

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

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

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## Tangible markers of DC's recovery from the Great Recession: ninety-one new buildings

# 26 large office buildings and 65 large apartment buildings helped accommodate job and population growth

Although the Great Recession did not hurt DC as much as many other places, by the recession's end in the summer of 2009 DC was losing jobs. In the next six years, however, things turned around in DC. Jobs and people both increased—66,000 more jobs and 76,000 more residents. Along with the new jobs and people came buildings to accommodate them. The largest of these new buildings stand as tangible markers of DC's recovery from the Great Recession. Using data from CoStar, this analysis describes the importance of these buildings over the six year period from the third quarter of 2009 to the third quarter of 2015 .

# Large new buildings led the recovery's growth in apartment and office space.

—65 new Class A apartment buildings, each with 50 or more apartments. added 15,043 more units from 2009.3 to 2015.3. These buildings accounted for 92% of the net increase in all apartment units in the city and 82% of the net change in occupied units.

—26 new Class A office buildings, each at least 50,000 square feet in size, brought 7.4 million square feet of space into DC's office market. These buildings accounted for 165% of the net increase in office space in DC and 156% of the net increase in occupied space.

The impact of the new buildings on the office market was so large because older office space was demolished or taken off the market. For apartments, older buildings more likely continued in use and smaller new ones also added to capacity.

The success of these 91 apartment and office buildings was possible because in the six years since the Great Recession there were enough households and employers who could pay higher rents.

(Continued on p. 19)

#### New Class A apartment buldings of 50 units or more: 2009.3 to 2015.3

	number of	% of net change in all DC		% of net change in all DC
Buildings	units	apartment units	Occupied units	occupied apartment units
65 New Class A	15,043 A Office buld	92.9% lings of 50,000 msf or mo	14,572	81.7%
		and a solution of the		

		% of net change in all		% of net change in all msf
Buildings	msf of space	msf of DC office space	Occupied msf of space	of DC occupied office space
26	7,442	165.9%	9,552	155.6%
Source: CoStar				

## Wage and salary employment

#### Job growth slowed a little in September

- •September wage and salary employment in DC was up by 12,933 (1.7%) from a year earlier as measured by the 3-month moving average.
- Federal government employment in DC for September was up by 900 (0.5%). The private sector gained 11,767 (2.3%).
- •Total year-over-year DC metropolitan area employment increased by 62,233 (2.0%) in September as measured by the 3-month moving average.
- ullet Suburban Washington employment in September increased by 2.1% from a year earlier.
- $\bullet Seasonally$  adjusted DC jobs have been fairly steady for 5 months.

Change in wage and salary employment located in DC, the DC suburbs, and the US:
September 2013 to September 2015

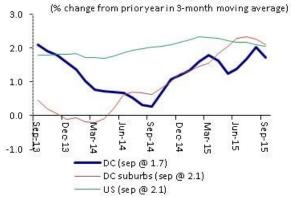


Table 1. Wage and salary employment in DC, Washington Metro area, and the US: September 2015

						3-mo	
Jurisdiction	FY 2011	FY 2012	FY 2013	FY 2014	12-mo avg	average	This month
District of Columbia	723,233	730,950	745,375	751,492	762,900	766,433	764,700
1 year change	14,158	7,717	14,425	6,117	11,408	12,933	7,400
% change	2.0	1.1	2.0	0.8	1.5	1.7	1.0
Washington metro area	3,015,650	3,052,417	3,090,375	3,101,983	3,155,575	3,175,533	3,172,000
1 year change	42,592	36,767	37,958	11,608	53,592	62,233	53,300
% change	1.4	1.2	1.2	0.4	1.7	2.0	1.7
Washington suburbs (% ch)	1.3	1.3	1.0	0.2	1.8	2.1	1.9
US (% ch)	1.2	1.7	1.7	1.9	2.2	2.1	1.9

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

Federal gov. and private sector wage and salary employment in DC: Sep. 2010 to Sep. 2015 (Change from prior year in 3-month moving average)



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

					3-month	
Sector	FY 2012	FY 2013	FY 2014	12-mo avg	average	This month
Federal government	208,575	205,900	198,367	197,867	198,500	198,300
1 year ch.	-4,683	-2,675	-7,533	-500	900	900
% change	-2.2	-1.3	-3.7	-0.3	0.5	0.5
Private sector	487,642	504,275	515,608	526,642	527,400	529,800
1 year ch.	12,808	16,633	11,333	11,033	11,767	7,300
% change	2.7	3.4	2.2	2.1	2.3	1.4

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

Table 3. Seasonally adjusted DC Employment: March 2015 to September 2015

Indicator	March	April	May	June	July	August	September	
D.C. Wage and Salary employment	760,300	761,800	765,300	765,500	765,300	764,400	765,200	
change from prior month	-2,500	1,500	3,500	200	-200	-900	800	
% change from prior month	-0.3	0.2	0.5	0.0	0.0	-0.1	0.1	
Source: BLS seasonally adjusted. September is preliminary								

2

## Jobs by sectors of the economy

# Health services and organizations topped DC private sector job growth

- •In September the increase of 4,333 jobs in health services was more than that of any other sector. (3-month moving average.)
- •Three other private sectors grew by more than 1,000 jobs: organizations (2,067), non-lawyer professional services (1,767), and other business services (1,333).
- •Private sector industries losing jobs included personal services and accomodations.
- •Local government rose by 367 (0.9%).
- •The federal government accounted for 25.9% of all DC jobs in September. Over the past year, DC's share of federal employment rose slightly in the metro area.

