



## District of Columbia Economic and Revenue Trends: December 2015

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### Highlights:

- ◇ Slower job growth.....2
- ◇ Higher single family house prices.....6,7
- ◇ Building permits top 5,000 for past year.....9
- ◇ Property transfers decline.....11

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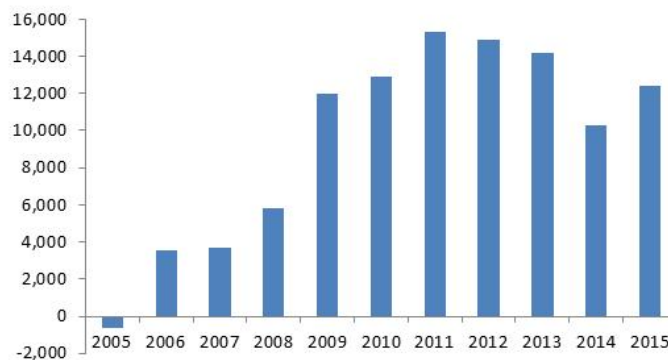
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## DC population tops 672,000 in 2015, a gain of 12,000 from the prior year

### *More international migration is the main reason for faster growth in 2015 than in 2014*

According to Census Bureau estimates released in December, DC's population as of July 1, 2015 was 672,228, an increase of 12,392 (1.9%) from 2014. This is the 6th time in the past 7 years that DC's population grew by 1,000 per month or more, the exception being 2014 (10,296).

Increase in DC population from the prior year: 2005 to 2015

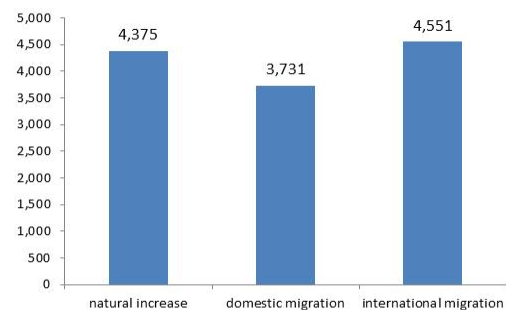


Migration is the driving force behind DC's growth last year, as it has been over the past 7 years. Natural increase (births minus deaths) accounted for a little more than a third of 2015's growth. The rest was from the net in-migration of more than 8,000 persons, 55% of whom were from outside the US. The, 4,551 new international migrants were the largest source of growth in 2015.

Although DC's 2015 population increase was greater than it was in 2014, it was 14.6% less than the average annual growth for the prior four year period. (The increase was 12,392 in 2015 and an average of 14,517 from 2010 to 2014.) Of the components of change, only international migration was greater (*Cont'd on p.19*)

Change from 2014 to 2015 in DC's population due to (1) natural increase, (2) net domestic migration, and (3) net international migration

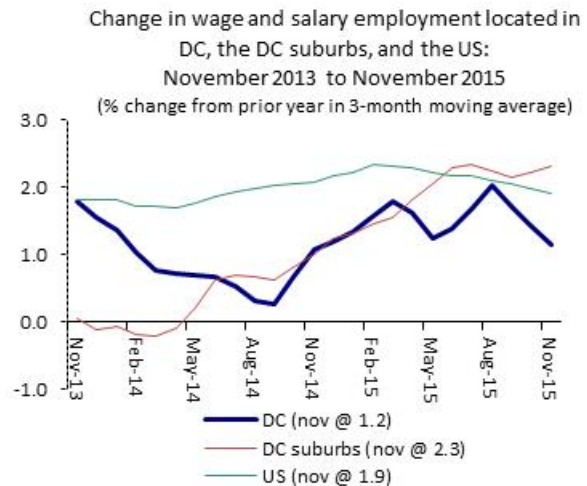
Source: Census Bureau



## Wage and salary employment

### For the past 3 months the rate of job growth in DC is below that in the US and the metro area

- November wage and salary employment in DC was up by 8,867 (1.2%) from a year earlier as measured by the 3-month moving average.
- Federal government employment in DC for November was up by 600 (0.3%). The private sector gained 8,733 (1.7%).
- Total year-over-year DC metropolitan area employment increased by 63,700 (2.0%) in November as measured by the 3-month moving average.
- Suburban Washington employment in November increased by 2.3% from a year earlier.
- Seasonally adjusted DC jobs rose by 700 in November from the prior month.

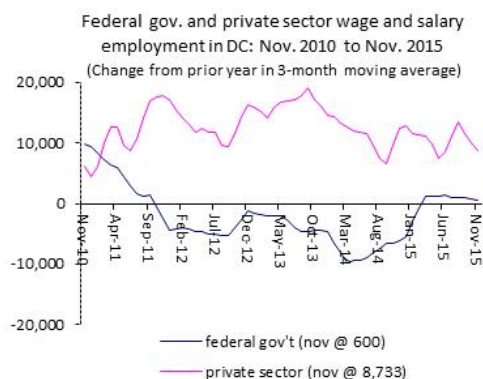


**Table 1. Wage and salary employment in DC, Washington Metro area, and the US: November 2015**

Jurisdiction	FY 2012	FY 2013	FY 2014	FY 2015	12-mo avg	3-mo average	This month
District of Columbia	730,950	745,375	751,492	762,908	764,500	772,200	776,200
1 year change	7,717	14,425	6,117	11,417	11,358	8,867	8,400
% change	1.1	2.0	0.8	1.5	1.5	1.2	1.1
Washington metro area	3,052,417	3,090,375	3,101,983	3,138,900	3,167,058	3,202,467	3,220,600
1 year change	36,767	37,958	11,608	37,300	58,925	63,700	61,900
% change	1.2	1.2	0.4	1.2	1.9	2.0	2.0
Washington suburbs (% ch)	1.3	1.0	0.2	1.8	2.0	2.3	2.2
US (% ch)	1.7	1.7	1.9	2.2	2.1	1.9	1.9

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

Source: BLS. November is preliminary.



**Table 2. Federal government and private sector wage and salary employment in DC: November 2015**

Sector	FY 2013	FY 2014	FY 2015	12-mo avg	3-month average	This month
Federal government	205,900	198,367	197,867	197,942	198,200	198,300
1 year ch.	-2,675	-7,533	-500	542	600	500
% change	-1.3	-3.7	-0.3	0.3	0.3	0.3
Private sector	504,275	515,608	526,575	528,217	536,900	541,000
1 year ch.	16,633	11,333	10,967	10,258	8,733	8,800
% change	3.4	2.2	2.1	2.0	1.7	1.7

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

**Table 3. Seasonally adjusted DC Employment: June 2015 to November 2015**

Indicator	June	July	August	September	October	November
D.C. Wage and Salary employment	765,500	765,300	764,400	765,300	769,900	770,600
change from prior month	200	-200	-900	900	4,600	700
% change from prior month	0.0	0.0	-0.1	0.1	0.6	0.1

Source: BLS seasonally adjusted. November is preliminary

**Health services and other business services topped DC private sector job growth**

- In November the increase of 3,767 jobs in health services was more than that of any other sector. (3-month moving average.)
- Two other private sectors grew by more than 1,000 jobs: other business services (3,000), and organizations (2,667).
- Private sector industries losing jobs included education, food services, personal services, and accommodations.
- Local government fell by 767 (-2.0%).
- The federal government accounted for 25.7% of all DC jobs in November. Over the past year, DC's share of US federal employment fell slightly.

Change in private sector wage and salary jobs located in DC, the DC suburbs, and the US: November 2013 to November 2015 (% change from prior year in 3-month moving average)

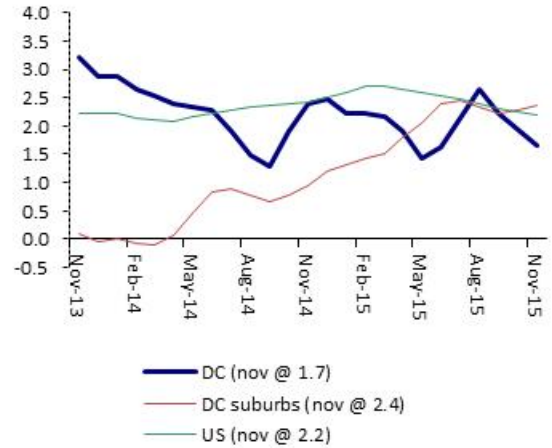


Table 4. Wage and salary employment located in DC: November 2015

Industry sector	3-month moving average				12-mo. moving avg: % change	Sector % of all DC jobs, Nov 2015	DC share (%) in Nov 2015 of all sector jobs in:		Change from Nov 2014 to Nov 2015 in DC share of sector jobs in:	
	Nov 2014	Nov 2015	Amount	%			metro area	US	metro area	US
Federal government	197,600	198,200	600	0.3	0.3	25.7	54.4	7.23	0.0	-0.01
Local government	37,567	36,800	-767	-2.0	1.3	4.8	10.8	0.19	-0.5	0.00
Legal services	28,867	29,833	967	3.3	1.1	3.9		2.65		0.07
Other Professional and technical	80,833	81,533	700	0.9	2.4	10.6	22.5	1.08	-0.6	-0.03
Employment services	15,333	16,000	667	4.3	8.1	2.1	34.7	0.43	-0.4	0.00
Other Business services	35,200	38,200	3,000	8.5	6.2	4.9	20.0	0.50	1.4	0.03
Information	17,000	17,100	100	0.6	-0.4	2.2	22.5	0.61	0.2	-0.01
Finance	30,600	31,167	567	1.9	1.9	4.0	20.5	0.38	0.3	0.00
Organizations	62,800	65,467	2,667	4.2	2.8	8.5	36.8	2.20	0.4	0.08
Education	64,300	61,867	-2,433	-3.8	-1.7	8.0	52.5	1.73	-3.0	-0.09
Health	67,233	71,000	3,767	5.6	3.9	9.2	23.1	0.38	0.4	0.01
Food service	48,233	47,967	-267	-0.6	0.4	6.2	21.3	0.43	-0.7	-0.02
Accommodations	15,333	14,767	-567	-3.7	-2.1	1.9	35.2	0.78	-1.1	-0.03
Amusement and recreation	7,233	7,367	133	1.8	3.5	1.0	19.1	0.34	0.8	0.00
Retail trade	22,333	22,867	533	2.4	5.7	3.0	8.3	0.14	0.1	0.00
Wholesale trade	4,967	4,800	-167	-3.4	-2.9	0.6	7.6	0.08	-0.3	0.00
Construction	14,567	14,767	200	1.4	1.6	1.9	9.4	0.22	-0.2	0.00
Personal and miscellaneous ser.	8,033	7,133	-900	-11.2	-7.1	0.9		0.27		-0.04
Other private	5,300	5,367	67	1.3	2.9	0.7	4.4	0.03	-0.3	0.00
<b>Total</b>	<b>763,333</b>	<b>772,200</b>	<b>8,867</b>	<b>1.2</b>	<b>1.5</b>	<b>100.0</b>	<b>24.1</b>	<b>0.54</b>	<b>-0.2</b>	<b>0.00</b>
Public sector	235,167	235,000	-167	-0.1	0.4	30.4	33.4	1.06	-0.5	0.00
Private sector	528,167	537,200	9,033	1.7	2.0	69.6	21.5	0.44	-0.1	0.00

