommodations, retail trade, and financial services services.

● Local government rose by 1,400.

● The federal government accounted for 24.6% of all DC jobs in February. 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: February 2017 to February 2019



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

Industry sector	3-month moving average				12-mo. moving avg: % change	Sector % of all DC jobs, Feb. 2019	DC share (%) in Feb 2019 of all sector jobs in:		Change from Feb 2018 to Feb 2019 in DC share of sector jobs in:	
	1 year change		metro area	US			metro area	US		
	Feb. 2018	Feb. 2019							Amount	%
Federal government	197,167	194,567	-2,600	-1.3	-1.5	24.6	53.7	6.96	-0.4	-0.10
Local government	40,733	42,133	1,400	3.4	-1.5	5.3	12.4	0.21	0.3	0.01
Legal services	28,300	28,667	367	1.3	2.6	3.6		2.52		0.03
Professional and tech. (except legal)	89,400	91,000	1,600	1.8	0.4	11.5	22.8	1.09	0.0	-0.02
Employment services	13,367	13,667	300	2.2	2.0	1.7	29.9	0.37	-1.1	0.00
Business services (except employ.)	35,400	35,900	500	1.4	0.1	4.5	18.5	0.45	0.0	0.00
Information	18,467	19,867	1,400	7.6	-0.1	2.5	26.8	0.71	2.0	0.05
Finance	29,567	29,367	-200	-0.7	7.9	3.7	19.0	0.34	0.3	-0.01
Organizations	66,967	67,467	500	0.7	0.5	8.5	36.4	2.25	-0.2	-0.01
Education	60,833	61,733	900	1.5	1.8	7.8	50.3	1.62	-1.2	0.00
Health	70,300	70,833	533	0.8	1.8	9.0	21.9	0.35	0.0	-0.01
Food service	52,500	53,933	1,433	2.7	1.4	6.8	22.3	0.46	-0.1	0.00
Accommodations	15,533	15,133	-400	-2.6	3.3	1.9	34.3	0.77	0.3	-0.03
Amusement and recreation	8,633	9,233	600	6.9	-0.2	1.2	20.6	0.41	-1.0	0.01
Retail trade	23,400	22,600	-800	-3.4	5.3	2.9	8.3	0.14	0.0	-0.01
Wholesale trade	4,867	4,900	33	0.7	-2.2	0.6	7.7	0.08	-0.1	0.00
Construction	15,333	15,207	-127	-0.8	0.5	1.9	9.6	0.21	-0.2	-0.01
Personal and miscellaneous ser.	8,767	8,033	-733	-8.4	1.1	1.0		0.28		-0.03
Other private	6,467	6,660	193	3.0	-0.4	0.8	5.3	0.04	0.0	0.00
Total	786,000	790,900	4,900	0.6	3.6	100.0	24.0	0.53	-0.1	-0.01
Public sector	237,900	236,700	-1,200	-0.5	0.0	29.9	33.7	1.04	-0.2	-0.01
Private sector	548,100	554,200	6,100	1.1	-0.7	70.1	21.4	0.44	0.0	0.00

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

Jobs and wages by sector

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

- For the year ending December the federal government accounted for 24.8% of all jobs and 31.1% of all wages and salaries paid in DC. Over the past year, however, federal jobs fell and the sector accounted for just 5.3% of wage increases.
- Professional and business services accounted for 19.0% of the net gain in employment and 38.9% of the gain in wages paid in DC for the year ending December.
- Information and finance accounted for 21.3% of the increase in jobs and 14.9% of the gain in wages over the past year.
- Education and health services accounted for 29.2% of last year's net job increases and 8.9% of the increase in wages.
- Trade and hospitality accounted for 28.4% of the increase in jobs over the past year and 9.1% of the increase in wages.

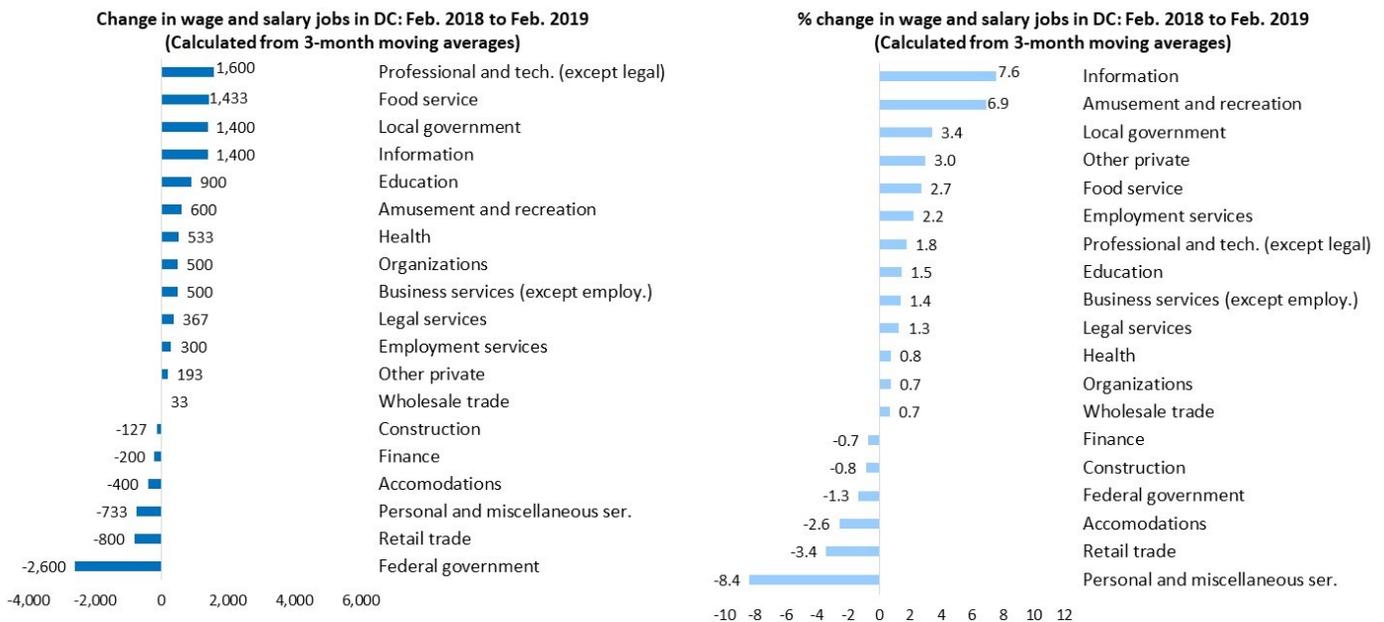


Table 8. Employment and income by sector of the DC economy: 12 mo average ending Dec. 2018 (2018.4)

Sector	12 mo. average wage and salary employment in DC ending December 2018			12 mo avg. wages and salaries earned in DC ending December 2018			Percentage Distributions			
	Level	Change from Dec 2017		Level (\$B)	Ch. from Dec 2017 (\$B)		Employment		Wages	
		2017	% change		Level (\$B)	% change	Dec 2018	Dec 2017	Dec 2018	Dec 2017
Total	792,150	7,658	1.0	75.41	2.63	3.61	100.0	100.0	100.0	100.0
Federal government	196,258	-3,142	-1.6	23.43	0.14	0.60	24.8	-41.0	31.1	5.3
Local government	42,233	1,117	2.7	3.38	0.12	3.67	5.3	14.6	4.5	4.5
Business and professional services	167,650	1,458	0.9	20.05	1.02	5.37	21.2	19.0	26.6	38.9
Information and financial services	49,025	1,633	3.4	6.77	0.39	6.15	6.2	21.3	9.0	14.9
Education and health services	130,808	2,233	1.7	7.61	0.23	3.18	16.5	29.2	10.1	8.9
Trade and hospitality services	107,483	2,175	2.1	5.06	0.24	4.94	13.6	28.4	6.7	9.1
Organizations and personal services	76,300	1,583	2.1	7.18	0.35	5.16	9.6	20.7	9.5	13.4
Other private	22,392	600	2.8	1.94	0.13	7.23	2.8	7.8	2.6	5.0
<i>Private sector</i>	<i>553,658</i>	<i>9,683</i>	<i>1.8</i>	<i>48.61</i>	<i>2.37</i>	<i>5.13</i>	<i>69.9</i>	<i>126.4</i>	<i>64.5</i>	<i>90.2</i>
<i>Government</i>	<i>238,492</i>	<i>-2,025</i>	<i>-0.8</i>	<i>26.80</i>	<i>0.26</i>	<i>0.97</i>	<i>30.1</i>	<i>-26.4</i>	<i>35.5</i>	<i>9.8</i>

Source: BLS and BEA. Federal government wages and salaries includes military.

Wages and income

DC's Personal Income growth continues to grow at a slower rate than the US average

- Wages and salaries earned in the District of Columbia were 4.4% higher in the December quarter compared to the same quarter of 2017.
- Wages earned by DC residents grew an estimated 3.9% in the December quarter compared to last year.
- In the December quarter, DC Personal Income grew 3.9%, compared to 4.6% for the US average.
- The growth rate of proprietors' income was 7.1% in the December quarter.
- Pensions and other transfers grew 2.4% over last year in the December quarter; property income grew 3.5%.