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

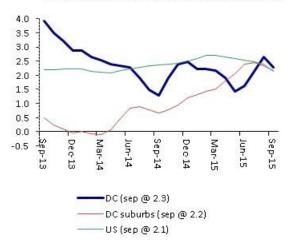


Table 4. Wage and salary employment located in DC: September 2015

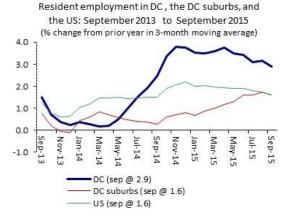
	3-month moving average		12-mo.		DC share (%) in Sep 2015		Change from sep 2014 to Sep 2015 in DC share			
			1 year ch	ange	moving avg:	Sector % of all DC jobs,	of all sector	•	of sector jo	bs in:
Industry sector	Sep 2014	Sep 2015	Amount	%	% change	Sep 2015	metro area	US	metro area	US
Federal government	197,600	198,500	900	0.5	-0.3	25.9	54.5	7.23	0.2	0.00
Local government	40,167	40,533	367	0.9	2.4	5.3	12.7	0.22	-0.2	0.00
Legal services	28,900	29,467	567	2.0	0.3	3.8		2.62		0.04
Other Professional and technical	80,033	81,800	1,767	2.2	2.8	10.7	22.6	1.09	-0.2	-0.02
Employment services	14,900	15,733	833	5.6	8.9	2.1	34.9	0.45	0.4	0.02
Other Business services	34,700	36,033	1,333	3.8	4.5	4.7	18.6	0.49	0.4	0.02
Information	17,267	17,200	-67	-0.4	-0.4	2.2	22.5	0.61	0.3	-0.01
Finance	30,600	31,000	400	1.3	2.1	4.0	20.5	0.38	0.4	0.00
Organizations	63,233	65,300	2,067	3.3	2.4	8.5	36.6	2.18	0.2	0.06
Education	55,533	55,933	400	0.7	-0.7	7.3	51.1	1.73	-2.3	0.00
Health	66,233	70,567	4,333	6.5	3.4	9.2	23.0	0.38	0.3	0.01
Food service	47,900	48,033	133	0.3	1.1	6.3	21.2	0.42	-0.7	-0.01
Accomodations	15,367	14,800	-567	-3.7	-1.6	1.9	35.0	0.74	-1.1	-0.03
Amusement and recreation	7,200	7,300	100	1.4	4.5	1.0	16.0	0.31	0.5	0.00
Retail trade	21,100	22,000	900	4.3	6.8	2.9	8.0	0.14	0.2	0.00
Wholesale trade	4,900	4,633	-267	-5.4	-2.1	0.6	7.4	0.08	-0.4	-0.01
Construction	14,800	15,033	233	1.6	2.0	2.0	9.7	0.23	0.0	0.00
Personal and miscellaneous ser.	7,700	7,067	-633	-8.2	-3.6	0.9		0.26		-0.03
Other private	5,367	5,500	133	2.5	3.0	0.7	4.9	0.03	0.2	0.00
Total	753,500	766,433	12,933	1.7	1.5	100.0	24.1	0.54	-0.1	0.00
Public sector	237,767	239,033	1,267	0.5	0.2	31.2	35.0	1.13	-0.3	0.00
Private sector	515,733	527,400	11,667	2.3	2.1	68.8	21.2	0.44	0.0	0.00
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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 fell to 6.7%

- •In September DC resident employment was up 10,079 (2.9%) from a year earlier (3-mo. moving average). The labor force grew by 6,323 (1.7%).
- •The seasonally adjusted unemployment rate fell to 6.7%, the lowest rate since August 2008. Seasonally adjusted DC resident employment grew by 384 in September from August.
- •September initial unemployment insurance claims were down 8.3% from last year (3-month moving average).



Jobs located in DC and DC resident employment:

September 2013 to September 2015

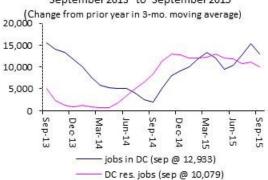


Table 5. Unemployment rates for DC, metro area, and US: September 2015

(percent of labor force) Not seasonally adj. Seasonally adj. Sep. 2015 Jurisdiction Sep. 2014 Sep. 2015 Sep. 2014 US 5.7 4.9 5.9 5.1 DC 8.0 6.9 7.8 6.7 5.0 4.3 DC metro area na na DC suburbs 4.6 3.9 na na