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

## Resident employment and unemployment

### DC's unemployment rate remains at 6.6%

- In November DC resident employment was up 9,252 (2.6%) from a year earlier (3-mo. moving average). The labor force grew by 5,823 (1.5%).
- The seasonally adjusted unemployment rate stayed at 6.6%, the lowest rate since August 2008. Seasonally adjusted DC resident employment grew by 955 in November from October.
- November initial unemployment insurance claims were down 7.1% from last year (3-month moving average).

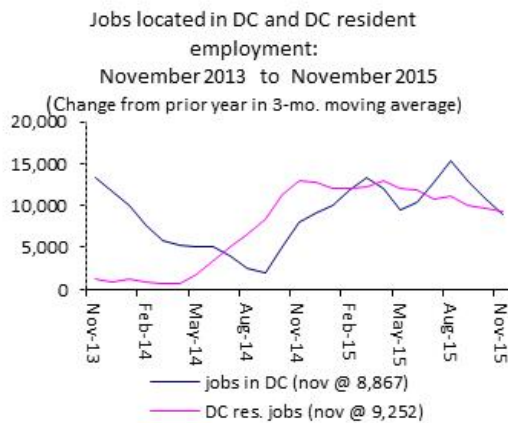
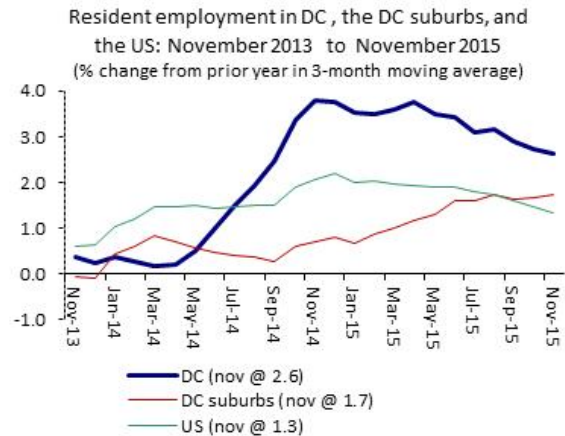


Table 5. Unemployment rates for DC, metro area, and US:  
November 2015

(percent of labor force)

Jurisdiction	Not seasonally adj.		Seasonally adj.	
	Nov. 2014	Nov. 2015	Nov. 2014	Nov. 2015
US	5.5	4.8	5.8	5.0
DC	7.6	6.7	7.7	6.6
DC metro area	4.6	4.1	na	na
DC suburbs	4.2	3.8	na	na

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

Table 6. Resident employment and unemployment: November 2015

Indicator	FY 2012	FY 2013	FY 2014	FY 2015	12-mo avg	3-mo. avg.	This month
<b>DC Labor force summary</b>							
Resident employment	325,671	341,547	344,855	356,577	358,245	362,122	364,708
1 year change	10,923	15,876	3,308	11,723	11,081	9,252	9,769
% change	3.5	4.9	1.0	3.4	3.2	2.6	2.8
Labor Force	359,299	373,874	374,475	384,581	385,708	388,428	391,042
1 year change	9,471	14,576	600	10,106	9,159	5,823	6,825
% change	2.7	4.1	0.2	2.7	2.4	1.5	1.8
Unemployed	33,627	32,327	29,620	28,020	27,479	26,307	26,334
1 year change	-1,452	-1,300	-2,707	-1,600	-1,906	-3,429	-2,944
% change	-4.1	-3.9	-8.4	-5.4	-6.5	-11.5	-10.1
Unemployment rate	9.4	8.7	7.9	7.3	7.1	6.8	6.7
<b>DC Unemployment insurance (state program)</b>							
Initial claims (monthly avg.)	1,784	1,915	1,851	1,596	1,579	1,492	1,429
1 year change	-317	131	-64	-255	-126	-113	-50
% change	-15.1	7.3	-3.3	-13.8	-7.4	-7.1	-3.4
Weeks compensated (mo. avg.)	45,170	42,862	42,133	32,811	32,132	30,808	28,353
1 year change	-1,253	-2,308	-729	-9,322	-7,758	-4,726	-3,055
% change	-2.7	-5.1	-1.7	-22.1	-19.4	-13.3	-9.7

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

Table 7. Seasonally adjusted DC Resident employment and unemployment: June 2015 to November 2015

Indicator	June	July	August	September	October	November
DC Resident employment	357,512	358,938	360,452	360,849	362,447	363,402
change from prior month	964	1,426	1,514	397	1,598	955
% change from prior month	0.3	0.4	0.4	0.1	0.4	0.3
DC Unemployment rate (%)	7.0	6.8	6.8	6.7	6.6	6.6

Source: BLS seasonally adjusted. November is preliminary.

### **Wage growth similar for jobs in DC, DC residents, and all US workers**

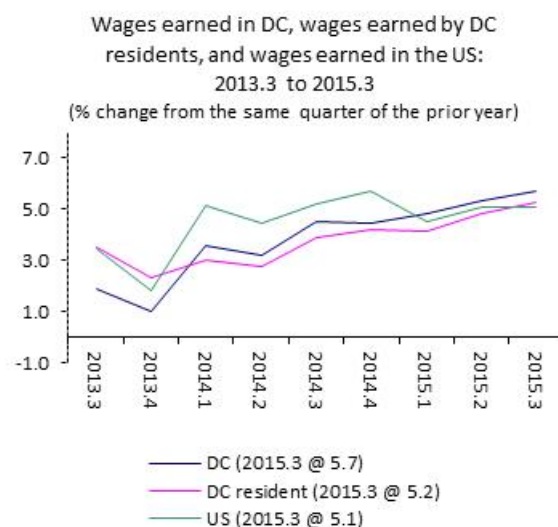
●Wages and salaries earned in the District of Columbia were 5.7% higher in the September quarter compared to the same quarter of 2014.

●Wages earned by DC residents have grown more slowly than the US average for most of the past 2 years, but the DC rate of growth was slightly higher in the 3rd quarter.

●In the September quarter, estimated wages of DC residents grew 5.2%. DC Personal Income grew 4.8%, slightly above the US increase (4.6%).

●Federal wages and salaries were \$0.95 billion (4.4%) higher in September than a year earlier.

●In the September quarter, private sector wages and salaries earned in DC grew by \$2.50 billion over the prior year, a 6.2% gain.



**Table 8. DC Wages and Personal Income: September 2015**

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

Indicator	FY 2012	FY 2013	FY 2014	FY 2015	4-qtr. moving avg.	Latest qtr. (Sep.)
Wages and salaries earned in DC	60.65	62.07	63.97	67.22	67.22	68.56
1 year change	1.13	1.41	1.90	3.25	3.25	3.68
% change	1.9	2.3	3.1	5.1	5.1	5.7
Supplements to wages & salaries	16.50	16.44	17.24	18.12	18.12	18.39
% change	0.9	-0.4	4.8	5.1	5.1	4.7
Proprietors' income earned by DC residents*	5.87	5.85	5.98	6.36	6.36	6.50
% change	5.9	-0.3	2.2	6.4	6.4	6.1
Wages and salaries of DC residents***	20.77	21.69	22.34	23.37	23.37	23.83
change from one year ago	0.91	0.92	0.65	1.03	1.03	1.18
% change	4.6	4.4	3.0	4.6	4.6	5.2
Income earned by DC residents	29.7	30.3	31.1	32.7	32.7	33.3
% change	4.9	2.0	2.8	5.0	5.0	5.3
Property income of DC residents	7.78	8.26	8.48	8.77	8.77	9.01
% change	11.0	6.2	2.6	3.5	3.5	5.8
Pensions and other transfer of DC residents	5.73	5.90	6.01	6.05	6.05	6.11
% change	-0.3	2.8	1.9	0.6	0.6	0.8
DC Personal Income**	43.21	44.44	45.63	47.52	47.52	48.45
1 year change	2.14	1.23	1.18	1.89	1.89	2.23
% change	5.2	2.8	2.7	4.2	4.2	4.8
US Personal income (% change from prior year)	4.6	3.0	2.9	4.7	4.7	4.6
US Wages and salaries(% change from prior year)	3.4	3.9	4.1	5.1	5.1	5.1
<i>Addendum: Change from prior year in wages earned in DC by sector</i>						
Private sector (1 yr ch, \$B)	1.35	1.79	1.33	2.20	2.20	2.50
Federal government (1 yr ch, \$B)	-0.37	-0.43	0.48	0.85	0.85	0.95
DC res. wages as % of wages earned in DC	34.2	34.9	34.9	34.8	34.8	34.8

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

\*\*Reflects deduction of social insurance paid by individuals. Wage and salary amounts shown are before this deduction.

\*\*\*Est. by ORA; assumes wage and salary suppl. are the same % for DC resident wages as for wages earned in DC.