Wages earned in DC, wages earned by DC residents, and wages earned in the US: 2015.4 to 2018.4

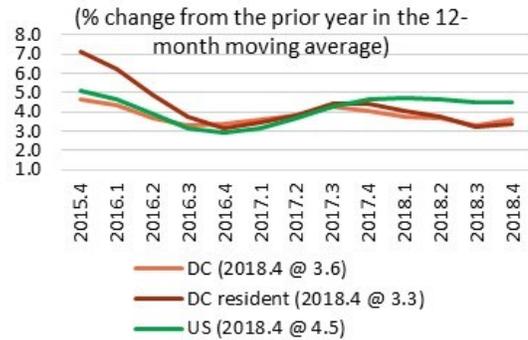


Table 9. DC Wages and Personal Income: December 2018 (2018.4)
(\$ billion at seasonally adjusted annual rates unless otherwise noted)

Indicator	FY 2015	FY 2016	FY 2017	FY 2018	4-qr. moving avg.	Latest qtr. (Dec.)
Wages and salaries earned in DC	67.06	69.26	72.23	74.60	75.41	76.47
1 year change	3.19	2.20	2.97	2.37	2.63	3.24
% change	5.0	3.3	4.3	3.3	3.6	4.4
Supplements to wages & salaries	17.66	18.33	19.14	19.50	19.61	19.73
% change	4.7	3.8	4.4	1.9	1.9	2.2
Income earned in DC**	82.22	85.42	89.49	92.48	93.44	94.71
% change	6.0	3.9	4.8	3.3	3.5	4.2
Net resident adjustment***	-47.50	-49.00	-51.07	-52.57	-53.11	-53.78
% change	3.6	3.1	4.2	2.9	3.3	4.2
Income earned by DC residents**	34.72	36.43	38.42	39.91	40.33	40.93
% change	9.4	4.9	5.5	3.9	3.8	4.3
Wages and salaries of DC residents****	24.66	25.59	26.72	27.59	27.86	28.25
change from one year ago	1.72	0.93	1.13	0.87	0.90	1.07
% change	7.5	3.8	4.4	3.3	3.3	3.9
Proprietors' income earned by DC residents*	7.09	7.73	8.44	9.06	9.21	9.42
% change	17.4	9.0	9.2	7.3	6.9	7.1
Property income of DC residents	9.38	9.54	9.87	10.33	10.42	10.57
% change	6.4	1.7	3.4	4.7	4.2	3.5
Pensions and other transfers for DC residents	6.02	6.45	6.64	6.73	6.77	6.87
% change	1.2	7.1	3.0	1.3	1.7	2.4
DC Personal Income	50.12	52.42	54.93	56.97	57.52	58.37
1 year change	3.61	2.30	2.51	2.04	2.01	2.19
% change	7.8	4.6	4.8	3.7	3.6	3.9
US Personal income (% change from prior year)	5.6	2.8	4.0	4.5	4.5	4.6
US Wages and salaries (% change from prior year)	5.5	3.2	4.3	4.5	4.5	4.5
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.

**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 individuals.

Source: BEA; data released March 26, 2019

Population, jobs, and per capita income

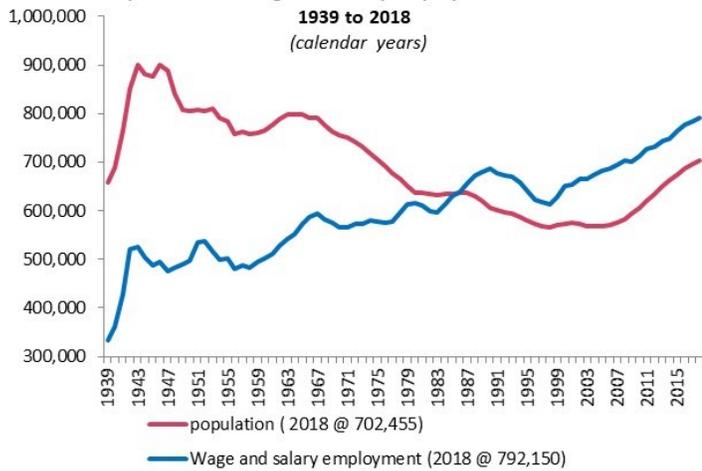
DC's population is growing faster than the national average, but per capita income is growing more slowly

- For 2018, population increased 6,764 (1.0%) and wage and salary employment increased by 7,658 (1.0%).
- In 2018 population and jobs grew below their 5 year average amount from 2013 to 2018.
- In the December quarter, DC's per capita income grew at a 2.9% rate compared to 3.9% in the US.
- In the December quarter wages per job in DC grew faster than in the US (3.7% v 2.7%).

DC population and employment: CY 2010 to CY 2018
(percent change from the prior year)



DC Population and Wage and Salary Employment located in DC:
1939 to 2018
(calendar years)



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

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

Calendar year	Population Number	Population Change from prior yr.		Wage and salary employment Number	Wage and salary employment Change from prior yr.	
		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 2013 to 2018		52,024	8.0		48,775	6.6
Avg. annual ch.		10,405			9,755	

Source: U.S. Census Bureau (population), BLS (jobs)

Table 11. Per capita income and wages per job in DC and the US: FY 2016 to December 2018

	DC					US				
	FY 2016	FY 2017	FY 2018	12-mo avg (Dec)	2018.4	FY 2016	FY 2017	FY 2018	12-mo avg (Dec)	2018.4
Per capita income	76,920	79,414	81,198	81,472	82,777	49,555	51,148	53,192	53,706	54,484
% ch in per capita income	2.8	3.2	2.2	1.9	2.9	2.0	3.2	4.0	4.0	3.9
% ch in population	1.7	1.5	1.3	1.1	1.0	0.7	0.7	0.5	0.5	0.6
% ch in personal income	4.6	4.8	3.7	3.6	3.9	2.8	4.0	4.5	4.5	4.6
Wages per job	89,377	92,264	94,303	95,165	96,405	55,726	57,187	58,835	59,226	59,789
% ch in wages per job	1.2	3.2	2.2	2.6	3.7	1.3	2.6	2.9	2.8	2.7
% ch in wages and salary jobs	2.1	1.0	1.0	1.0	0.7	1.8	1.6	1.6	1.7	1.8
% ch in total wages	3.3	4.3	3.3	3.6	4.4	3.2	4.3	4.5	4.5	4.5
US Consumer price index						0.9	2.1	2.4	2.4	2.2

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

Housing permits rise to highest pace since DC population began to grow

- 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 February 5,798 housing permits were issued, up 9.6% from last year. The 3-month total (2,182) was 381% above the same period as last year. If the pace were ever higher in the past 50 years, it was back in the 1960's when there was a period of populatio growth
- 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.

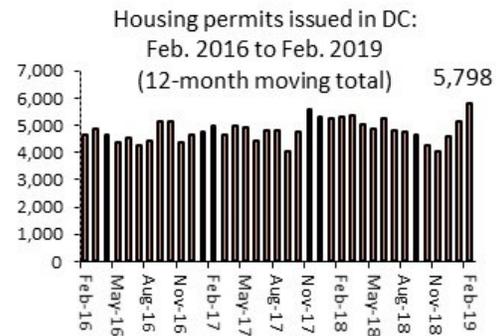
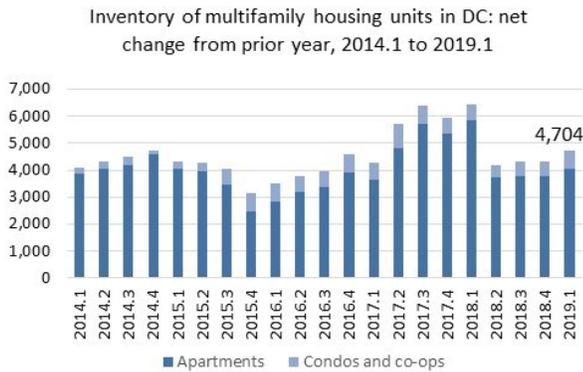


Table 12. Estimated DC households: 2012 to 2018

date	Population	pop/hh ratio	Estimated households	1 yr ch
2012	634,725	2.259	281,000	6,217
2013	650,431	2.260	287,793	6,793
2014	662,513	2.261	292,976	5,183
2015	675,254	2.263	298,441	5,466
2016	686,575	2.267	302,854	4,412
2017	695,691	2.271	306,278	3,424
2018	702,455	2.276	308,636	2,358

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: February 2019

	FY 2016	FY 2017	FY 2018	12-mo. moving total	3-mo. moving total	This month
Total units	5,129	4,026	4,640	5,798	2,182	954
change from 1 yr ago	998	-1,103	614	510	1728	679
% change from 1 year	24.2	-21.5	15.3	9.6	380.6	247
Multi-family projects with 5 or more units						
number	40	38	46	57	21	9
average size	128	106	101	102	104	101
Units in small projects with up to 4 units	333	376	179	195	79	45
% of all units	6.5	9.3	3.9	3.4	3.6	4.7

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

CY	Inventory									Under construction					
	All Units			Apartments			Condominiums			Apartments			Condominiums		
	number	1 year ch.	%	build-ings	units	1 yr ch	build-ings	units	1 yr ch	build-ings	units per bldg.	build-ings	units	units per 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.