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

Table 6. Resident employment and unemployment: September 2015

Indicator	FY 2011	FY 2012	FY 2013	FY 2014	12-mo avg	3-mo. avg.	This month
DC Labor force summary							
Resident employment	314,748	325,671	341,547	344,855	356,575	360,377	357,733
1 year change	3,378	10,923	15,876	3,308	11,720	10,079	7,707
% change	1.1	3.5	4.9	1.0	3.4	2.9	2.2
Labor Force	349,827	359,299	373,874	374,475	384,580	387,362	384,326
1 year change	5,524	9,471	14,576	600	10,105	6,323	3,934
% change	1.6	2.7	4.1	0.2	2.7	1.7	1.0
Unemployed	35,079	33,627	32,327	29,620	28,022	27,051	26,593
1 year change	2,146	-1,452	-1,300	-2,707	-1,598	-3,689	-3,773
% change	6.5	-4.1	-3.9	-8.4	-5.4	-12.0	-12.4
Unemployment rate	10.0	9.4	8.7	7.9	7.3	7.0	6.9
DC Unemployment insurance (stat	te program)						
Initial claims (monthly avg.)	2,101	1,784	1,915	1,851	1,596	1,563	1,329
1 year change	302	-317	131	-64	-255	-142	-142
% change	16.8	-15.1	7.3	-3.3	-13.8	-8.3	-9.7
Weeks compensated (mo. avg.)	46,423	45,170	42,862	42,133	32,811	33,328	35,597
1 year change	-7,169	-1,253	-2,308	-729	-9,322	-8,509	-6,031
% change	-13.4	-2.7	-5.1	-1.7	-22.1	-20.3	-14.5

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

Table 7. Seasonally adjusted DC Resident employment and unemployment: March 2015 to September 2015

Indicator	March	April	May	June	July	August	September			
DC Resident employment	354,726	356,199	356,548	357,512	358,938	360,452	360,836			
change from prior month	-607	1,473	349	964	1,426	1,514	384			
% change from prior month	-0.2	0.4	0.1	0.3	0.4	0.4	0.1			
DC Unemployment rate (%)	7.7	7.5	7.3	7.0	6.8	6.8	6.7			
Source: BLS seasonally adjusted. September is	Source: BLS seasonally adjusted. September is preliminary.									

4-qtr. moving Latest qtr.

## For more than a year, wages of DC residents have grown slower than all wages earned in DC

- Wages and salaries earned in the District of Columbia were 4.8% higher in the June quarter compared to the same quarter of 2014.
- For the past 6 quarters, wages of DC residents have grown more slowly than in both the US as whole and wages earned in DC..
- •In the June quarter, estimated wages of DC residents grew 4.2%. DC Personal Income also grew 4.2%, slightly above the US increase (4.1%).
- Federal wages and salaries were \$1.01 billion (5.1%) higher in June than year earlier.
- •In the June quarter, private sector wages and salaries earned in DC grew by \$1.87 billion over the prior year, a 4.7% gain.

Wages earned in DC, wages earned by DC residents, and wages earned in the US: 2013.2 to 2015.2

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

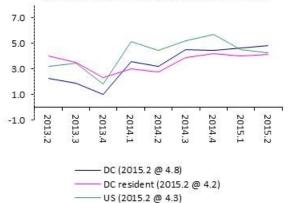


Table 8. DC Wages and Personal Income: June 2015

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

					+ qu. moving	Latest qui.
Indicator	FY 2011	FY 2012	FY 2013	FY 2014	avg.	(June)
Wages and salaries earned in DC	59.53	60.65	62.07	63.97	65.41	67.45
1 year change	2.29	1.13	1.41	1.90	2.64	3.10
% change	4.0	1.9	2.3	3.1	4.2	4.8
Supplements to wages & salaries	16.35	16.50	16.44	17.24	17.68	18.31
% change	8.5	0.9	-0.4	4.8	5.6	5.3
Proprietors' income earned by DC residents*	5.54	5.87	5.85	5.98	6.18	6.39
% change	3.6	5.9	-0.3	2.2	5.5	6.2
Wages and salaries of DC residents***	19.86	20.77	21.69	22.34	22.80	23.41
change from one year ago	0.89	0.91	0.92	0.65	0.82	0.94
% change	4.7	4.6	4.4	3.0	3.7	4.2
Income earned by DC residents	28.3	29.7	30.3	31.1	31.9	32.8
% change	6.2	4.9	2.0	2.8	4.3	4.7
Property income of DC residents	7.01	7.78	8.26	8.48	8.57	8.86
% change	15.0	11.0	6.2	2.6	3.1	3.5
Pensions and other transfer of DC residents	5.75	5.73	5.90	6.01	6.02	6.16
% change	9.0	-0.3	2.8	1.9	0.3	2.8
DC Personal Income**	41.08	43.21	44.44	45.63	46.47	47.83
1 year change	3.05	2.14	1.23	1.18	1.60	1.95
% change	8.0	5.2	2.8	2.7	3.6	4.2
US Personal income (% change from prior year)	6.1	4.6	3.0	2.9	4.6	4.1
US Wages and salaries(% change from prior year)	4.2	3.4	3.9	4.1	5.0	4.3
Addendum: Change from prior year in wages earned	in DC by secto	or				
Private sector (1 yr ch, \$B)	1.72	1.35	1.79	1.33	1.76	1.87
Federal government (1 yr ch, \$B)	0.69	-0.37	-0.43	0.48	0.74	1.01
DC res. wages as % of wages earned in DC	33.4	34.2	34.9	34.9	34.9	34.7

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

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

<sup>\*\*\*</sup>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 June were released September 30, 2015

## Single family and condominium housing

#### More sales, higher prices

- •The 3-month moving total of single family home sales in September was up 3.9% from a year earlier, and the average selling price was 7.9% higher. The year-to-date median sales price (\$660,000) was up 6.5%.
- •September condominium sales were up 13.4% from last year as measured by the 3-month moving total, and the average selling price was 5.6% higher. Year-to-date median sales price (\$435,000) was up 6.1%.
- •The total value of all home sales in September was 8.6% 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 7.2% price gain in the June quarter was higher than that in the US (6.2%), and the DC metro area (4.1%).