Source: BEA; data for September were released December 21, 2015

## Single family and condominium housing

### Single family sales and average sale price moved higher

- The 3-month moving total of single family home sales in November was up 5.5% from a year earlier, and the average selling price was 12.1% higher. The year-to-date median sales price (\$665,000) was up 7.5%.
- November condominium sales were up 1.9% from last year as measured by the 3-month moving total, and the average selling price was 0.3% higher. Year-to-date median sales price (\$435,000) was up 4.5%.
- The total value of all home sales in November was 7.1% above last year as measured by the 12-month moving total.
- For the Federal Housing Finance Agency Index of single-family same-property transactions, DC's 8.6% price gain in the September quarter was well above the US average (5.8%) and more than twice the metro area average (3.3%).

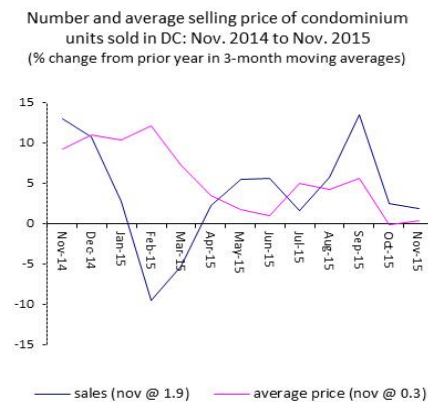
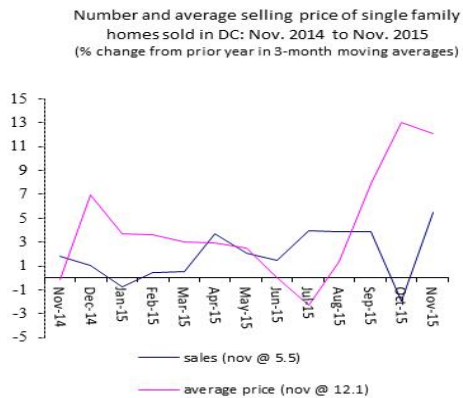


Table 9. D.C. Residential Real Estate Indicators: November 2015

Indicator	FY 2012	FY 2013	FY 2014	FY 2015	12-mo moving total or average	3-mo moving total or average	This month
<b>Number of sales (settled contracts)</b>							
Single family	3,563	3,979	4,024	4,097	4,146	1,022	349
1 year change	-237	416	45	73	123	53	65
% change	-6.2	11.7	1.1	1.8	3.1	5.5	22.9
Condo	2,784	3,487	3,592	3,832	3,770	911	289
1 year change	315	703	105	240	61	17	21
% change	12.8	25.3	3.0	6.7	1.6	1.9	7.8
Total	6,347	7,466	7,616	7,929	7,916	1,933	638
1 year change	78	1,119	150	313	184	70	86
% change	1.2	17.6	2.0	4.1	2.4	3.8	15.6
<b>Average prices of units that sold</b>							
Single family (\$)	630,109	712,799	736,362	767,870	780,347	798,014	796,023
1 year change	29,083	82,690	23,563	31,508	34,936	86,222	90,980
% change	4.8	13.1	3.3	4.3	4.7	12.1	12.9
Condo (\$)	429,611	447,827	472,419	499,650	498,038	491,423	503,629
1 year change	6,245	18,216	24,592	27,232	19,200	1,574	2,093
% change	1.5	4.2	5.5	5.8	4.0	0.3	0.4
<b>Total value of all sales (\$ million)</b>							
	3,441.1	4,397.8	4,660.0	5,060.6	5,112.9	1,263.3	423.4
1 year change	111.9	956.7	262.2	400.6	338.1	135.6	88.7
% change	3.4	27.8	6.0	8.6	7.1	12.0	26.5
<b>Ratio: active inventory to sales</b>							
Single family	2.3	1.6	1.6	1.5	1.3	1.7	1.8
Condo	2.9	1.7	1.9	1.7	1.6	2.1	2.1

**Median contract prices, CY to date in November 2015:** single family \$665,000 (7.5% 1 yr ch); condo \$435,000 (4.5% 1 yr ch)

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

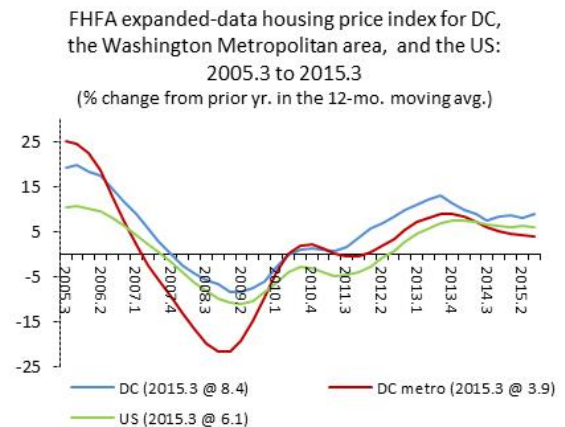
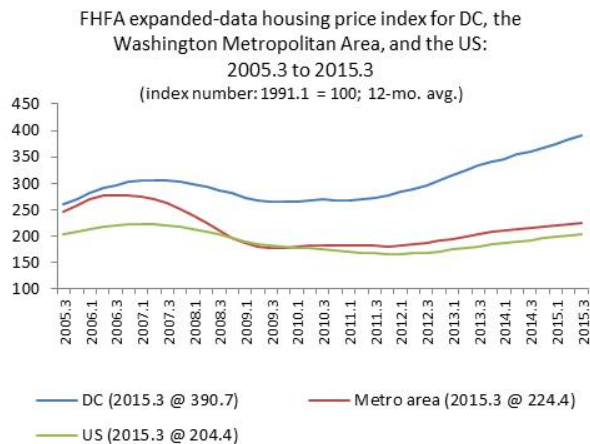
Source: Metropolitan Regional Information Systems (MRIS); median price and inventory accessed through Greater Capital Area Assn. of Realtors.

## Single family and condominium housing

**Table 10. Federal Housing Finance Agency Price Index for single family property in DC, DC metro area, and US: September 2015 (2015.3)**

Indicator	Fiscal year average				Last 2 Q's	
	FY 2012	FY 2013	FY 2014	FY 2015	2015.2	2015.3
<b>% change from prior year in value of index</b>						
DC	8.2	13.0	7.6	8.8	8.2	8.6
DC metro area	3.4	8.8	6.1	3.9	3.6	3.3
US	0.8	6.9	6.6	6.1	6.5	5.8

Source: (1) Federal Housing Finance Agency "Expanded-data HPI Index" (sales plus refinancings) (nsa). This 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.



**Table 11. D.C. Single family and condominium home sales at prices of \$1 million or more: November 2015**

Category	FY 2013	FY 2014	FY 2015	12-mo	3-mo	This month
				moving total	moving total	
Single family homes	689	734	765	820	212	76
1 year change	231	45	31	89	63	41
% change	50.4	6.5	4.2	12.2	42.3	117.1
percent of all single family sales	17.3	18.2	18.7	19.8	20.7	21.8
Condominiums	112	128	160	158	35	15
1 year change	40	16	32	20	2	4
% change	55.6	14.3	25.0	14.5	6.1	36.4
percent of all condominium sales	3.2	3.6	4.2	4.2	3.8	5.2

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

**Table 12. Single family housing permits in DC and sales of new DC condominium units: FY 2011 to 2015.3**

	Single family housing permits	Sales of new condo units
FY 2011	267	335
FY 2012	236	479
FY 2013	368	442
FY 2014	267	516
12-mo. ending:		
2015.3	293	483
1 yr ch	26	-33
% ch.	9.7	-6.4

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

**Table 13. Condominium units under construction or planned: September 2015**

item	projects	units	Avg. units per project
Unsold units in completed projects	51	1,614	32
Planned with probable sales within 36 months*	19	1,169	62
Proposed/rumored with long term delivery	17	1,514	89
<b>Subtotal</b>	<b>87</b>	<b>4,297</b>	
Planned as either condo or rental	19	8,947	471
<b>Total</b>	<b>106</b>	<b>13,244</b>	

\* 1,137 apartment units under construction could also switch to condo.

Source: Delta Associates. See p.11 For definition of planned and proposed.

## Apartments and population

### Population growth picked up in 2015. Housing permits also increasing

● In the September quarter, occupied apartment units increased 4,817 (2.9%) from a year earlier; effective rents rose 3.9%, and the vacancy rate fell to 4.1%.

● For the the 12-month period ending November, 5,014 housing permits were issued, up 22.5% from a year ago; the 3-month total was 94% higher than last year.

● In the September quarter 11,198 apartment units were under construction, representing the equivalent of 6.5% of the existing inventory.

● DC's population in July 2015 was estimated by the Census Bureau at 672,228, an increase of 12,392 (1.9%) from 2014.

● In 2014, the estimated net increase in households (4,037) was slightly less than the increase in occupied apartment units (4,389).

DC Apartment units: 12-mo. change in inventory and occupancy, and number under construction (all classes): 2014.1 to 2015.3

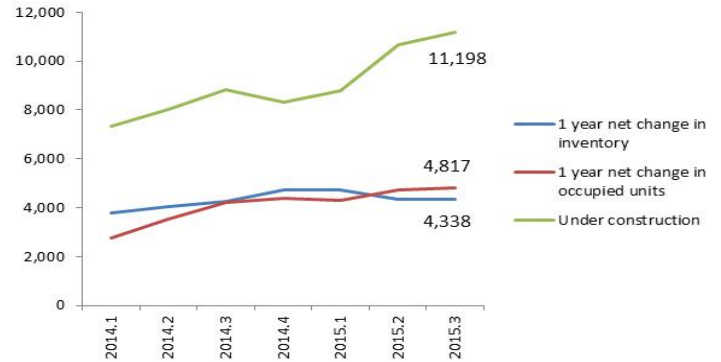


Table 14. Market rate apartment units in DC: 2007 to 2015.3

CY	Inventory				Occupied units			Effective monthly rent			Under Construction	
	Buildings	Units			Number	1 yr ch	% ch	\$ per		Buildings	Units	
		number	1 yr ch	% vacant				month	1 yr % ch			
2007	3,098	151,405	1,994	5.2	146,849	1,465	1.0	\$1,374	1.9	34	4,624	
2008	3,121	154,931	3,526	6.3	149,334	2,485	1.7	\$1,416	3.1	22	3,568	
2009	3,135	156,707	1,776	5.7	151,539	2,205	1.5	\$1,443	1.9	8	1,313	
2010	3,141	157,811	1,104	4.6	153,557	2,018	1.3	\$1,467	1.7	18	2,424	
2011	3,150	159,350	1,539	4.6	155,035	1,478	1.0	\$1,563	6.5	21	4,781	
2012	3,158	161,419	2,069	4.6	157,030	1,995	1.3	\$1,601	2.4	35	8,031	
2013	3,173	165,216	3,797	5.4	159,821	2,791	1.8	\$1,632	1.9	48	7,068	
2014	3,200	169,964	4,748	5.5	164,210	4,389	2.7	\$1,675	2.6	79	8,306	
2015.2	3,224	171,457	4,322	4.9	166,250	4,726	2.9	\$1,708	2.8	89	10,669	
2015.3	3,234	172,539	4,338	4.1	168,191	4,817	2.9	\$1,732	3.9	94	11,198	