• 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) vacancy rate :
2016.1 to 2019.1
(all classes; units on left scale)

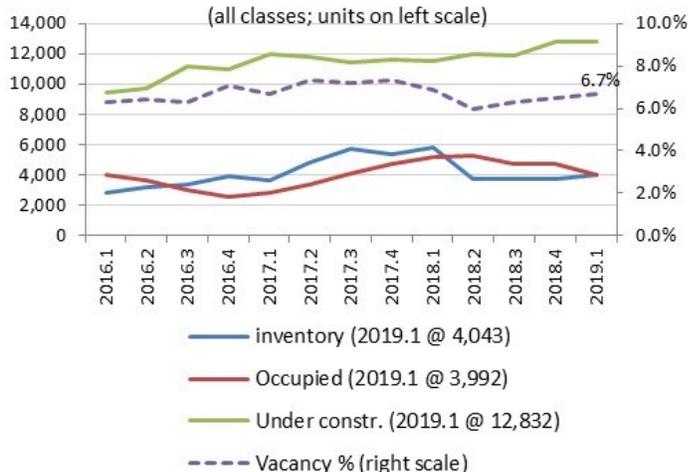
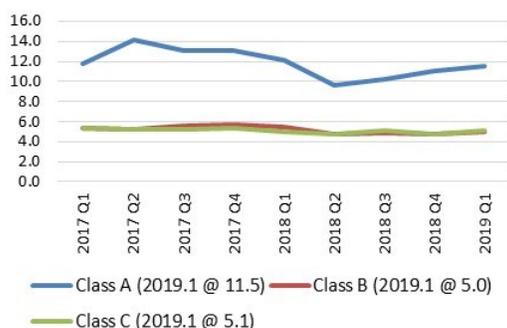


Table 15. Apartment units in DC: 2013 to 2019.1

	Level				Change from prior period						Average rent		1 yr ch in units under constr.
	number				Inventory		Occupied		Vacant		Effective rent per unit	1 yr % change	
	Inventory	Occupied	Vacant	% vacant	units	% ch	units	% ch	units	% ch			
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	146,159	136,377	9,782	6.7	4,043	2.8	3,992	3.0	51	0.5	\$1,896	3.0	1,343
1 Q ch	906	642	264								-\$7		

Source: CoStar, as of April 17, 2019.

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

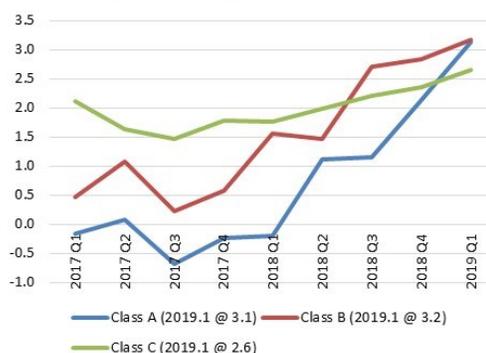


Table 16. Market rate apartment units in DC, Classes A, B, and C: 2019.1

Class	Inventory Units					Occupied units			Effective monthly rent		Under construction		
	Buildings	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 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: 2016.4 to 2018.4 (million square feet)

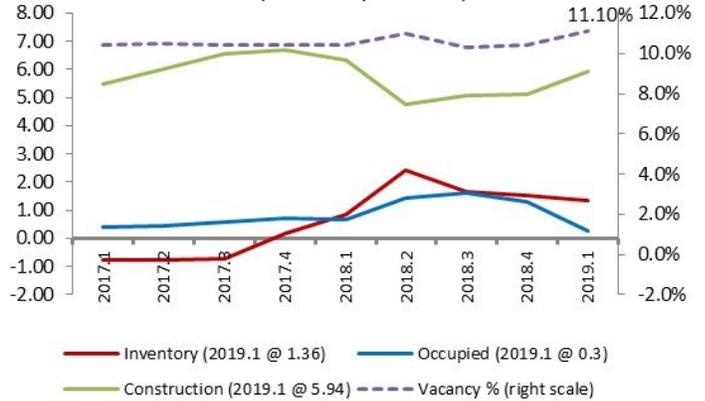


Table 17. DC commercial office space: 2013 to 2019.1

CY (year end)	Inventory				Occupied space			Vacant space			Base rent (direct)		Under constr.		
	Build-ings	Level (msf)	1 yr ch (msf)	1 yr % ch	Level (msf)	1 yr ch (msf)	% ch	Level (msf)	Direct only %	Total %	\$ per sq ft.	1 yr % ch	Build-ings	msf	Avg. sf per 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

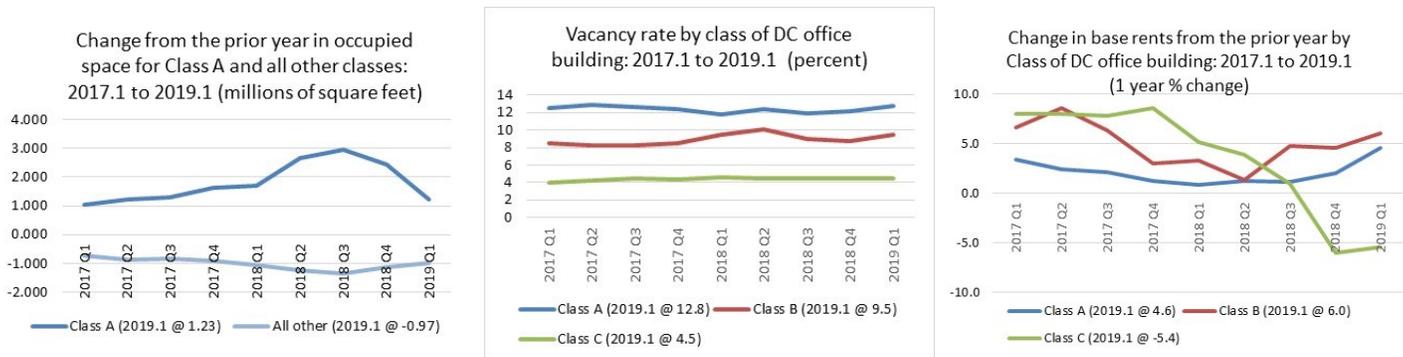


Table 18. DC Class A, B, and C commercial office space: 2019.1

Class	Inventory				Occupied space			Vacant space			Base rent (direct)		Under constr.	
	Build-ings	Level (msf)	1 yr ch (msf)	1 yr % ch	Level (msf)	1 yr ch (msf)	% ch	Level (msf)	Total %	Direct %	\$ per sq ft.	1 yr % ch	Build-ings	msf
Class A	317	87.29	2.48	2.9	76.07	1.23	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	-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	-0.4	0.5	4.2	4.5	\$35.20	-5.4	0	

Source: CoStar. Data as of April 17, 2019

Property transfers and deed taxes

The value of real property transfers fell over the past three months but is up for the past year

- The value of March property transfers rose by 4.9% to \$15.38 billion from last year as measured by the 12-month moving total. The 3-month moving total, \$3.28 billion, was 15.5% below last year.
- Over the 12 month period ending March, the estimated value of brokered home sales fell 0.5% while the value of all other real property transfers rose 8.7%. For the last 3 months, the value of both types of sales were less than last year.
- Over the past 12 months ending March a measure of major construction activity—the amount by which deed recordation tax collections exceeds deed transfer collections—declined 6.4%. For the last 3 months, however, it was 23.5% higher.

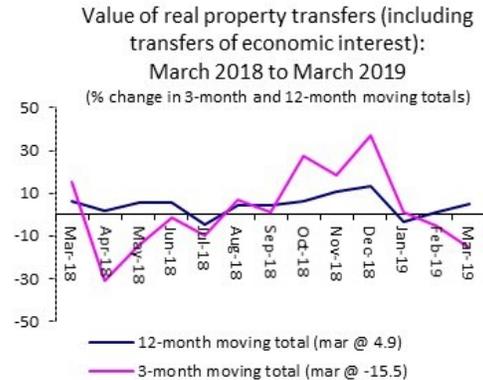
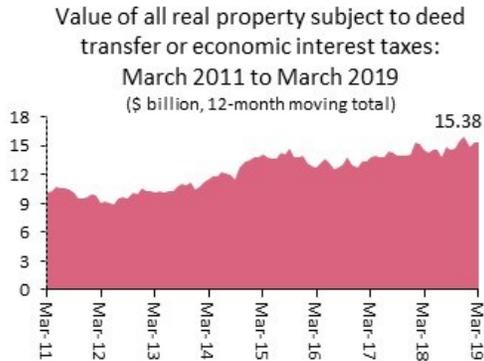


Table 19. Market Value of Real Property transfers subject to the Deed Transfer or Economic Interest tax: March 2019

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	12-mo moving total	3-month moving total	This month
All property transfers (\$ million)	11,569.8	14,766.3	13,035.9	13,998.6	14,646.3	15,379.0	3,283.3	1,100.3
change from one year ago (\$M)	505.8	3,196.5	-1,730.3	962.6	647.8	724.6	-600.9	51.3
% change from 1 year ago	4.6	27.6	-11.7	7.4	4.6	4.9	-15.5	4.9

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/ORR (calculated from tax collections and deposits adjusted for tax rate changes).