Number and average selling price of single family



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

	'				12-mo moving	3-mo moving	
					total or	total or	
Indicator	FY 2011	FY 2012	FY 2013	FY 2014	average	average	This month
Number of sales (settled contracts)							
Single family	3,800	3,563	3,979	4,024	4,097	1,092	319
1 year change	-284	-237	416	45	73	41	4
% change	-7.0	-6.2	11.7	1.1	1.8	3.9	1.3
Condo	2,469	2,784	3,487	3,592	3,832	1,066	332
1 year change	-415	315	703	105	240	126	79
% change	-14.4	12.8	25.3	3.0	6.7	13.4	31.2
Total	6,269	6,347	7,466	7,616	7,929	2,158	651
1 year change	-699	78	1,119	150	313	167	83
% change	-10.0	1.2	17.6	2.0	4.1	8.4	14.6
Average prices of units that sold							
Single family (\$)	601,026	630,109	712,799	736,362	767,870	798,510	791,723
1 year change	62,631	29,083	82,690	23,563	31,508	58,444	105,788
% change	11.6	4.8	13.1	3.3	4.3	7.9	15.4
Condo (\$)	423,365	429,611	447,827	472,419	499,650	492,670	493,585
1 year change	9,336	6,245	18,216	24,592	27,232	26,072	30,924
% change	2.3	1.5	4.2	5.5	5.8	5.6	6.7
Total value of all sales (\$ million)	3,329.2	3,441.1	4,397.8	4,660.0	5,060.6	1,397.2	416.4
1 year change	-63.7	111.9	956.7	262.2	400.6	180.7	83.3
% change	-1.9	3.4	27.8	6.0	8.6	14.9	25.0
Ratio: active inventory to sales							
Single family	3.3	2.3	1.6	1.6	1.3	1.6	1.6
Condo	4.9	2.9	1.7	1.9	1.6	1.9	2.2

Median contract prices, CY to date in September 2015: single family \$660,000 (6.5% 1 yr ch); condo \$435,000 (6.1% 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

FHFA expanded-data housing price index for DC, the Washington Metropolitan Area, and the US: 2005.2 to 2015.2 (index number: 1991.1 = 100; 12-mo. avg.) 400 350 300 250 200 100 DC (2015.2 @ 383.3) Metro area (2015.2 @ 222.8) US (2015.2 @ 202.0)

FHFA expanded-data housing price index for DC, the Washington Metropolitan area, and the US: 2005.2 to 2015.2

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

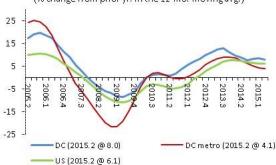


Table 10. Federal Housing Finance Agency Price Index for single family property in DC, DC metro area, and US: June 2015 (2015.2)

Fiscal year average Last 2 Q's FY 2011 FY 2012 FY 2013 FY 2014 2015.1 2015.2 % change from prior year in value of index 1.6 8.2 12.9 7.5 8.5 7.2 DC metro area -0.5 3.5 8.9 6.2 4.3 4.1 US -4.8 0.8 6.9 6.7 6.1 6.2

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: September 2015

					12-mo	3-mo		
					moving	moving	This	
Category	FY 2011	FY 2012	FY 2013	FY 2014	total	total	month	
Single family homes	489	458	689	734	765	220	60	
1 year change	71	-31	231	45	31	8	8	
% change	17.0	-6.3	50.4	6.5	4.2	3.8	15.4	
percent of all single family sales	12.9	12.9	17.3	18.2	18.7	20.1	18.8	
Condominiums	87	72	112	128	160	33	13	
1 year change	-2	-15	40	16	32	2	4	
% change	-2.2	-17.2	55.6	14.3	25.0	6.5	44.4	
percent of all condominium sales	3.5	2.6	3.2	3.6	4.2	3.1	3.9	
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 Sales of new housing permits condo units FY 2011 267 335 FY 2012 236 479 FY 2013 368 442 FY 2014 267 516 12-mo. ending: 483 293 2015.3 1 yr ch 26 -33 9.7 % ch. -6.4

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

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

			Avg. units
item	projects	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
Subtotal	87	4,297	
Planned as either condo or			
rental	19	8,947	471
Total	106	13,244	

## Apartments and population

#### Apartment growth

- •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 September, 4,131 housing permits were issued, down 7.5% from a year ago; the 3-month total was 52.4% lower than last year.
- •In the September quarter 11,198 units were under construction, representing the equivalent of 6.5% of the existing inventory.
- •DC's population in July 2014 was estimated by the Census Bureau at 658,893, an increase of 9,782 (1.5%) from 2013. This is the slowest annual growth since 2008.
- For the five years 2009 through 2014, the number of occupied private sector apartment units increased by 12,671, about 51% of the estimated 24,638 increase in households in DC.