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

Table 15. DC Population and Households: 2005 to 2015

Calendar year	Population				Households (estimated)			
	Number	Change from prior yr.		Number	Change from prior yr.		% pop/hh ratio	
		number	%		number	% pop/hh ratio		
2005	567,136	-618	-0.1	253,232	763	0.3	2.24	
2006	570,681	3,545	0.6	254,435	1,204	0.5	2.24	
2007	574,404	3,723	0.7	255,715	1,279	0.5	2.25	
2008	580,236	5,832	1.0	257,928	2,213	0.9	2.25	
2009	592,228	11,992	2.1	262,868	4,941	1.9	2.25	
2010	605,126	12,898	2.2	268,196	5,327	2.0	2.26	
2011	620,472	15,346	2.5	274,519	6,324	2.4	2.26	
2012	635,342	14,870	2.4	280,611	6,092	2.2	2.26	
2013	649,540	14,198	2.2	286,385	5,774	2.1	2.27	
2014	659,836	10,296	1.6	290,422	4,037	1.4	2.27	
2015	672,228	12,392	1.9	295,362	4,940	1.7	2.28	
Change from 10 to 15		67,102	11.1	27,166		10.1	2.47	

Source: U.S. Census Bureau. Estimate is as of July 1 of the year shown. Households estimated by ORA based on DC Office of Planning data.

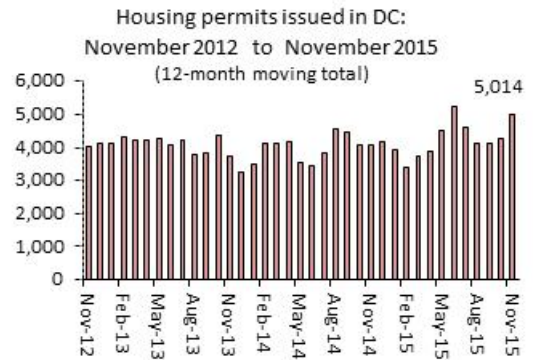


## Apartments and housing permits

**Table 17. Housing unit building permits issued in DC: November 2015**

	FY 2013	FY 2014	FY 2015	12-mo. moving total	3-month moving total	This month
Total units	3,855	4,467	4,131	5,014	1,840	781
change from 1 yr ago	-236	612	-336	922	892	730
% change from 1 year	-5.8	15.9	-7.5	22.5	94.1	1,431.4
Multi-family projects with 5 or more units						
number	36	32	37	41	12	5
average size	107	140	112	122	153	155

Source: Census Bureau (permits issued during period).



**Table 18. Delta Associates outlook for Class A apartment units: September 2015**

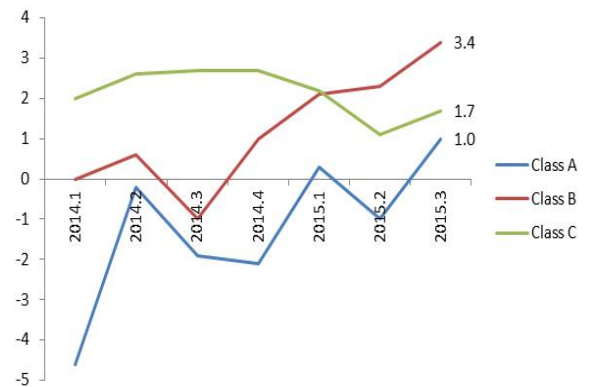
item	projects	units	Avg. units per project
Under construction*	67	10,579	158
Planned with probable sales within 36 months	24	5,510	230
Proposed/rumored with long term delivery	54	12,794	237
Total	145	28,883	
<b>Addendum: estimated supply and demand for the next 3 years</b>			
supply**		10,627	
demand		7,750	

\*CoStar, Class A. See table 16.

\*\*Supply available by Sept. 2018 represents vacant units, units under construction and marketing, and 25% (1,280) of planned units.

Source: Delta Associates, except for under construction (CoStar). For definitions of planned and proposed, see p. 11.

**Annual increase in effective rent by apartment class: 2014.1 to 2015.3 (1 year % change)**



**Table 16. Market rate apartment units in DC, Classes A, B, and C: 2012 to 2015.3**

CY	Inventory				Occupied units			Effective monthly rent		Under construction	
	Buildings	number	Units	% vacant	Number	1 yr ch	% ch	\$ per month	1 yr % ch	Buildings	Units
<b>Class A</b>											
2012	160	26,950	2,158	5.5	25,458	1,614	6.8	\$2,613	-4.4	28	7,742
2013	173	30,561	3,611	7.6	28,248	2,790	11.0	\$2,512	-3.9	45	6,993
2014	201	35,292	4,731	7.3	32,726	4,478	15.9	\$2,458	-2.1	65	8,091
2015.2	220	36,693	4,224	6.2	34,431	4,541	15.2	\$2,507	-1.0	68	10,288
2015.3	231	37,784	4,268	5.6	35,686	3,958	12.5	\$2,525	1.0	67	10,579
<b>Class B</b>											
2012	979	73,801	196	1.9	72,366	514	0.7	\$1,546	3.3	5	264
2013	983	74,037	236	2.3	72,301	-65	-0.1	\$1,570	1.6	3	75
2014	985	74,098	61	2.7	72,105	-196	-0.3	\$1,585	1.0	14	215
2015.3	990	74,190	105	1.5	73,066	752	1.0	\$1,632	3.4	26	614
<b>Class C</b>											
2012	2,003	60,317	-55	1.9	58,975	146	0.2	\$1,092	3.4	2	25
2013	2,003	60,311	-6	2.3	58,975	0	0.0	\$1,120	2.6	0	
2014	2,001	60,276	-35	2.7	59,081	106	0.2	\$1,150	2.7	0	
2015.3	2,000	60,267	-35	1.5	59,130	95	0.2	\$1,167	1.7	1	5

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

## Commercial office space

### Occupied commercial office space continues to rise and vacancy rate falls.

●According to CoStar, for the quarter ending September 2015, the vacancy rate for all office space in DC was 10.4%, down from 10.5% in the prior quarter. The Class A vacancy rate was 11.4%. (both including sublet)

●In September 2015 occupied space rose 0.7% from the prior year; base rent rose 1.1%.

●Space under construction in September 2015 (3.24 million square feet in 15 buildings) was virtually unchanged from the prior quarter, but was 61% above a year earlier (2.01 msf in 11 buildings). Space under construction is equivalent to 2.1% of the existing inventory.

DC Commercial office space: 1 year change in inventory and occupancy, and under construction: 2013.3 to 2015.3 (all classes, msf):



Vacancy rate and 1 year % change in rent for Class A and all commercial office space: 2013.3 to 2015.3

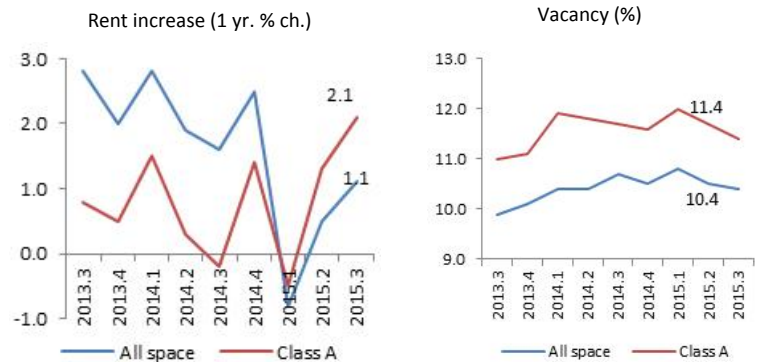


Table 19. DC commercial office space: 2007 to September (2015.3)

CY (year end)	Buildings	Inventory		Occupied space			Vacancy %		Base rent (direct)		Under constr.	
		Level (msf)	1 yr ch (msf)	Level (msf)	1 yr ch (msf)	% ch	Direct	Total	\$ per sq ft.	1 yr % ch	buildings	msf
2007	2,320	143.90	3.01	131.37	0.38	0.3	8.1	8.7	\$43.10	3.6	20	5.35
2008	2,320	144.95	1.05	131.55	0.18	0.1	8.6	9.2	\$43.22	0.3	25	6.89
2009	2,328	147.90	2.95	130.61	-0.94	-0.7	10.5	11.7	\$44.86	3.8	13	3.96
2010	2,337	150.46	2.56	133.78	3.17	2.4	10.1	11.1	\$45.59	1.6	6	1.56
2011	2,332	151.35	0.90	134.70	0.92	0.7	10.3	11.0	\$46.15	1.2	9	2.05
2012	2,322	151.09	-0.26	136.17	1.47	1.1	9.2	9.9	\$45.18	-2.1	8	2.23
2013	2,319	151.87	0.78	136.46	0.29	0.2	9.6	10.1	\$46.08	2.0	11	2.12
2014	2,312	151.84	-0.03	135.94	-0.53	-0.4	10.0	10.5	\$47.22	1.8	11	2.15
2015.2	2,308	152.38	-0.12	135.88	-0.33	-0.2	10.0	10.5	\$47.40	0.5	14	3.25
2015.3	2,306	151.90	0.42	136.57	0.95	0.7	9.9	10.4	\$47.64	1.1	15	3.24

Source: CoStar. All classes, all sizes.