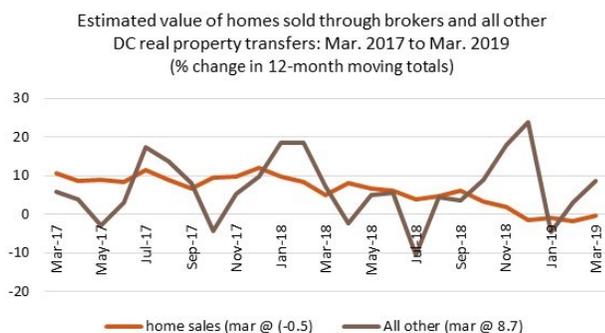


Table 19A. Value of (1) brokered home sales and (2) all other real property subject to the Deed Transfer and Economic Interest taxes: FY 2016 to March 2019

	FY 2016	FY 2017	FY 2018	12-mo moving total	3-month moving total
Brokered home sales (\$M)	5,465.4	5,823.2	6,184.2	6,001.5	1,196.5
All other property transfers (\$M)	7,570.5	8,175.4	8,462.1	9,377.4	2,086.8
% change from 1 year ago					
Brokered home sales	8.0	6.6	6.2	-0.5	-0.5
All other property transfers	-22.0	8.0	3.5	8.7	-22.2

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 calculated from deed tax collections reported by the OCFO (see table 19) and the value of brokered home sales.

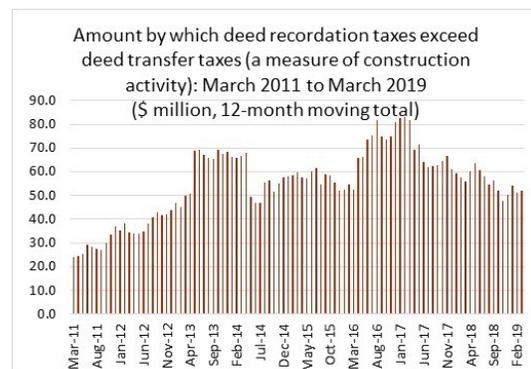


Table 19B. A deed tax measure of construction activity (the amount by which recordation taxes exceed transfer taxes): FY 2016 to March 2019

	FY 2016	FY 2017	FY 2018	12-mo moving total	3-month moving total
Amount of difference (\$M)	74.9	62.8	56.2	52.1	10.2
ch. from one year ago (\$M)	15.8	-12.1	-6.5	-3.6	1.9
% change from 1 year ago	26.8	-16.2	-10.4	-6.4	23.5

Source: OCFO/Recorder of Deeds and OCFO/ORR. 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

The trend of fewer sales and higher prices for single family homes continued in March

- The 3-month moving total of single family home sales in March was down 6.7% from a year earlier, while the average selling price was 12.7% higher. The year-to-date median sales price of detached homes (\$750,000) was 0.1% higher than the prior year, while the median price of attached homes (\$719,000) was 14.1% higher.
- March condominium sales were down 10.2% 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 (\$460,000) was 1.1% higher than last year.
- The total value of all home sales in March was down 0.5% from last year as measured by the 3-month moving total. For the past 12-months the total was also down by 0.5%.



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

Indicator	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	12-mo moving total or average	3-mo moving total or average	This month
Number of sales (settled contracts)								
Single family	4,024	4,097	4,385	4,552	4,717	4,447	888	353
1 year change	45	73	288	167	165	-263	-64	-4
% change	1.1	1.8	8.7	3.8	3.6	-5.6	-6.7	-1.1
Condo	3,592	3,832	3,955	4,046	4,240	4,025	806	323
1 year change	105	240	123	91	194	-152	-92	-28
% change	3.0	6.7	5.6	2.3	4.8	-3.6	-10.2	-8.0
Total	7,616	7,929	8,340	8,598	8,957	8,472	1,694	676
1 year change	150	313	411	258	359	-415	-156	-32
% change	2.0	4.1	7.2	3.1	4.2	-4.7	-8.4	-4.5
Average prices of units sold								
Single family (\$)	736,362	767,870	794,668	824,857	835,130	866,779	871,652	882,548
1 year change	23,563	31,508	26,798	30,189	10,273	46,776	98,559	110,929
% change	3.3	4.3	5.8	3.8	1.2	5.7	12.7	14.4
Condo (\$)	472,419	499,650	500,824	511,247	529,463	533,408	524,176	556,777
1 year change	24,592	27,232	1,173	10,423	18,215	14,598	4,453	26,244
% change	5.5	5.8	2.2	2.1	3.6	2.8	0.9	4.9
Total value of all sales (\$ million)								
Total value of all sales	4,660.0	5,060.6	5,465.4	5,823.3	6,184.2	6,001.5	1,196.5	491.4
1 year change	262.2	400.6	404.8	357.9	361.0	-27.8	-6.2	29.7
% change	6.0	8.6	12.4	6.5	6.2	-0.5	-0.5	6.4
Ratio: active inventory to sales								
Single family	1.6	1.5	1.6	1.6	1.6	1.5	1.6	1.3
Condo	1.9	1.7	1.8	1.8	1.8	1.9	1.5	1.2

Median contract prices, CY to date (March): single family detached \$750,000 (0.1% 1 yr ch); single-family attached \$719,000 (14.1% 1 yr ch); condominium and co-ops \$460,000 (1.1% 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 and metro area average

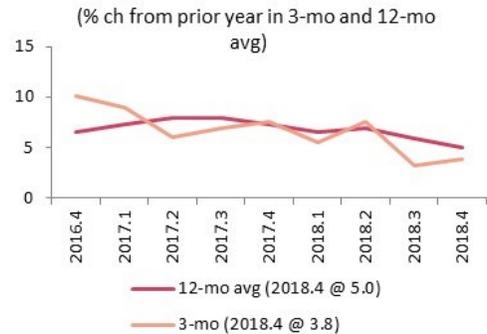
- The percentage change in DC home prices increased 3.8% in the December quarter, according to the Federal Housing Finance Agency Index of single-family same-property transactions. The US index was up 6.4%, and the Washington metropolitan area gain was 4.3%.
- 27.7% of all single family sales for the 12-months ending March 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: December 2018 (2018.4)**

Indicator	Fiscal year average				Last 2 Q's	
	FY 2015	FY 2016	FY 2017	FY 2018	2018.3	2018.4
% change from prior year in value of index						
DC	7.8	4.8	8.0	5.9	3.2	3.8
DC metro area	3.2	2.5	4.8	5.0	4.6	4.3
US	5.4	5.5	6.5	7.2	6.9	6.4

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.

FHFA Expanded-data housing price index for DC: 2016.4 to 2018.4



DC Personal Income and FHFA Housing index: 2010.4 to 2018.4



FHFA expanded-data housing price index for DC, the Washington Metropolitan area, and the US: 2015.4 to 2018.4

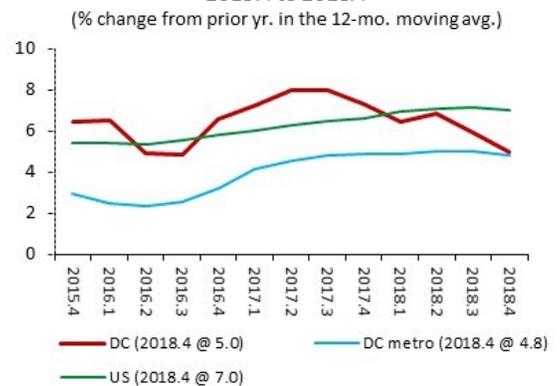


Table 22. **D.C. Single family and condominium home sales at prices of \$1 million or more: March 2019**

Category	FY 2016	FY 2017	FY 2018	12-mo	3-mo	This month
				moving total	moving total	
Single family homes	936	1,057	1,192	1,230	251	102
1 year change	171	121	135	105	64	25
% change	30.5	12.9	12.8	9.3	34.2	32.5
percent of all single family sales	21.3	23.2	25.3	27.7	28.3	28.9
Condominiums	167	189	222	211	46	26
1 year change	7	22	33	-3	0	7
% change	21.9	13.2	17.5	-1.4	0.0	36.8
percent of all condominium sales	4.2	4.7	5.2	5.2	5.7	8.0

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**

FY	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 visitors and revenue up slightly from a year ago

- For the past 3 months, the number of room-days sold in February was 0.2% more than a year ago, the average room rate was up by 2.7%, and hotel revenues were up by 2.9%. In February the 12-month moving total for hotel room-days sold was 1.8% above a year earlier, but revenues were 0.5% lower.
- Employment in food services was 2.7% more in February than a year earlier as measured by the 3-month moving average. Hotel employment was 2.6% lower.
- January airline traffic into the DC area was up 0.8% compared to a year earlier as measured by the 3-month moving total. Reagan National was down 0.5%. For the past 12-months, total traffic into the DC area was 2.1% more than the prior year.