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

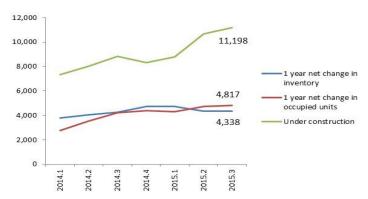


Table 14. Market rate apartment units in DC: 2007 to 2015.3

	Inventory			Occu	Occupied units			nthly rent	Under Construction					
CY	_	Units			Units						\$ per			
	Buildings	number	1 yr ch	% vacant	Number	1 yr ch	% ch	month	1 yr % ch	Buildings	Units			
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: 2004 to 2014

		Population		Households (esti	mated)		
Calendar	Number Change from prior yr.			Number	Change from pr	rior yr.	
year		number	%		number	% por	/hh ratio
2004	567,754	-748	-0.1	252,468	1,095	0.4	2.25
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	605,210	12,982	2.2	268,233	5,365	2.0	2.26
2011	620,427	15,217	2.5	273,901	5,668	2.1	2.27
2012	635,040	14,613	2.4	279,259	5,358	2.0	2.27
2013	649,111	14,071	2.2	284,338	5,079	1.8	2.28
2014	658,893	9,782	1.5	287,506	3,168	1.1	2.29
Change fro	om 09 to 14	66,665	11.3		24,638	9.4	2.71

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: September 2015								
				12-mo.	3-month			
				moving	moving	This		
	FY 2012	FY 2013	FY 2014	total	total	month		
Total units	4,091	3,855	4,467	4,131	998	403		
change from 1 yr ago	1,632	-236	612	-336	-1,097	9		
% change from 1 year	66.4	-5.8	15.9	<i>-7.5</i>	-52.4	2.3		
Multi-family projects with								
5 or more units								
number	21	36	32	37	8	2		
average size	195	107	140	112	125	180		



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	

Addendum: estimated supply and demand for the next 3 years supply\*\* 10,627 demand 7,750

Source: Census Bureau (permits issued during period).

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)

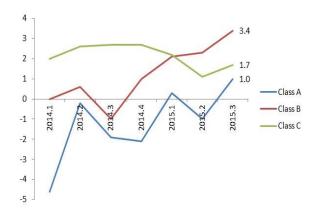


Table 16. Market rate apartment units in DC, Classes A, B, and C: 2012 to 2015.3

	Inventory				Оссі	Occupied units			Effective monthly rent		Under construction	
CY			Units									
	Buildings r	number	1 yr ch	% vacant	Number	1 yr ch	% ch	\$ per month	1 yr % ch	Buildings L	Jnits	
Class A												
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	
Class 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	
Class C												
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.

9

<sup>\*</sup>CoStar, Class A. See table 16.

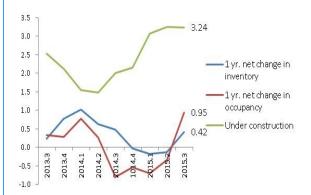
<sup>\*\*</sup>Supply available by Sept. 2018 represents vacant units, units under construction and marketing, and 25% (1,280) of planned units.

## 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

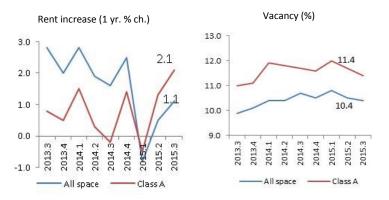


Table 19. <b>C</b>	OC commercial	office space: 2007	to September	(2015.3)
--------------------	---------------	--------------------	--------------	----------

		Inven	tory	Occ	cupied spa	ice	Vacan	су %	Base rent (d	lirect)	Under	constr.
CY (year	Build-	Level	1 yr ch	Level	1 yr ch				\$	1 yr	build-	
end)	ings	(msf)	(msf)	(msf)	(msf)	% ch	Direct	Total	per sq ft.	% ch	ings	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

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

		Inven	tory	Осс	upied spa	ice	Vacancy	/ %	Base rent (	direct)	Under	constr.
CY (year	Build-	Level	1 yr ch	Level	1 yr ch				\$	1 yr	build-	
end)	ings	(msf)	(msf)	(msf)	(msf)	% ch	Direct	Total	per sq ft.	% ch	ings	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: CoS	Star. All	Class A.										

## Office outlook and value of all property transfers

#### Property transfers increased sharply

- •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 September property transfers was up 37.7% from last year as measured by the 3-month moving total. The 12-month moving total (\$14.77 billion) was 27.6% higher than last year.

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

cinco spaces copicinaes =c=c	
	Million
item	sq. feet
Under construction*	3.24
Planned	9.23
Proposed/rumored with long term delivery	10.46
Total	22.93
*C-C+ C+	

\*CoStar. See table 19.

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

supply**	1.60
demand	2.50

<sup>\*\*</sup>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.