Table 20. DC Class A commercial office space: 2012 to September (2015.3)

CY (year end)	Buildings	Inventory		Occupied space			Vacancy %		Base rent (direct)		Under constr.	
		Level (msf)	1 yr ch (msf)	Level (msf)	1 yr ch (msf)	% ch	Direct	Total	\$ per sq ft.	1 yr % ch	buildings	msf
2012	332	90.27	0.52	80.48	2.07	2.6	10.0	10.8	\$49.83	0.9	8	2.23
2013	336	91.26	1.00	81.15	0.67	0.8	10.4	11.1	\$50.10	0.5	8	2.07
2014	340	92.43	1.17	81.75	0.60	0.7	10.9	11.6	\$50.78	1.4	9	2.08
2015.2	342	92.63	0.36	81.75	0.33	0.4	11.1	11.7	\$51.11	1.3	11	3.17
2015.3	343	93.10	0.67	82.45	0.81	1.0	11.0	11.4	\$51.36	2.1	12	3.16

Source: CoStar. All Class A.

## Office outlook and value of all property transfers

### Property transfers occurring at a slower pace than last year

- Delta Associates expects the DC share of new office construction and increased demand to be a little more than one-third of the regional totals—about the same as DC's share of existing regional office space.
- The value of November property transfers was down 10.9% from last year as measured by the 3-month moving total. The 12-month moving total (\$13.74 billion) was 2.4% higher than last year.

Table 21. Delta Associates outlook for commercial office space: September 2015

item	Million sq. feet
Under construction*	3.24
Planned	9.23
Proposed/rumored with long term delivery	10.46
Total	22.93

\*CoStar. See table 19.

#### Addendum: estimated supply and demand for the next 2 years

supply**	1.60
demand	2.50

\*\*Supply for next two years represents office buildings currently under construction and those planned that might deliver by September 2017.

Source: Delta Associates, except for construction (CoStar). For definitions of planned and proposed, see box.

Table 22. Delta Associates outlook for commercial office space in DC and the surrounding metro area: Sep. 2015 to Sep. 2017

Indicator	DC	No VA	Sub MD	Total	DC % of total
<b>Inventory September 2015</b>					
Inventory (msf)	141.3	179.4	85.9	406.6	34.8
<b>Estimated net activity to September 2017</b>					
new supply (msf)	1.6	2.9	0.3	4.7	34.0
new demand (msf)	2.5	3.5	1.2	7.2	34.7

Source: Delta Associates msf = million square feet

#### Note: Planned and proposed projects

**Planned projects:** Permits are filed, a ground-break date is established, size and location is determined, and the project is in one of many phases of the planning process (site plan review, design review, environmental compliance review, zoning, etc.).

**Proposed projects:** a developer has proposed to build a project (either formally or informally) but has not submitted any plans for review and permits have not yet been filed.

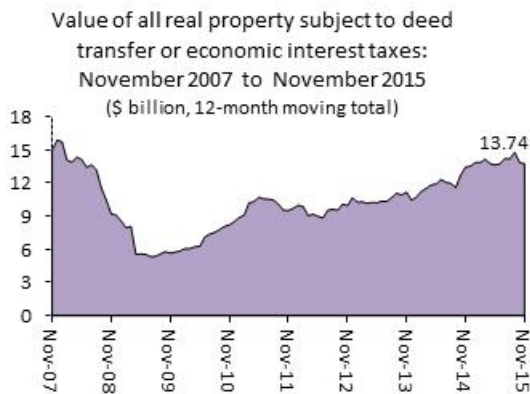


Table 23. Market Value of Real Property transfers subject to the Deed Transfer or Economic Interest tax: November 2015

	FY 2012	FY 2013	FY 2014	FY 2015	12-mo moving total	3-month moving total	This month
All property transfers (\$ million)	9,533.3	11,063.9	11,569.8	14,766.3	13,744.9	3,506.2	1,414.1
change from one year ago (\$M)	-526.2	1,530.6	505.8	3,196.5	326.4	-428.3	-76.4
% change from 1 year ago	-5.2	16.1	4.6	27.6	2.4	-10.9	-5.1

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

## Hospitality

### Hotel room revenue has been fairly flat the last few months

● In November the 3-month moving total for hotel room-days sold was 0.8% above a year earlier. The average room rate was down 0.1%, and revenue grew by 0.7%.

● Employment in food services was 0.6% less in November than a year earlier as measured by the 3-month moving average. Hotel employment was down 3.7%, and retail was 2.4% higher.

● October airline traffic into the DC area was up 7.0% compared to a year earlier as measured by the 3-month moving total. Reagan National was up 12.3%. For the past 12-months, total traffic into the DC area was 5.1% higher.

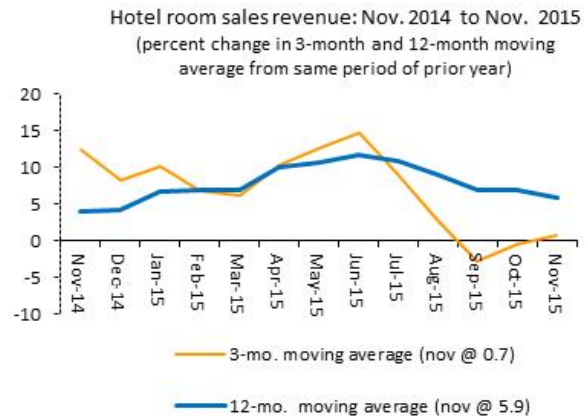


Table 24. Hospitality Industry: November 2015

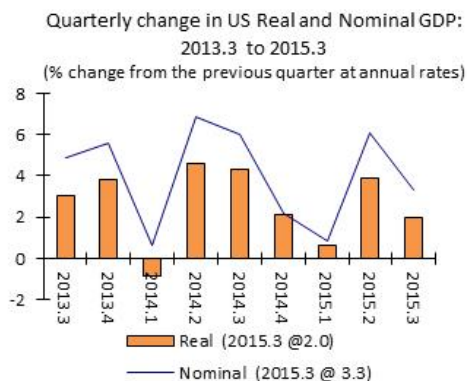
Indicator	Units	date	FY 2013	FY 2014	FY 2015	12-mo total	3-month	This month	
						or average*	moving total or average*		
<b>Hotel stays</b>									
Hotel room-days sold	('M)	nov	7.680	7.869	8.193	8.207	2.099	0.608	
			1 yr ch	0.062	0.189	0.325	0.243	0.017	-0.020
			1 yr % ch	0.8	2.5	4.1	3.1	0.8	-3.2
Average room rate	\$	nov	207.31	209.87	215.32	216.05	228.43	211.90	
			1 yr ch	3.74	2.56	5.45	5.73	-0.27	1.70
			1 yr % ch	1.8	1.2	2.6	2.7	-0.1	0.8
Occupancy rate (average)	%	nov	75.8	76.6	77.5	77.7	79.5	69.8	
			1 yr ch	0.5	0.8	0.9	0.8	1.0	-2.2
			1 yr % ch	0.6	1.0	1.2	1.0	1.2	-3.1
Room revenue	(\$M)	nov	1,592.1	1,651.4	1,764.2	1,773.2	479.4	128.9	
			1 yr ch	41.4	59.4	112.8	98.2	3.3	-3.2
			1 yr % ch	2.7	3.7	6.8	5.9	0.7	-2.4
<b>Airline passengers</b>									
DCA	1 yr % ch	oct	5.5	0.0	10.3	10.5	12.3	11.5	
IAD	1 yr % ch	oct	-4.0	-1.9	0.3	0.2	1.8	0.4	
BWI	1 yr % ch	oct	-1.5	-0.5	4.1	4.9	7.3	9.9	
Total	1 yr % ch	oct	-0.3	-0.8	4.8	5.1	7.0	7.3	
<b>Employment</b>									
Accommodations	level ('000)	nov	15.2	15.2	15.0	14.9	14.8	14.8	
			1 yr ch	-0.2	0.0	-0.2	-0.3	-0.6	-0.6
			1 yr % ch	-1.2	-0.1	-1.6	-2.1	-3.7	-3.9
Food and bev	level ('000)	nov	45.1	47.0	47.5	47.5	48.0	47.7	
			1 yr ch	2.5	1.9	0.5	0.2	-0.3	0.2
			1 yr % ch	5.7	4.2	1.1	0.4	-0.6	0.4
Arts and entertain.	level ('000)	nov	6.9	7.1	7.4	7.4	7.4	7.4	
			1 yr ch	0.0	0.2	0.3	0.3	0.1	0.1
			1 yr % ch	0.2	2.2	4.5	3.5	1.8	1.4
Retail	level ('000)	nov	19.7	21.1	22.5	22.6	22.9	24.0	
			1 yr ch	0.9	1.4	1.4	1.2	0.5	0.6
			1 yr % ch	4.7	6.9	6.8	5.7	2.4	2.6

\* Total for hotel rooms sold and room revenue

Source: Smith Travel Research (hotel data); BLS (employment); Airport authorities (airline passengers);

**US economic growth slowed in the third quarter of 2015**

- US real GDP growth in the September quarter was 2.0%; nominal growth was 3.3% (seasonally adjusted, annual rates).
- US employment (seas. adj.) increased by 211,000 in November from the month before.
- The US unemployment rate (seas. adj.) stayed at 5.0% in Nov.
- In November the average S&P 500 index for the month rose 2.4% from October and was 1.4% above a year earlier.
- Compared to a year earlier, inflation rose slightly in November, and was 0.4% above a year earlier. (seas. adj.).



**Table 27. Federal government sector, US GDP accounts: 2015.3**

(percent change from same period of prior year)

Indicator	FY 2013	FY 2014	FY 2015	12-mo avg	2015.3
<b>Non-defense</b>					
Compensation of employees	-0.2	1.8	4.2	4.2	4.7
Purchases of goods and services	-5.4	-1.0	0.7	0.7	-1.7
Gross investment	-3.0	-1.6	2.6	2.6	3.3
<b>Defense</b>					
Compensation of employees	-3.5	-0.5	-0.7	-0.7	0.0
Purchases of goods and services	-8.5	-9.1	-2.9	-2.9	-5.9
Gross investment	-8.3	-2.8	-3.3	-3.3	-3.8
<b>All federal consumption and investment</b>	<b>-3.9</b>	<b>-2.0</b>	<b>-0.1</b>	<b>-0.1</b>	<b>-0.7</b>

Source: BEA (December 22, 2015). Nominal values.