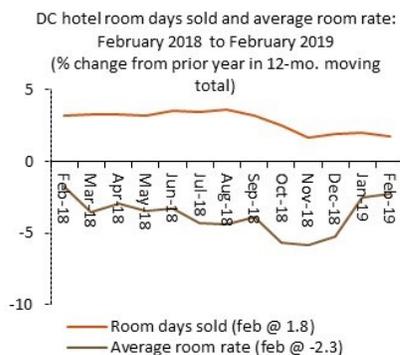
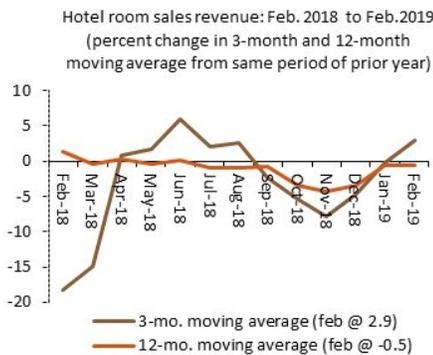


Table 27. Hospitality Industry: February 2019

Indicator	Units	date	FY 2015	FY 2016	FY 2017	FY 2018	12-month moving total or average*	3-month moving total or average*	This month	
Hotel stays										
Hotel room-days sold	('M)	feb	8.197	8.332	8.740	9.021	8.996	1.762	0.614	
			1 yr ch	0.328	0.135	0.408	0.281	0.155	0.004	-0.010
			1 yr % ch	4.2	1.3	4.9	3.2	1.8	0.2	-1.7
Average room rate	\$	feb	215.34	221.19	233.03	223.90	221.54	183.13	197.35	
			1 yr ch	5.46	7.18	11.84	-9.14	-5.13	4.74	1.12
			1 yr % ch	2.6	3.3	5.4	-3.9	-2.3	2.7	0.6
Occupancy rate	%	feb	77.5	78.0	78.5	78.1	77.0	60.4	67.8	
(average)			1 yr ch	0.9	0.5	0.5	-0.5	-1.1	-1.7	-2.7
			1 yr % ch	1.2	0.7	0.6	-0.6	-1.4	-2.7	-3.8
Room revenue	(\$M)	feb	1,765.1	1,843.0	2,036.7	2,019.7	1,993.0	322.7	121.1	
			1 yr ch	113.6	83.2	193.7	-17.0	-11.0	9.1	-1.4
			1 yr % ch	6.9	4.7	10.5	-0.8	-0.5	2.9	-1.1
Airline passengers										
DCA	1 yr % ch	jan	10.3	2.8	3.2	-1.2	-1.3	-0.5	0.1	
IAD	1 yr % ch	jan	0.3	-0.1	5.0	4.1	5.4	5.4	1.7	
BWI	1 yr % ch	jan	4.1	6.0	5.6	4.5	2.2	-2.0	-5.2	
Total	1 yr % ch	jan	4.8	3.0	4.6	2.5	2.1	0.8	-1.4	
Employment										
Accommodations	level ('000)	feb	15.2	14.9	15.0	14.8	15.4	15.1	15.1	
			1 yr ch	0.0	-0.3	0.1	-0.2	0.0	-0.4	-0.4
			1 yr % ch	-0.2	-1.9	0.6	-1.3	-0.2	-2.6	-2.6
Food and bev	level ('000)	feb	49.7	51.5	52.0	54.3	55.0	53.9	53.9	
			1 yr ch	2.7	1.7	0.6	2.2	1.8	1.4	1.1
			1 yr % ch	5.6	3.5	1.1	4.3	3.3	2.7	2.1

* Total for hotel rooms sold and room revenue.

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

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

- 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 3.2% (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 (6.6%).

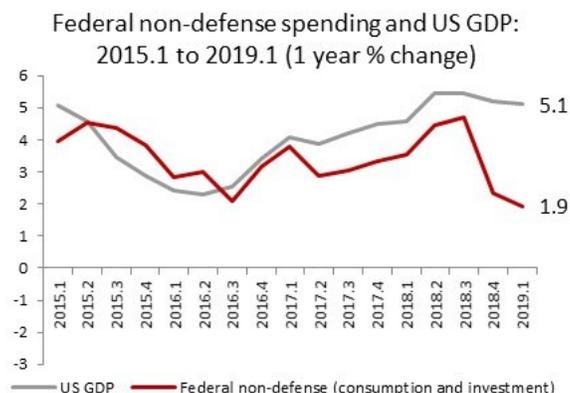


Table 29. Federal government consumption and investment, US GDP accounts: 2019.1

(percent change from same period of prior year)

Indicator	FY 2015	FY 2016	FY 2017	FY 2018	12-mo avg	2019.1
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	2.0
Purchases of goods and services	6.1	3.8	1.7	9.0	4.4	-3.2
Gross investment	3.6	1.4	3.0	2.7	3.2	4.8
Defense	-2.4	-0.4	1.7	3.7	5.5	6.6
Compensation of employees	-0.4	1.2	1.7	0.4	0.9	1.9
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	6.8
All federal consumption and invest.	0.1	0.9	2.3	3.9	4.6	4.7

Source: BEA (April 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	3.2
US GDP nominal	4.3	7.6	4.9	4.1	3.8
Wages and salaries	5.7	2.8	4.9	4.5	4.4
Personal income	5.1	3.4	4.4	5.2	3.3

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

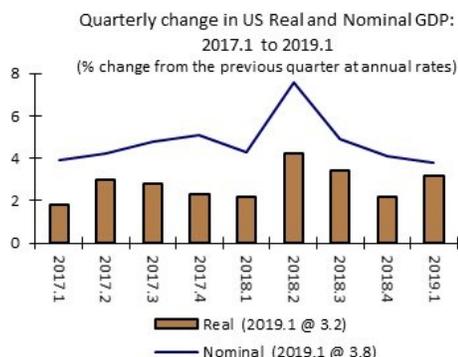


Table 28. US GDP, income, and inflation: 2019.1

(percent change from same period of prior year)

Indicator	FY 2015	FY 2016	FY 2017	FY 2018	12-mo 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	4.4	4.1
Consumption	4.4	4.0	4.3	4.7	4.7	4.2
Investment	7.2	-1.3	5.0	7.7	8.3	7.6
Corporate profits*	1.3	2.9	4.2	6.7	na	na
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

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

*Before tax, with IVA and CCAAdj.

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



Table 31. Monthly selected US Indicators: November 2018 to March 2019

Indicator	November	December	January	February	March
S and P stock index (level)	2723	2567	2607	2755	2804
% change from prior month	-2.2	-5.7	1.6	5.7	1.8
% change from 1 year ago	5.0	-3.6	-6.5	1.8	3.7
10 yr. Treasury Interest rate (level)	3.12	2.83	2.71	2.68	2.58
CPI % ch from prior month (seasonally adjusted)	0.02	-0.06	-0.02	0.17	0.17
CPI % ch from prior year (seasonally adjusted)	2.21	1.95	1.38	1.40	1.40
Jobs (seasonally adjusted level, in millions)	150.05	150.28	150.59	150.62	150.82
change from prior month (thousands)	196	227	312	33	196
% change from prior month	0.1	0.2	0.2	0.0	0.1
Resident employment (season. adj. level, in mil.)	156.80	156.95	156.69	156.95	156.75
change from prior month (thousands)	221	142	-251	255	-201
% change from prior month	0.1	0.1	-0.2	0.2	-0.1
Unemployment rate (seasonally adj.)	3.7	3.9	4.0	3.8	3.8

Source: BLS and Fred (Federal Reserve data base)

DC tax collections

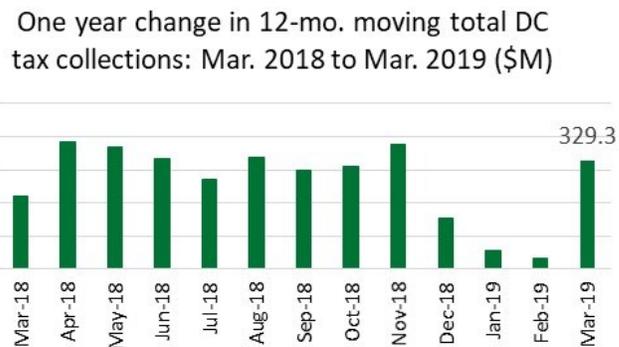
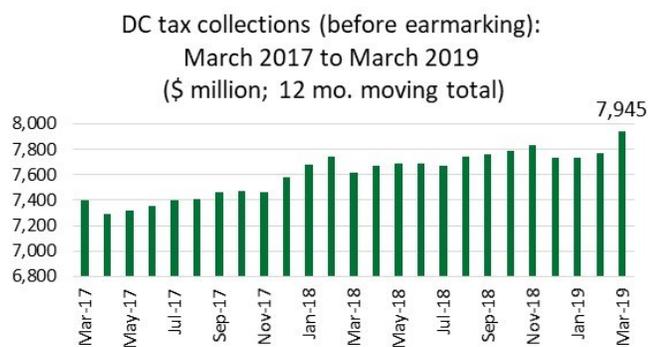