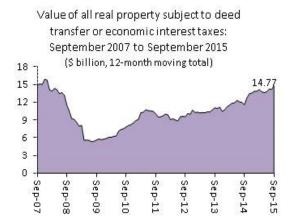


Table 22. Delta Associates outlook for commercial office space in DC and the surrounding metro area: June 2015 to June 2017

Indicator	DC	No VA	Sub MD	Total	DC % of total							
Inventory June 2015												
Inventory (msf)	140.8	179.4	85.8	406.0	0.3							
vacancy rate (%)	6.9	13.7	13.1	11.2								
Estimated net activity to June 2017												
new supply (msf)	2.0	2.7	0.4	5.1	0.39							
new demand (msf)	2.5	3.0	1.3	6.8	0.37							
Estimated vacancy r	ate on June	2017										
vacancy rate (%)	6.4	13.3	11.9	10.6								
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: September 2015

						12-mo moving	3-month	
	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	total	moving total	This month
All property transfers (\$ million)	7,789.1	10,059.5	9,533.3	11,063.9	11,569.8	14,766.3	3,765.2	1,181.8
change from one year ago (\$M)	2,197.9	2,270.4	-526.2	1,530.6	505.8	3,196.5	1,030.0	593.2
% change from 1 year ago	39.3	29.1	-5.2	16.1	4.6	27.6	37.7	100.8

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

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

## **Hospitality**

#### Demand for hotel rooms has been slowing

- •In September the 3-month moving total for hotel roomdays sold was 0.4% below a year earlier. The average room rate was down 2.5%, and revenue decelined by 2.8%.
- •Employment in food services was 0.3% more in September than a year earlier as measured by the 3-month moving average. Hotel employment was down 3.7%, and retail was 4.3% higher.
- •August airline traffic into the DC area was up 7.8% compared to a year earlier as measured by the 3-month moving total. Reagan National was up 14.0%. For the past 12-months, total traffic into the DC area rose 4.5%.

Hotel room sales revenue: Sep. 2014 to Sep. 2015 (percent change in 3-month and 12-month moving average from same period of prior year)



Table 24. Hospitality Industry: September 2015

3-month 12-mo total moving total FY 2012 FY 2013 FY 2014 Indicator Units date or average\* or average\* This month **Hotel stays** Hotel room-days sold ('M) sep 7.617 7.680 7.869 8.193 2.169 0.708 1 yr ch 0.152 0.062 0.189 0.325 -0.008 0.003 1 yr % ch 2.0 0.8 2.5 4.1 -0.4 0.4 192.13 Average room rate 203.57 207.31 209.87 215.36 220.22 sep 1 yr ch -3.03 3.74 2.56 5.49 -4.86 -9.02 1 yr % ch -1.5 1.8 1.2 2.6 -2.5 -3.9 Occupancy rate % sep 75.4 75.8 76.6 77.5 81.3 81.4 (average) 1 yr ch 1.2 0.5 0.8 0.9 0.0 0.7 0.6 0.0 0.9 1 yr % ch 1.6 1.0 1.2 1,550.7 1,592.1 1,764.5 416.7 155.9 Room revenue (\$M) 1,651.4 sep 41.4 59.4 113.1 -12.2 -5.7 1 yr ch 8.4 2.7 1 yr % ch 0.5 3.7 6.8 -2.8 -3.5 Airline passengers DCA 1 yr % ch 2.8 5.5 0.0 9.7 14.0 12.8 aug IAD 1 yr % ch -2.9 -4.0 -1.9 0.2 3.4 2.4 aug BWI 1 yr % ch 1.0 -1.5 -0.5 3.8 6.6 5.1 aug 7.8 Total 1 yr % ch aug 0.1 -0.3 -0.8 4.5 6.5 **Employment** Accommodations level ('000) 15.4 15.2 15.2 15.0 14.8 14.8 sep 1 yr ch 0.1 -0.2 0.0 -0.2 -0.6-0.6 1 yr % ch 0.7 -1.2 -0.1 -1.6 -3.7 -3.9 Food and bev level ('000) 42.7 45.1 47.0 47.5 48.0 47.9 sep 1 yr ch 3.4 2.5 1.9 0.5 0.1 -0.4 1 yr % ch 8.5 5.7 4.2 1.1 0.3 -0.8 level ('000) Arts and entertain. 6.9 6.9 7.1 7.4 7.3 7.3 sep 1 yr ch 0.1 0.0 0.2 0.3 0.1 0.1 1 yr % ch 1.3 0.2 2.2 4.5 1.4 1.4 Retail level ('000) sep 18.8 19.7 21.1 22.5 22 N 21.9 1 yr ch 0.3 0.9 1.4 1.4 0.9 0.6 1 yr % ch 4.7 6.9 6.8 4.3 2.8 1.4

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

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

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

- •US real GDP growth in the September quarter fell to to 1.5%; nominal growth was 2.7% (seasonally adjusted, annual rates).
- •US employment (seas. adj.) increased by 142,000 in September from the month before.
- •The US unemployment rate (seas. adj.) stayed at 5.1% in Sep.
- •In September the average S&P 500 index for the month fell 4.7% from August and was 2.4% below last year.
- •Compared to a year earlier, inflation fell slightly in September (seas. adj.).