Federal government consumption and investment and US GDP: 2013.3 to 2015.3

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



**Table 26. Qtr. to Qtr. ch. in US GDP: 2014.3 to 2015.3**

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

Indicator	2014.3	2014.4	2015.1	2015.2	2015.3
US GDP real	4.3	2.1	0.6	3.9	2.0
US GDP nominal	6.0	2.2	0.8	6.1	3.3
Wages and salaries	5.4	6.3	2.6	5.7	5.3
Personal income	4.4	4.9	3.3	5.2	5.0

Note: GDP=Gross Domestic Product Source: BEA, updated Dec. 22, 2015.

**Table 25. US GDP, income, and inflation: 2015.3**

(percent change from same period of prior year)

Indicator	FY 2013	FY 2014	FY 2015	12-mo avg	2015.3
US GDP real	1.2	2.4	2.6	2.6	2.1
US GDP nominal	2.9	4.2	3.6	3.6	3.1
US Personal income	3.0	3.0	4.7	4.7	4.7
US wages	3.9	4.1	5.1	5.1	5.1
Corporate profits*	3.1	3.0	4.2	4.2	2.0
S and P stock index	16.7	20.3	9.7	9.7	-2.5
US CPI	1.6	1.6	0.3	0.3	0.1
Balt./Wash. area CPI	1.6	1.7	0.4	0.4	na

Source: BEA (Dec. 22, 2015), BLS, Yahoo.

na= not available. \*Before tax, w/o IVV and CCAAdj.

Personal income and wage data may differ from table 8 due to differences in BEA source

**Table 28. Monthly selected US Indicators: July 2015 to November 2015**

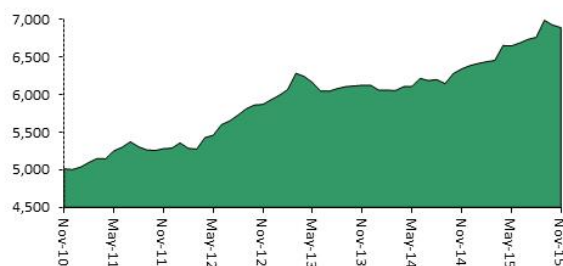
Indicator	July	August	September	October	November
S and P stock index (level)	2094	2040	1944	2025	2073
% change from prior month	-0.2	-2.6	-4.7	4.1	2.4
% change from 1 year ago	6.1	4.0	-2.4	4.5	1.4
10 yr. Treasury Interest rate (level)	2.32	2.16	2.17	2.06	2.26
CPI % ch from prior month (seasonally adjusted)	0.13	-0.07	-0.15	0.20	0.03
CPI % ch from prior year (seasonally adjusted)	0.21	0.22	-0.03	0.12	0.44
Jobs (seasonally adjusted level, in millions)	142.09	142.25	142.39	142.69	142.90
change from prior month (thousands)	223	153	145	298	211
% change from prior month	0.16	0.11	0.10	0.21	0.15
Resident employment (season. adj. level, in mil.)	148.84	149.04	148.80	149.12	149.364
change from prior month (thousands)	101	196	-236	320	244
% change from prior month	0.07	0.13	-0.16	0.22	0.16
Unemployment rate (seasonally adj.)	5.3	5.1	5.1	5.0	5.0

Source: BLS and Yahoo! Finance.

## DC tax collections

**Total DC tax collections (before earmarking):**  
**November 2010 to November 2015**  
 (12-month moving total in \$ million)

November 2015 @ \$6,891M



**Table 29. Tax Collections (before earmarking): November 2015 (Preliminary)**

Tax	Revenue (from CAFR)				Tax collections			
	FY 2012	FY 2013	FY 2014	FY 2015*	12-month moving total	FY 2015 to date	3-month moving total	This month
Total taxes	5,853.3	6,100.5	6,290.0	6,988.5	6,890.8	686.1	2,123.1	299.9
1 year change	528.0	247.2	189.5	799.8	509.6	-97.7	129.4	-33.6
% change	9.9	4.2	3.1	12.9	8.0	-12.5	6.5	-10.1
Real property	1,822.0	1,914.8	2,015.6	2,313.6	2,215.6	22.6	998.2	4.4
1 year change	106.9	92.8	100.7	423.8	220.7	-98.0	110.3	-0.2
% change	6.2	5.1	5.3	11.1	11.1	-81.2	12.4	-4.4
General sales	1,111.0	1,137.9	1,172.1	1,254.2	1,258.6	231.8	331.8	110.3
1 year change	67.6	26.8	34.2	93.7	80.4	4.4	11.9	3.6
% change	9.5	2.4	3.0	8.1	6.8	1.9	3.7	3.4
Individual income	1,490.7	1,640.9	1,679.2	1,873.7	1,874.2	253.7	452.5	108.0
1 year change	194.1	150.2	38.3	187.7	173.2	0.5	13.1	-20.3
% change	15.0	10.1	2.3	11.1	10.2	0.2	3.0	-15.8
withholding	1,321.6	1,391.2	1,472.9	1,579.8	1,580.0	252.7	373.5	121.1
1 year change	129.5	69.6	81.7	101.0	79.8	0.1	-5.8	-10.7
% change	10.9	5.3	5.9	6.8	5.3	0.0	-1.5	-8.1
non-withholding	169.1	249.6	206.2	293.8	294.2	1.0	78.9	-13.1
1 year change	64.6	80.6	-43.4	86.7	93.4	0.4	18.9	-9.5
% change	61.9	47.7	-17.4	41.9	46.5	62.9	31.5	na
Corporate income	302.9	299.0	280.2	317.0	317.4	10.3	71.6	6.2
1 year change	86.6	-3.9	-18.8	29.1	33.5	0.4	4.6	1.8
% change	40.1	-1.3	-6.3	10.1	11.8	4.1	6.9	42.1
Unincorporated Bus.	163.0	154.3	135.4	148.3	151.3	7.9	34.4	1.8
1 year change	19.6	-8.7	-18.9	9.4	12.7	3.0	3.2	0.7
% change	13.6	-5.3	-12.3	6.7	9.2	61.8	10.3	60.4
Deed taxes**	306.6	367.3	386.0	480.6	446.0	72.7	115.3	45.3
1 year change	-4.5	60.6	18.8	89.4	3.4	-34.6	-23.4	-13.7
% change	-1.5	19.8	5.1	22.8	0.8	-32.2	-16.9	-23.3
Other taxes	657.0	586.3	621.6	601.2	627.7	87.0	119.3	23.8
1 year change	29.2	-70.7	35.3	-33.3	-14.3	26.6	9.7	-5.6
% change	4.6	-10.8	6.0	-5.2	-2.2	44.0	8.8	-19.0

na = not applicable due to negative numbers.

\* Tax collections before year end accounting adjustments needed to determine FY 2015 revenue.

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

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

(2) Tax collections data subject to accounting adjustments.

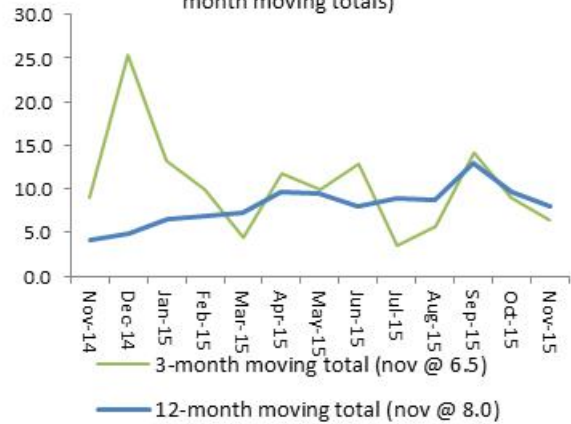
(3) This table and the graphs on the next page may include adjustments to the timing and consistency of collection reporting intended to make comparisons with prior year periods more meaningful. The data may therefore vary from other OCFO reports.

Source: OCFO/ORR

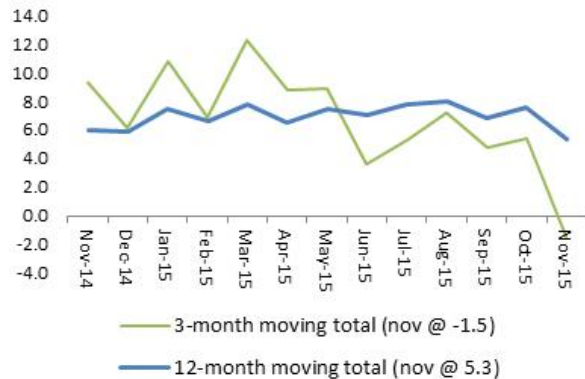
**Tax collections are above a year ago, but sales, income, and deed taxes show signs of slowing**

- For the 12 month period ending November, total tax collections (before earmarking) were \$509.6 million (8.0%) more than in the prior year. For the last 3 months they were 6.5% above last year.
- Individual income tax collections were 10.2% above last year for the 12-months ending November and withholding was 5.3% higher. For the past 3 months, withholding declined 1.5%.
- General sales tax collections were 6.8% above last year for the 12-months ending November. For the past 3 months, they were 3.7% above last year.
- Deed tax collections for the 12-months ending November were up 0.8% from last year; for the past 3 months they were down 16.9%.
- Corporate income taxes in November were up 11.8% and unincorporated business income taxes rose 9.2% from last year (12-mo. total).