Table 32. Tax Collections (before earmarking): March 2019 (Preliminary)

Tax	Revenue (from CAFR)				Tax collections			
	FY 2015	FY 2016	FY 2017	FY 2018	12-month moving total	FY 2019 to date	3-month moving total	This month
Total taxes	6,916.8	7,241.0	7,472.9	7,771.3	7,945.2	3,513.2	2,290.0	1,322.8
1 year change	626.9	324.2	239.3	298.5	329.3	188.1	213.1	174.6
% change	10.0	4.7	3.3	4.0	4.3	5.7	10.3	15.2
Real property	2,194.5	2,357.5	2,473.3	2,554.2	2,625.0	1,057.7	1,019.5	1,023.1
1 year change	178.9	163.0	115.9	80.9	94.2	69.4	98.4	150.3
% change	8.9	7.4	4.9	3.3	3.7	7.0	10.7	17.2
General sales	1,315.3	1,343.1	1,419.2	1,492.6	1,504.1	741.7	339.4	92.7
1 year change	143.2	27.8	76.1	73.4	60.3	21.5	5.0	-11.6
% change	12.2	2.1	5.7	5.2	4.2	3.0	1.5	-11.1
Individual income	1,868.0	1,907.9	1,958.3	2,066.8	2,123.0	982.8	538.8	53.2
1 year change	188.9	39.8	50.4	108.6	95.2	33.4	77.3	12.8
% change	11.2	2.1	2.6	5.5	4.7	3.5	16.7	31.8
withholding	1,553.2	1,627.6	1,766.6	1,818.2	1,877.1	970.5	539.3	165.0
1 year change	80.3	74.4	139.0	51.6	84.5	44.3	30.4	14.7
% change	5.5	4.8	8.5	2.9	4.7	4.8	6.0	9.8
non-withholding	314.8	280.3	191.7	248.7	245.9	12.3	-0.5	-111.8
1 year change	108.6	-34.5	-88.6	56.9	10.7	-10.9	46.9	-1.9
% change	52.7	-11.0	-31.6	29.7	4.5	-47.1	na	na
Corporate income	308.0	387.1	389.2	436.5	445.7	173.0	75.1	34.7
1 year change	27.8	79.1	2.1	47.3	74.2	31.3	14.1	-3.0
% change	9.9	25.7	0.6	12.2	20.0	22.1	23.1	-8.0
Unincorporated Bus.	139.8	169.4	165.0	138.2	126.1	40.4	21.8	11.5
1 year change	4.4	29.6	-4.4	-26.8	-30.0	-7.8	4.0	5.0
% change	3.2	21.2	-2.6	-16.2	-19.2	na	22.5	na
Deed taxes*	480.6	445.2	460.9	472.3	485.2	249.4	116.7	43.3
1 year change	89.4	-35.4	16.7	11.4	12.8	13.9	-2.3	10.1
% change	22.8	-7.4	3.8	2.5	2.7	5.9	-1.9	30.3
Other taxes	610.6	630.9	606.9	610.7	636.0	268.1	178.6	64.4
1 year change	-5.8	20.3	-17.6	3.7	22.7	26.4	16.6	11.0
% change	-0.9	3.3	-2.8	0.6	3.7	10.9	10.2	20.5

*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/ORR na = not meaningful due to negative numbers

Total tax collections rose sharply in March

- For the 12 month period ending March total tax collections (before earmarking) were \$329.3 million (4.3%) more than in the prior year. For the last 3 months they were up by 10.3% from last year.
- Individual income tax collections were 4.7% above last year for the 12-months ending March and withholding was also 4.7% higher. For the past 3 months, total income tax collections were up 16.7% and withholding was up 6.0%.
- General sales tax collections were 4.2% above last year for the 12-months ending March. For the past 3 months, they were 1.5% above last year.
- Deed tax collections for the 12-months ending March were up 2.7% from last year; for the past 3 months they were down 1.9% from last year.
- Corporate income taxes for the 12 months ending March were up 20.0% while unincorporated business income taxes fell 19.2% from last year.

**Total tax collections (before earmarks):
March 2018 to March 2019**
(% change from prior year: 3-month and 12-month moving totals)



**General Sales tax collections (before earmarks):
March 2018 to March 2019**
(% change from prior year: 3-months and 12-month moving totals)



**Withholding for the Individual Income tax:
March 2018 to March 2019**
(% change from prior year: 3-month and 12-month moving totals)



**General Sales tax and Withholding for the Individual Income tax:
March 2018 to March 2019**
(% change from prior year in the 12-month moving total)



**Deed tax collections (before earmarks):
March 2018 to March 2019**
(% change from prior year: 3-month and 12-month moving totals)



US economic forecasts

Blue Chip real GDP outlook for FY 2019 is the same as FY 2018, with slowing in FY 2020

- The March Blue Chip Indicators pegs real GDP growth for FY 2019 at 2.7%, falling to 2.0% in FY 2020. Nominal growth falls from 4.8% in FY 2019 to 4.2% 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 March forecast for inflation (CPI): 1.9% in FY 2019 and 2.2% in FY 2020.
- IHS Markit and Moody's Analytics March forecasts expect US Personal Income growth to be between 4.4% and 4.7% in FY 2019 and FY 2020.
- S&P 500 March baseline forecasts: For the 4th quarter of 2019, IHS Markit says the stock market will be 10.3% higher than a year earlier, Moody's says it will be 1.8% higher. By the 4th quarter of 2020, IHS Markit says it will grow another 1.0%, while Moody's expects a 4.1% decline.

Table 33. Forecasts for US nominal and real GDP: FY 2015 through FY 2020
(% change from prior fiscal year)

Fiscal year and date of forecast	real			nominal		
	Blue Chip	Moody's Analytics	IHS Markit	Blue Chip	Moody's Analytics	IHS Markit
FY 2015 Actual	3.1	3.1	3.1	4.4	4.4	4.4
FY 2016 Actual	1.6	1.6	1.6	5.5	5.5	5.5
FY 2017 Actual	2.1	2.1	2.1	3.9	3.9	3.9
FY 2018 Actual	2.7	2.7	2.7	5.0	5.0	5.0
FY 2019						
December	2.8	3.1	2.8	5.3	5.5	4.9
January	2.8	2.9	2.7	5.0	5.4	5.0
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
FY 2020						
January	2.0	1.3	2.1	4.2	3.4	4.5
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

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

Forecast date	% change from prior year			% change from prior year		
	2018.4	2019.4	2020.4	2018.4	2019.4	2020.4
	IHS Markit			Moody's Analytics		
December	6.4	6.1	-0.2	6.0	-8.8	4.9
January	3.6	2.6	1.2	3.3	-6.7	4.9
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

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; March 2019 estimate)

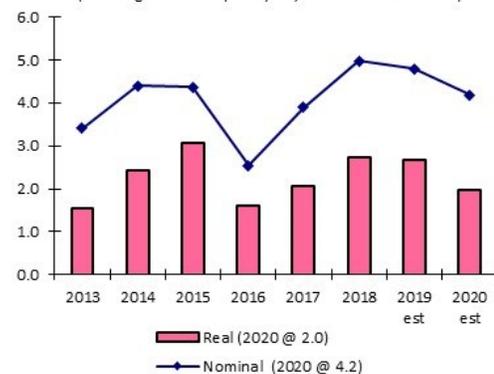


Table 34A. Alternate forecasts of nominal US GDP: FY 2017 to FY 2023
(% change from prior FY)

	2017	2018	2019	2020	2021	2022	2023
IHS Markit	3.9	5.0	4.7	4.4	4.3	4.2	4.1
Moody's Analytics	3.9	5.0	4.9	3.8	3.7	4.9	4.2
CBO	3.9	5.0	5.0	4.1	3.7	3.7	3.8

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

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

Forecast date	% change from prior fiscal yr				% change from prior fiscal yr			
	2017	2018	2019	2020	2017	2018	2019	2020
	IHS Markit				Moody's Analytics			
Dec	4.0	4.4	4.4	4.8	4.0	4.4	4.6	4.5
Jan	4.0	4.4	4.3	4.6	4.0	4.4	4.4	4.4
Feb	4.0	4.4	4.2	4.3	4.0	4.4	4.4	4.5
Mar	4.0	4.5	4.4	4.4	4.0	4.5	4.5	4.7

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 date	CPI			10 yr Treasury rate		
	2018	2019	2020	2018	2019	2020
Dec	2.4	2.1		2.8	3.3	
Jan	2.4	2.0	2.2	2.8	3.0	3.2
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

Source: Blue Chip Indicators

IHS Markit has a more optimistic forecast for DC than Moody's Analytics

● **Jobs:** IHS Markit anticipates DC job growth will dip to 4,401 in FY 2019 and then rise to 8,200 in FY 2020. Moody's has somewhat less growth in both 2019 (3,900) and FY 2020 (6,450).

● **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 3.2% and 2.2%, respectively. In FY 2020 growth rises to 4.0% for IHS Markit and 2.9% 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 new demand will outpace new supply for office space.