Table 27. Federal government sector, US GDP acounts: 2015.3 (percent change from same period of prior year)

Indicator FY 2012 FY 2013 FY 2014 12-mo avg 2015.3 Non-defense 0.7 -0.2 Compensation of employees 1.8

Purchases of goods and services -1.2 -5.4 -1.0 0.6 -2.2 2.7 3.9 Gross investment -1.9 -3.0 -1.6 Defense -0.7 0.0 Compensation of employees 0.2 -3.5 -0.5 -4.3 -8.5 -9.1 -2.9 -5.9 Purchases of goods and services -3.3 Gross investment -5.1-8.3 -2.8 -3.8 -0.7

-1.0

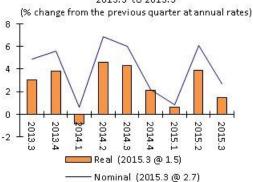
-3.9

-2.0

All federal consumption and investment Source: BFA (October 29, 2015), Nominal values,

> Federal government 4 consumption and 3 investment and US 2 GDP: 2013.3 to 2015.3 Fed. gov't. consumption (% change from and same quarter of the investment prior year)

Quarterly change in US Real and Nominal GDP: 2013.3 to 2015.3



#### 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	20						
US GDP real	4.3	2.1	0.6	3.9							
US GDP nominal	6.0	2.2	0.8	6.1							
Wages and salaries	5.4	6.3	2.6	2.5							
Personal income	4.4	4.9	3.3	3.7							

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

(percent change from same period of prior year)

Indicator	FY 2012	FY 2013	FY 2014	12-mo avg	2015.3					
US GDP real	2.3	1.2	2.4	2.5	2.0					
US GDP nominal	4.2	2.9	4.2	3.6	2.9					
US Personal income	4.7	3.0	3.0	4.5	4.2					
US wages	3.4	3.9	4.1	4.6	4.0					
Corporate profits*	15.0	3.1	3.0							
S and P stock index	5.4	16.7	20.3	9.7	2.5					
US CPI	2.4	1.6	1.6	0.3	0.1					
Balt//Wash. area CPI	2.4	1.6	1.7	0.4	na					
Source: BEA (Oct. 29, 2015), BLS, Yahoo.										

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

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

Table 28. Monthly selected US Indicators: May 2015 to September 2015

Indicator	May	June	July	August	September
S and P stock index (level)	2112	2099	2094	2040	1944
% change from prior month	0.8	-0.6	-0.2	-2.6	-4.7
% change from 1 year ago	11.8	7.8	6.1	4.0	-2.4
10 yr. Treasury Interest rate (level)	2.19	2.36	2.32	2.16	2.17
CPI % ch from prior month (seasonally adjusted)	0.44	0.32	0.13	-0.07	-0.15
CPI % ch from prior year (seasonally adjusted)	0.03	0.18	0.21	0.22	-0.03
Jobs (seasonally adjusted level, in millions)	141.625	141.87	142.09	142.23	142.37
change from prior month (thousands)	260	245	223	136	142
% change from prior month	0.18	0.17	0.16	0.10	0.10
Resident employment (season. adj. level, in mil.)	148.80	148.74	148.84	149.04	148.80
change from prior month (thousands)	272	-56	101	196	-236
% change from prior month	0.18	-0.04	0.07	0.13	-0.16
Unemployment rate (seasonally adj.)  Source: BLS and Yahoo! Finance.	5.5	5.3	5.3	5.1	5.1

4.1

-0.1

4.5

## DC tax collections

Total DC tax collections (before earmarking): September 2010 to September 2015

(12-month moving total in \$ million)

September 2015 @ \$6,951M

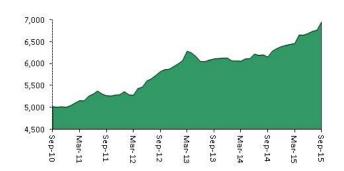


Table 29. Tax Collections (before earmarking): September 2015 (Preliminary)

(\$ million)	F	Revenue (fro	om CAFR)			Tax collections					
					12-month	FY 2015	3-month				
Tax	FY 2011	FY 2012	FY 2013	FY 2014	moving total	to date	moving total	This month			
Total taxes	5,325.3	5,853.3	6,100.5	6,290.0	6,951.2	6,951.2	2,221.3	1,397.9			
1 year change	320.1	528.0	247.2	189.5	762.5	762.5	240.1	187.9			
% change	6.4	9.9	4.2	3.1	12.3	12.3	12.1	15.5			
Real property	1,715.1	1,822.0	1,914.8	2,015.6	2,289.0	2,289.0	1,092.2	950.9			
1 year change	-106.4	106.9	92.8	100.7	399.1	399.1	199.3	183.6			
% change	-5.8	6.2	5.1	5.3	21.1	21.1	22.3	23.9			
General sales	1,014.9	1,111.0	1,137.9	1,172.1	1,240.0	1,240.0	309.1	85.8			
1 year change	51.7	67.6	26.8	34.2	79.5	79.5	13.9	-6.7			
% change	3.9	9.5	2.4	3.0	6.9	6.9	4.7	-7.2			
Individual income	1,296.6	1,490.7	1,640.9	1,679.2	1,866.1	1,866.1	444.7	191.2			
1 year change	186.2	194.1	150.2	38.3	180.2	180.2	22.0	5.1			
% change	16.8	15.0	10.1	2.3	10.7	10.7	5.2	2.7			
withholding	1,192.2	1,321.6	1,391.2	1,472.9	1,564.7	1,564.7	364.5	105.7			
1 year change	118.3	129.5	69.6	81.7	85.9	85.9	2.0	-21.0			
% change	11.0	10.9	5.3	5.9	5.8	5.8	0.6	-16.6			
non-withholding	104.4	169.1	249.6	206.2	301.4	301.4	80.2	85.5			
1 year change	67.8	64.6	80.6	-43.4	94.3	94.3	20.0	26.1			
% change	185.2	61.9	47.7	-17.4	45.6	45.6	33.3	44.0			
Corporate income	216.3	302.9	299.0	280.2	311.0	311.0	53.2	55.3			
1 year change	9.0	86.6	-3.9	-18.8	23.1	23.1	-12.1	-1.8			
% change	4.3	40.1	-1.3	-6.3	8.0	8.0	-18.5	-3.1			
Unincorporated Bus.	143.4	163.0	154.3	135.4	145.0	145.0	17.5	23.3			
1 year change	27.0	19.6	-8.7	-18.9	6.2	6.2	-12.5	-3.0			
% change	23.2	13.6	-5.3	-12.3	4.4	4.4	-41.7	-11.5			
Deed taxes*	311.2	306.6	367.3	386.0	480.6	480.6	127.3	42.6			
1 year change	85.6	-4.5	60.6	18.8	89.4	89.4	28.3	11.2			
% change	37.9	-1.5	19.8	5.1	22.8	22.8	28.5	35.5			
Other taxes	627.8	657.0	586.3	621.6	619.4	619.4	177.3	48.8			
1 year change	80.6	29.2	-70.7	35.3	-15.0	-15.0	1.3	-0.5			
% change	14.7	4.6	-10.8	6.0	-2.4	-2.4	0.7	-0.9			