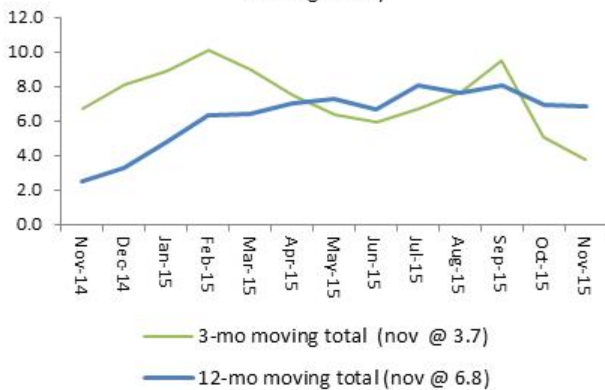
**Total tax collections (before earmarks):**  
**November 2014 to November 2015**  
 (% change from prior year: 3-month and 12-month moving totals)



**Withholding for the Individual Income tax:**  
**November 2014 to November 2015**  
 (% change from prior year: 3-month and 12-month moving totals)



**General Sales tax collections (before earmarks):**  
**November 2014 to November 2015**  
 (% change from prior year: 3-months and 12-month moving totals)



**General Sales tax and Withholding for the Individual Income tax:**  
**November 2014 to November 2015**  
 (% change from prior year in the 3-month moving total)



**Deed tax collections (before earmarks):**  
**November 2014 to November 2015**  
 (% change from prior year: 3-month and 12-month moving totals)



## US economic forecasts

### The December Blue Chip forecast for the US economy show little change: steady, moderate growth

- The Blue Chip Indicator December forecast for real GDP growth in FY 2016 (2.5%) is about same for its estimate for FY 2015 actual (2.6%), and only slightly above what it was in FY 2014 (2.4%).
- The Blue Chip Indicator December forecast for inflation (CPI) : 0.3% for FY 2015 and 1.4% in FY 2016.
- S&P 500: December baseline forecasts: moderate growth by the last quarter of 2016, but still less than one-half of the growth in 2014.

Table 30. Forecasts for US nominal and real GDP:

**FY 2013 through FY 2016** (% change from prior fiscal year)

Fiscal year and date of forecast	real			nominal		
	Blue Chip	Moody's	IHS Global	Blue Chip	Moody's	IHS Global
		Analytics	Insight		Analytics	Insight
<b>FY 2013 Actual</b>	1.2	1.2	1.2	2.9	2.9	2.9
<b>FY 2014 Actual</b>	2.4	2.4	2.4	4.2	4.2	4.2
<b>FY 2015</b>						
September	2.6	2.5	2.5	3.7	3.6	3.7
October	2.6	2.5	2.5	3.7	3.7	3.7
November	2.5	2.6	2.5	3.6	3.6	3.6
December	2.6	2.6	2.6	3.7	3.7	3.7
<b>FY 2016</b>						
September	2.7	3.1	2.6	4.4	4.6	5.5
October	2.6	2.9	2.7	4.3	4.3	5.6
November	2.5	2.5	2.8	4.1	3.9	5.2
December	2.5	2.6	2.5	4.0	3.7	5.0

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

Blue Chip Indicators estimate of US Nominal and Real GDP: FY 2009 to FY 2016 (% change from the prior year; Nov. 2015 estimate)

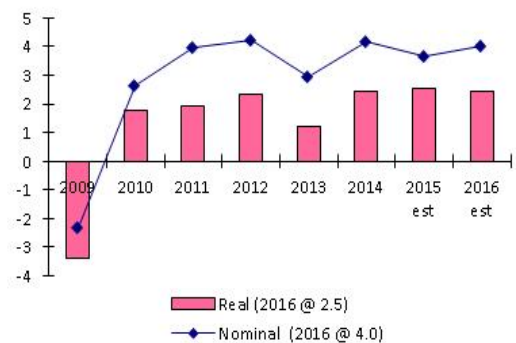


Table 31. CBO estimates of GDP and other indicators: FY 2014 to FY 2017

Indicator	FY 2014	FY 2015	FY 2016	FY 2017
Real GDP (% ch from prior yr.)	2.6	2.4	2.7	3.0
Nominal GDP (% ch from prior yr.)	4.1	3.4	4.2	4.8
CPI (% ch from prior yr.)	1.6	0.3	1.7	2.3
10 yr. Treasury bond rate	2.7	2.2	2.8	3.6
Unemployment rate	6.5	5.5	5.2	5.0

Source: Congressional Budget Office, *The Budget and Economic*

*Outlook: 2015 to 2025*, August 2015

Table 32. Blue Chip forecasts for CPI and 10 year Treasury interest rate: FY 2014 to FY 2016

(% change from prior fiscal year)

Forecast date	CPI			10 yr Treasury rate		
	2014	2015	2016	2014	2015	2016
Sep	1.6	0.3	1.6	2.7	2.2	2.7
Oct	1.6	0.3	1.5	2.7	2.2	2.6
Nov	1.6	0.3	1.4	2.7	2.2	2.5
Dec	1.6	0.3	1.4	2.7	2.2	2.5

Source: Blue Chip Indicators

Table 33. IHS Global Insight forecast for S and P 500: 2014.4 to 2016.4

Forecast date	% change from prior year			% change from prior year		
	2014.4	2015.4	2016.4	2014.4	2015.4	2016.4
	Global Insight: baseline			Global Insight: pessimistic		
September	13.6	0.2	5.8	13.6	-15.1	-3.9
October	13.6	-1.1	5.0	13.6	-11.1	-5.4
November	13.6	3.1	6.5	13.6	-13.4	-23.4
December	13.6	3.1	6.5	13.6	2.8	-31.8

Source: IHS Global Insight

Table 34. Moody's Analytics forecast for S and P 500: 2014.4 to 2016.4

Forecast date	% change from prior year			% change from prior year		
	2014.4	2015.4	2016.4	2014.4	2015.4	2016.4
	Economy.com baseline			Economy.com pessimistic		
September	13.6	2.0	4.6	13.6	0.0	1.0
October	13.6	0.6	6.9	13.6	-0.5	3.5
November	13.6	2.0	5.1	13.6	2.0	0.8
December	13.6	1.6	5.1	13.6	1.6	0.7

Source: Moody's Analytics (Economy.com.)



**Little change in baseline forecasts for DC in FY 2016 and FY 2017. Global Insight and Moody's Analytics have sharply different views about DC Personal Income Growth**

●**Employment:** In FY 2016 growth is expected to be less than in FY 2015. For FY 2016, the increase in the number of employed DC residents is expected to be greater than in jobs located in DC. DC's unemployment rate stays about 6.5% through FY 2017.

●**Income.** Global Insight estimates DC Personal Income will be higher in FY 2016 and FY 2017 than it was in FY 2015; Moody's Analytics says it will be lower each year. Global Insight's Personal Income growth for DC is similar to the national average, whereas Moody's Analytics is much below the US average.

**Table 35. Jobs in DC: forecasts for FY 2014 to FY 2017**

(amount of change from prior year, in thousands of jobs)

Date of estimate	Global Insight: baseline				Global Insight: pessimistic				Moody's Analytics: baseline				Moody's Analytics: pessimistic			
	2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017
Sep	6.0	11.5	7.1	6.9	6.0	11.5	4.5	3.1	6.0	11.6	9.0	10.4	6.0	11.6	4.5	5.9
Oct	6.0	11.2	6.0	6.5	6.0	11.2	4.0	3.6	6.0	11.2	6.4	8.2	6.0	11.2	1.5	3.5
Nov	6.0	11.3	6.7	6.2	6.0	11.3	4.5	2.5	6.0	11.3	6.2	6.8	6.0	11.3	3.4	0.5
Dec	6.0	11.3	6.6	5.8	6.0	11.3	4.9	0.5	6.0	11.3	6.4	6.7	6.0	11.3	3.6	0.3

Source: IHS Global Insight and Moody's Analytics (Economy.com).

**Table 36. DC Resident employment: forecasts for FY 2014 to FY 2017**

(amount of change from prior year, in thousands of jobs)

Date of estimate	Global Insight: baseline				Global Insight: pessimistic				Moody's Analytics: baseline				Moody's Analytics: pessimistic			
	2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017
Sep	3.4	11.3	6.3	5.4	3.4	11.3	5.2	3.1	3.4	11.3	8.3	6.9	3.4	11.3	6.1	6.1
Oct	3.4	11.7	9.3	5.9	3.4	11.7	8.6	4.1	3.4	11.8	9.2	5.8	3.4	11.8	6.6	5.3
Nov	3.4	11.7	8.9	7.0	3.4	11.7	7.8	4.5	3.4	11.7	8.1	5.6	3.4	11.7	6.8	3.8
Dec	3.4	11.7	9.1	7.2	3.4	11.7	8.4	4.3	3.4	11.7	7.9	5.6	3.4	11.7	6.5	3.8

Source: IHS Global Insight and Moody's Analytics (Economy.com).

**Table 37. DC Personal Income: forecasts for FY 2014 to FY 2017**

(percent change from prior year)

Date of estimate	Global Insight: baseline				Global Insight: pessimistic				Moody's Analytics: baseline				Moody's Analytics: pessimistic			
	2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017
Sep	2.3	3.4	3.8	4.8	2.3	3.4	2.5	2.0	2.3	3.5	6.8	7.2	2.3	3.5	5.4	6.6
Oct	2.7	4.1	4.5	6.1	2.7	4.0	3.3	3.2	2.7	3.9	3.9	2.4	2.7	3.9	1.8	1.3
Nov	2.7	4.1	4.4	5.9	2.7	4.1	3.4	3.1	2.7	3.8	3.1	1.8	2.7	3.8	2.1	0.4
Dec	2.7	4.1	4.3	5.8	2.7	4.1	3.4	2.4	2.7	3.8	2.5	1.7	2.7	3.8	1.5	0.3

Source: IHS Global Insight and Moody's Analytics (Economy.com).