Table 38. Forecasts of DC jobs and population to FY 2022

	FY	IHS Markit			Moody's Analytics		
		Level	1 yr ch	%ch	Level	1 yr ch	%ch
Jobs	2017	782,867	7,909	1.0	782,875	7,925	1.0
	2018	791,075	8,208	1.0	791,075	8,200	1.0
	2019	795,476	4,401	0.6	794,975	3,900	0.5
	2020	803,676	8,200	1.0	801,425	6,450	0.8
	2021	807,534	3,858	0.5	801,625	200	0.0
	2022	811,354	3,820	0.5	805,400	3,775	0.5
Population	2017	694,405	9,382	1.4	694,575	9,350	1.4
	2018	701,607	7,202	1.0	701,600	7,025	1.0
	2019	708,285	6,678	1.0	705,975	4,375	0.6
	2020	714,768	6,483	0.9	709,825	3,850	0.5
	2021	720,789	6,021	0.8	713,525	3,700	0.5
	2022	726,286	5,497	0.8	717,600	4,075	0.6

Source: March baseline forecasts from IHS Markit and Moody's Analytics

Table 39. DC resident jobs, households, and housing starts to FY 2022

	FY	IHS Markit	Moody's
			Analytics
Resident jobs (1 year change)			
	2017	6,124	6,125
	2018	5,682	5,700
	2019	2,266	1,425
	2020	8,906	3,450
	2021	5,907	-2,350
	2022	5,231	-350
Households (1 year change)			
	2017	56	9,200
	2018	454	3,650
	2019	2,262	2,900
	2020	3,315	3,300
	2021	3,294	3,050
	2022	3,137	3,225
Housing starts			
	2017	4,381	4,111
	2018	4,877	4,229
	2019	4,038	5,157
	2020	3,407	4,534
	2021	2,982	3,871
	2022	2,560	3,713

Source: March baseline forecasts

Table 40. Forecasts of DC Personal Income to FY 2022

Date of est.	IHS Markit						Moody's Analytics					
	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Dec.	4.8	3.7	3.4	4.4	5.4	4.6	4.8	3.7	2.8	2.8	3.0	4.3
Jan.	4.8	3.6	2.9	4.1	5.2	4.2	4.8	3.6	2.3	2.6	3.0	4.3
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
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

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

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

(percent change from prior year)

Indicator	IHS Markit				Moody's Analytics			
	2018	2019	2020	2021	2018	2019	2020	2021
Wage and salary jobs								
DC	1.0	0.6	1.0	0.5	1.0	0.5	0.8	0.0
Metro area					1.4	1.5	1.1	-0.1
US	1.6	1.8	1.2	0.5	1.6	1.7	1.2	-0.2
Personal Income								
DC	3.6	3.2	4.0	5.9	3.6	2.2	2.9	3.0
Metro area					3.8	3.8	4.3	2.7
US	4.5	4.4	4.4	4.4	4.5	4.5	4.7	3.7

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

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

	IHS Markit				Moody's Analytics			
	2018	2019	2020	2021	2018	2019	2020	2021
Wages and salaries earned in DC								
	3.0	3.0	4.5	5.2	3.0	3.5	5.0	2.6
DC resident wages and salaries								
	3.1	2.1	4.1	7.3	3.1	2.6	5.3	3.6
DC Unemployment rate (level)								
	5.7	5.4	5.1	5.0	5.7	5.5	5.3	6.1

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

Table 43. Delta Associates outlook for Class A apartments in DC and the surrounding metro area: Dec. 2018 to Dec. 2021

Indicator	DC	No VA	Sub MD	Total	DC % of total
Inventory December 2018					
Inventory (msf)	27,103	68,188	38,871	134,162	20.2
Estimated net activity to December 2021					
new supply (msf)	16,426	13,473	8,288	38,188	43.0
new demand (msf)	11,340	8,910	6,750	27,000	42.0

Source: Delta Associates

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

Indicator	DC	No VA	Sub MD	Total	DC % of total
Inventory December 2018					
Inventory (msf)	145.0	184.9	85.6	415.5	34.9
Estimated net activity to December 2020					
new supply (msf)	3.7	0.8	2.6	7.1	52.1
new demand (msf)	4.2	3.0	2.6	9.7	43.3

Source: Delta Associates msf = million square feet

DC revenue estimate

The February revenue estimate: tax revenue (before earmarks) \$242 million more in FY 2019 than in FY 2018, followed by an additional \$300 million increase in FY 2020

- 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 \$115.9 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 2020 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.
- As a % of DC Personal Income, tax revenue is expected to fall slightly from 13.7% in FY 2018 to 13.4% in 2020.

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

Tax	FY level (\$ million)				Change from prior year (\$ M)				% change from prior year			
	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 (% change from prior year)

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

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 2021

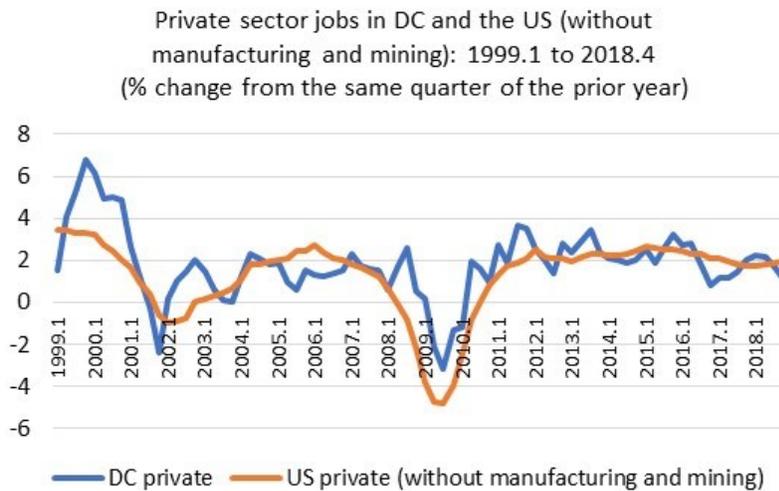
item	2012	2013	2014	2015	2016	2017	2018	2019 est	2020 est	2021 est
Tax revenue (\$ million)										
Level	5,853	6,100	6,290	6,917	7,234	7,473	7,771	8,014	8,313	8,595
Change from prior year	528	247	189	627	317	239	298	242	300	282
Percent change from prior year										
Tax revenue	9.9	4.2	3.1	10.0	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										
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.

Recession and DC’s private sector. In the 2001 and 2007 recessions, the manufacturing and mining sectors of the national economy were hardest hit. In the 2007 recession, for example, wages and salaries in the manufacturing sector declined 13.9% from 2007.2 to 2009.3, while those in the rest of the private sector fell by 2.9% over the same period of 9 quarters. The recession’s impact on DC’s economy was nothing like that of places with a lot of manufacturing and mining, but neither was DC insulated from the effects of the recessions.

The graphs of changes in both jobs and wages in DC’s private sector during the 2001 and 2007 downturn show a similar pattern to the US private sector with manufacturing and mining left out. The extent of the downturn in DC’s private sector is somewhat less, however. For example, a one year decline of 3.2% in private sector jobs in DC in the 2009.3 quarter compared to 4.8% in the private sector nationally (with manufacturing and mining excluded). Similarly, the one year drop in wages in DC’s private sector in the 2009.1 quarter was 4.1% compared to 6.0% in the US.

In a future recession, it would be reasonable to assume that the exposure of DC’s private sector would again at least be similar to that in the US as a whole (excluding manufacturing and mining sectors). However, one reason the private sector impact was lower in DC than for the similar sectors in the US in the last two recessions was the relatively large boost in federal spending that benefitted DC’s economy as the recession unfolded.



Impact of the 2001 and 2007 recessions on private sector jobs and wages in DC and the US

	Wage and salary jobs			Wages and salaries		
	Lowest quarter	Lowest 1-year % change	Number of negative quarters	Lowest quarter	Lowest 1-year % change	Number of negative quarters
2001 recession						
DC private	2001.4	-2.4	2	2002.1	2.1	0
US private*	2002.1	-1.0	4	2002.1	-0.7	1
2007 recession						
DC private	2009.3	-3.2	4	2009.1	-4.1	4
US private*	2009.3	-4.8	9	2009.1	-6.0	4

* Excludes manufacturing and mining

Source: BLS (jobs, not seasonally adjusted), and BEA (wages and salaries, seasonally adjusted)

Federal spending. In the 2001 and 2007 recessions, federal spending increased, providing a counter-cyclical boost to the economy. Because the federal government accounts for such a relatively large portion of DC’s economy, this spending has provided a much more substantial boost to DC’s economy than was true nationally. (Federal jobs account for 25% of the jobs in DC compared to 2% nationally, and federal wages and salaries account for 31% of the total earned in DC compared to 3% nationally. Looked at another way, DC accounts for about 7% of all federal jobs and about 9% of all federal wages and salaries.

The proportionately greater boost that DC received from federal spending is evident in the change in wages and salaries that occurred in DC and the US from 2008.1 to 2009.1, a year right in the middle of the Great Recession. Federal wages and salaries in DC increased by \$1.02 billion in that year, equivalent to 75% of the loss in private sector wages. For the US, the increase in federal wages was equivalent to only 2.3% of the private sector decline. The increase in federal wages and salaries in DC was 15.8% of the US total.

In a new recession it would appear that DC cannot count on receiving such a relatively large boost from federal spending. Under current federal fiscal policies, debt is increasing even as the economy expands. If controlling the level of federal debt is a policy concern at the time another recession occurs, counter-cyclical spending is likely to be much more moderate, if it happens at all, and the proportion spent in DC may be less.

Change from 2008.1 to 2009.1 in private sector and federal wages and salaries in DC and the US

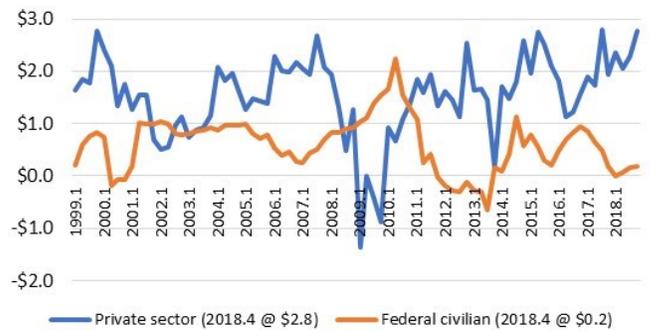
Sector	US		DC		DC % of US total
	Amount of change (\$ billion)	% change	Amount of change (\$ billion)	% change	
Private sector*	-276.69	-6.0	-1.37	-4.1	0.5
Federal civilian	6.48	3.5	1.02	6.1	15.8
Portion of private sector decline offset by federal increase		2.3%	74.5%		

*Excludes manufacturing and mining

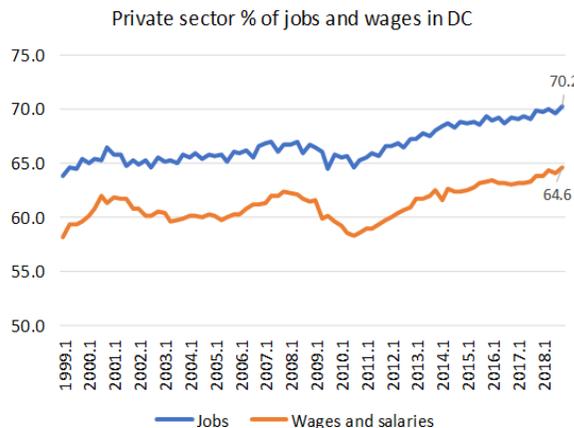
Note: At the time of the 2007 recession, DC accounted for about 7% of all federal civilian jobs and about 9% of all wages and salaries paid to federal employees.

Source: BEA

Change from the prior year in DC private sector and federal wages earned in DC: 1999.1 to 2018.4 (\$ billion)



Private sector share of the economy. In the years since the 2007 recession the private sector share of DC employment and wages has been rising. In 2009.2, the recession’s last quarter, DC’s private sector accounted for 66.1% of all jobs in DC and 59.9% of all wages in the economy. By the 2018.4 quarter, these shares had risen to 70.2% and 64.6%, respectively. With this rise in the private sector’s share of the economy, it is reasonable to expect the potential for negative impacts on the DC economy from a US recession also to rise.

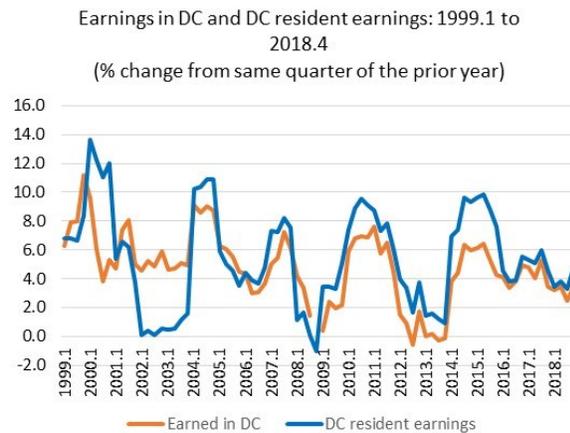
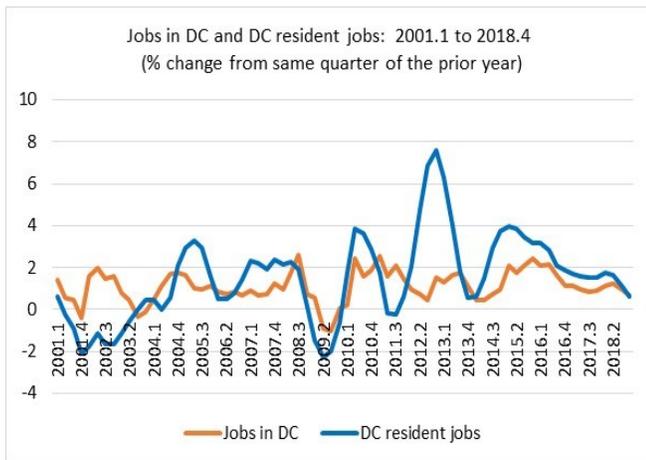


Recession impact on DC residents. In the 2001 and 2007 recessions the jobs and earnings of DC residents (some of whom worked outside of DC) were more adversely affected than were the jobs and earnings related to all the jobs located in DC. In the 2001 recession, resident jobs and wages fell more quickly in the first quarter of 2001 when the recession began. The consequences for DC residents then lingered, which is likely related more to the shock of 9/11 than to the recession itself (9/11 occurred before the recession ended).

In the 2007 recession, neither the jobs located in DC or those for DC residents fell right away when the recession began. By the second quarter of 2009, however, resident jobs were 2.3% lower than a year earlier compared to 0.9% lower for all jobs located in DC. One year into the recession, the earnings of DC residents went from growing at a very fast 7.6% rate in the 2007.4 quarter to -1.0% in the 2008.4 quarter. Earnings of all those working in DC also fell, but not quite as much—from a 6.1% growth rate in 2007.4 to 2.5% in 2008.4.

The jobs and earnings of DC residents surely would be adversely affected by a new recession, but there have been changes in the economy that might mean the impact would be more like—or even less than—that affecting jobs and earnings for all working in DC. For example, DC’s population began to grow in 2005 and it is now 128,051 (22.3%) higher than it was in 2007 when the recession began. From calendar year 2009 to calendar year 2018, DC resident jobs grew faster than jobs located in DC (25.5% versus 12.9%), and the growth in amounts earned by DC residents also well outpaced the amounts earned in DC (64.5% versus 42.4%). Also, DC resident jobs and earnings recovered faster from the 2007 recession, and the growth of resident jobs and earnings also generally remained above jobs and earnings for all persons working in DC for the period of the sequester (FY 2013) and subsequent years.

—Stephen Swaim, DC Office of Revenue Analysis



About the data: The wage and salary employment data for DC and the US is from the US Bureau of Labor Statistics (BLS). Most of the data shown here are based on quarterly data calculated from data that is not seasonally adjusted.

Data on earnings and wages and salaries 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 of the data are subject to further revision next year.

US business cycle expansions and contractions are officially designated by the National Bureau of Economic Research (NBER). According to NBER, the 2001 recession was a brief one, extending only from March 2001 (the first quarter) to November 2001 (the fourth quarter). Particularly for DC, the occurrence of the 9/11 attacks in the midst of the recession makes it more complicated to discern only the recession’s impact on DC.

NBER defines the Great Recession of 2007 as running from December 2007 (the fourth quarter) to June 2009 (the second quarter).

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.

<p>Recent ORA reports:</p> <p>February revenue estimate. February 28, 2019.</p> <p>DC Tax Facts, 2018. Details on all DC taxes.</p> <p>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.</p> <p>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.</p> <p>Briefing documents. A series with information related to DC's economy and taxes.</p> <p>Review of economic development tax expenditures. November 2018. Comprehensive description and analysis of DC tax expenditures related to economic development incentives.</p>
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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	February	May 17
D.C. Personal Income	BEA	2018.4	June 25
D.C. Tax Collections	OTR/ORA	March	c. May 15
D.C. Housing Sales	MarketStats by ShowingTime*	March	c. May 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	February	c. April 20
Consumer Price Index	BLS	March	May 10
U.S. Jobs and Labor Force	BLS	February/March	May 3
U.S. GDP and Personal Income	BEA	2019.1	May 30
S and P 500 Stock Index	FRED (St. Louis Fed Reserve)	March	May 1
Interest rate on 10-Year Treasury Securities	FRED (St. Louis Fed Reserve)	March	May 1
IHS Markit D.C. forecast	IHS Markit	March	c. April 20
Moody's Analytics D.C. forecast	Moody's Analytics	March	c. April 20
Blue Chip Economic Indicators for the U.S.	Wolters Kluwer	March	c. April 10

*Accessed through Bright MLS & the Greater Capital Area Association of Realtors.

For further information or to comment on this report, contact: Stephen Swaim (202-727-7775) or stephen.swaim@dc.gov See also the *Economic Indicators* issued monthly by the D.C. Office of the Chief Financial Officer (www.cfo.dc.gov).

District of Columbia Economic and Revenue Trends is prepared by the Office of Revenue Analysis, which is part of the Office of the Chief Financial Officer of the District of Columbia government.

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