**Table 38. December forecasts for employment and Personal Income for DC, the metro area, and the US: FY 2014 to FY 2017**

(percent change from prior year)

Indicator	Global Insight				Moody's Analytics			
	2014	2015	2016	2017	2014	2015	2016	2017
<b>Wage and salary jobs</b>								
DC	0.8	1.5	0.9	0.8	0.8	1.5	0.8	0.9
Metro area					0.4	1.7	1.3	1.5
US	1.8	2.2	1.7	1.4	1.8	2.2	1.8	1.9
<b>Personal Income</b>								
DC	2.7	4.1	4.3	5.8	2.7	3.8	2.5	1.7
Metro area					2.2	4.0	6.0	6.8
US	3.0	4.7	4.4	5.1	3.0	4.7	5.1	6.3

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

**Table 39. December DC forecasts for wages and unemployment: FY 2014 to FY 2017**

(percent change from prior year)

	Global Insight				Moody's Analytics			
	2014	2015	2016	2017	2014	2015	2016	2017
<b>Wages and salaries earned in DC</b>								
	3.1	4.8	4.2	4.6	3.1	4.6	4.0	3.6
<b>DC resident wages and salaries</b>								
	3.0	4.3	4.5	6.1	3.0	3.8	0.5	-2.1
<b>DC Unemployment rate (level)</b>								
	7.9	7.4	6.5	6.2	7.9	7.4	6.6	6.8

Source: IHS Global Insight and Moody's Analytics (Economy.com). Baseline forecasts.

## DC revenue estimate

### The December revenue estimate: \$623 million more tax revenue in FY 2015 followed by a \$20 million decline in FY 2016 due to effects of one-time revenue in FY 2015 and enacted FY 2016 tax reductions

● Anticipated tax revenue growth (before earmarks) is 9.9% in FY 2015 and -0.3% in FY 2016. FY 2014 tax revenue growth was 3.1%. The estimates reflect growth in the DC economy and federal spending constraints due to sequestration. Part of the big increase in FY 2015 is a one-time revenue gain from settlement payments for past due sales taxes from on-line hotel booking. And extraordinary gains from certain taxes. The reduction in FY 2016 includes the effects of scheduled tax cuts enacted in September.

● The real property tax accounts for 29% of revenue growth in FY 2015 and is the tax source with the biggest positive gains in FY 2016. Individual income tax revenue increased 11.2% in FY 2015, but are estimated to grow just 0.1% in FY 2016 reflecting both tax cuts and extraordinary capital gains in FY 2015. Sales (due to the hotel booking settlement), deed taxes, and business income are projected to fall in FY 2016.

● As a share of DC Personal Income, tax revenue in FY 2015 is expected to rise to 14.6% compared to 13.8% in FY 2014—and fall back to 13.7% by FY 2017 due in part to the effects of scheduled tax cuts.

Table 40. DC Tax Revenue (before earmarks) for FY 2014 through FY 2017: December 2015 revenue estimate

Tax	FY level (\$ million)				Change from prior year (\$ M)				% change from prior year			
	2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017
Real property	2,015.6	2,194.5	2,318.9	2,380.4	100.7	178.9	124.4	61.6	5.3	8.9	5.7	2.7
Deed taxes	391.2	480.6	400.9	408.9	24.0	89.4	-79.7	8.0	6.5	22.8	-16.6	2.0
General sales	1,172.1	1,309.9	1,287.7	1,341.8	34.2	137.8	-22.1	54.1	3.0	11.8	-1.7	4.2
Individual income	1,679.2	1,868.0	1,870.3	1,950.9	38.3	188.9	2.3	80.6	2.3	11.2	0.1	4.3
Withholding	1,472.9	1,553.2	1,629.7	1,700.7	81.7	80.3	76.5	71.0	5.9	5.5	4.9	4.4
non-withholding	206.2	314.8	240.6	250.2	-43.4	108.6	-74.2	9.6	-17.4	52.7	-23.6	4.0
Business income	415.6	447.8	420.9	437.4	-37.7	32.2	-26.9	16.4	-8.3	7.8	-6.0	3.9
Other	616.4	612.1	593.8	598.9	30.1	-4.3	-18.3	5.1	5.1	-0.7	-3.0	0.9
Total	6,290.0	6,912.9	6,892.6	7,118.3	189.5	622.9	-20.3	225.7	3.1	9.9	-0.3	3.3

Source: ORA. December 30, 2015 revenue estimate under existing legislation. Deed taxes include economic interest. The table includes tax revenue only, before all earmarks, and excludes all non-tax revenues, lottery, and "O-type" earmarked revenues. FY 2014 is from the FY 2014 CAFR.

Table 41. DC labor market assumptions: FY 2014 to FY 2017

item	2014	2015	2016	2017
Wage and salary employment	751,483	762,792	771,871	780,777
1 year change	6,000	11,309	9,079	8,906
% change	0.8	1.5	1.2	1.2
DC resident employment	344,826	356,539	363,938	368,769
1 year change	3,434	11,713	7,399	4,831
% change	1.0	3.4	2.1	1.3
Unemployment rate	7.9	7.4	6.5	6.5

Source: ORA December 2015 revenue estimate.

Table 42. DC Income and stock market assumptions:

item	FY 2014 to FY 2017 (% change from prior year)			
	2014	2015	2016	2017
Wages and salaries earned in DC	3.1	4.7	4.4	4.8
Wages and salaries earned by DC residents	3.0	4.2	4.4	4.2
DC Personal income	2.7	4.1	4.6	4.8
S and P 500 stock index	13.6	2.6	5.8	5.7

Source: ORA December 2015 revenue estimate. Stock index, on a calendar year basis, represents the % change from the December quarter of the prior year.

Table 43. DC tax revenue (before earmarks) and DC Personal Income: FY 2008 to FY 2017

item	2008	2009	2010	2011	2012	2013	2014	2015 est	2016 est	2017 est
<b>Tax revenue (\$ million)</b>										
Level	5,325	5,052	5,005	5,325	5,853	6,100	6,290	6,913	6,893	7,118
Change from prior year	170	-273	-47	320	528	247	189	623	-20	226
<b>Percent change from prior year</b>										
Tax revenue	3.3	-5.1	-0.9	6.4	9.9	4.2	3.1	9.9	-0.3	3.3
Personal Income	9.3	-0.7	1.5	8.0	5.2	2.8	2.7	4.1	4.6	4.8
<b>Tax revenue as percent of Personal Income</b>										
	14.1	13.5	13.2	13.0	13.5	13.7	13.8	14.6	13.9	13.7

Source: ORA. December 30, 2015 revenue estimate under existing legislation. The table includes tax revenue only, before all earmarks, and excludes all non-tax revenues, lottery, and "O-type" earmarked revenues.

in 2015 than the annual average for the years 2010 to 2014. Natural increase in 2015 was down 9.4% and net domestic migration down 31.7% compared the average of those four years. By contrast, international migration was 11.8% higher.

The natural increase in population of 4,375 in DC for 2015 was 452 less than the prior four year average due both to fewer births and more deaths.

Looking ahead, migration holds the key to what happens to the pace of DC's population growth. The annual natural increase in DC's population is likely to be fairly stable at around 4,500 per year. For DC population growth to reach 12,000 per year, net in-migration of close to 8,000 per year would be necessary, divided between domestic and international sources. The on-going attractiveness of DC in terms of jobs, housing, and amenities is thus a crucial determinant of future population growth.

#### Components of DC population change: 2010 to 2015

period of change	Total populaton	Natural increase	Vital events		Net Migration		
			Births	Deaths	Total	International	Domestic
Average annual change from 2010 to 2014	14,517	4,827	9,884	5,057	9,538	4,072	5,466
Change from 2014 to 2015	12,392	4,375	9,593	5,218	8,282	4,551	3,731
Difference: 2015 compared to the prior 4 year average							
Amount	-2,125	-452	-291	161	-1,256	480	-1,735
Percent change	-14.6	-9.4	-2.9	3.2	-13.2	11.8	-31.7

US Census Bureau. Total includes small statical discrepancy

#### Comparison to the 50 States.

The 2015 Census estimates document continued shifts in the nation's population. The District of Columbia differs, of course, in many ways from the states, but some comparisons are quite interesting. Again in 2015 DC has more population than two states (Vermont and Wyoming). Also:

- DC's net population increase of 12,392 was greater than in 19 states (7 of which had declines).
- DC's net domestic in-migration of 3,731 was greater than in 33 states (all of which had declines).
- DC's net international in-migration of 4,551 was greater than in 14 states (none of which had declines).
- DC's natural increase of 4,375 was greater than in 7 states (two of which had declines).

—Stephen Swaim, Office of Revenue Analysis

**ORA reports and documents.** From time to time the Office of Revenue Analysis prepares revenue estimates, fiscal impact statements on pending legislation, reports, and other documents on subjects related to DC’s economy and taxes. These documents are posted on the OCFO web site ([www.cfo.dc.gov](http://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](http://districtmeasured.com)). You can sign up at the blog page to receive updates as new articles are posted.

**Recent ORA reports:**

**Revised revenue estimate, December 30, 2015.**

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

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

**DC Tax Facts, 2015.** Details on all DC taxes.

**Tax Rates and Tax Burdens 2014 Nationwide.** This annual publication compares DC tax rates and estimated DC tax burdens for households of different income levels with the rates and burdens of state and local taxes in the principal cities in all 50 states.

**Tax Rates and Tax Burdens 2013 Washington Metropolitan Area.** This annual publication compares DC tax rates and estimated DC tax burdens for households of different income levels with the rates and burdens of the surrounding jurisdictions in the DC metropolitan area.

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

**Table 44. Information sources**

Indicator	Source	Period covered in this report	Next release
D.C. Jobs and Labor Force information	BLS	November	January 26
D.C. Personal Income	BEA	2015.3	March 24
D.C. Tax Collections	OTR/ORA	November	c. January 15
D.C. Housing Sales	MRIS*	November	c. January 10
D.C. Commercial Office Building data	CoStar and Delta	2015.3	c. January 10
DC Apartment data	CoStar and Delta	2015.3	c. January 10
D.C. Hotel stay information	Smith Travel Research	November	c. January 25
Consumer Price Index	BLS	November	January 20
U.S. Jobs and Labor Force	BLS	November	January 8
U.S. GDP and Personal Income	BEA	2015.3	January 29
S and P 500 Stock Index	Financial press	November	January 1
Interest rate on 10-Year Treasury Securities	Financial press	November	January 1
IHS Global Insight D.C. forecast	Global Insight	December	c. January 25
Moody's Analytics D.C. forecast	Moody's Analytics	December	c. January 25
Blue Chip Economic Indicators for the U.S.	Aspen Publishers	December	c. January 10

\*Metropolitan Regional Information Systems; listings and contract data accessed through the Greater Capital Area Association of Realtors.

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