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

Source: OCFO/ORA

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

<sup>(2)</sup> Tax collections data subject to accounting adjustments.

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

#### Tax collections continue well above a year ago

- •For the 12 month period ending September, total tax collections (before earmarking) were \$762.5 million (12.3%) more than in the prior year. For the last 3 months they were 12.1% above last year.
- •Individual income tax collections were 10.7% above last year for the 12-months ending September and withholding was 5.8% higher. For the past 3 months, withholding was up 0.6%.
- •General sales tax collections were 6.9% above last year for the 12-months ending September. For the past 3 months, they were 4.7% above last year.
- $\bullet$  Deed tax collections for the 12-months ending September were up 22.8% from last year; for the past 3 months they were up 28.5%.
- •Corporate income taxes in September were up 8.0% and unincorporated business income taxes rose 4.4% from last year (12-mo. total).

#### General Sales tax collections (before earmarks): September 2014 to September 2015



# General Sales tax and Withholding for the Individual Income tax:



#### Total tax collections (before earmarks): September 2014 to September 2015

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



#### Withholding for the Individual Income tax: September 2014 to September 2015

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



#### Deed tax collections (before earmarks): September 2014 to September 2015

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



## US economic forecasts

#### The October Blue Chip forecast for the US economy slightly cut GDP growth in FY 2016

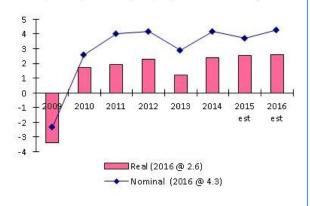
- •The Blue Chip Indicator October forecast for real GDP growth in FY 2015 (2.6%) remains slightly above the actual for FY 2014, and remains at 2.6% in FY 2016.
- •The Blue Chip Indicator October forecast for inflation (CPI): 0.3% for FY 2015 and 1.5% in FY 2016.
- $\bullet$ S&P 500: October baseline forecasts: lower forecasts for the last quarter of 2015, and with growth picking up 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)

		real			nominal	
Fiscal year and date of forecast	Blue Chip	Moody's Analytics	IHS Global Insight	Blue Chip	Moody's Analytics	IHS Global Insight
FY 2013 Actual	1.2	1.2	1.2	2.9	2.9	2.9
FY 2014 Actual	2.4	2.4	2.4	4.2	4.2	4.2
FY 2015						
July	2.4	2.4	2.3	3.5	3.2	3.6
August	2.4	2.4	2.4	3.6	3.4	3.5
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
FY 2016						
June	2.6	3.0	2.7	4.4	4.3	5.8
July	2.7	2.9	2.8	4.5	4.3	5.9
August	2.6	3.2	2.5	4.4	4.7	5.3
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

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



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

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
Course Congressional Budget Office	The Bude	and Eco	nomic	

Source: Congressional Budget Office, <u>The Budget and Economic</u>

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	СР	1		10 yr Treas	ury rate							
date	2014	2015	2016	2014	2015	2016						
Jul	1.6	0.3	1.8	2.7	2.2	2.9						
Aug	1.6	0.4	1.8	2.7	2.2	2.8						
Sep	1.6	0.3	1.6	2.7	2.2	2.7						
Oct	1.6	0.3	1.5	2.7	2.2	2.7						

Source: Blue Chip Indicators

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

DC Economic and Revenue Trends: October 2015

1001C 33. 1113 GIC	Table 55. In 5 Global Hisight for Coast for 5 and 1 5001 201444 to 201014												
Forecast	% chan	ge from prio	or year		% char	ige from pri	ge from prior year						
date	2014.4	2015.4 2016.4		2014.4 2015.4 2016.4			2014.4	2015.4	2016.4				
	Global	Insight: ba	seline	Global Insight: pessimistic									
July	13.6	5.5	3.8		13.6	-5.0	-20.4						
August	13.6	2.9	4.9		13.6	-7.1	2.6						
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						
Source: IHS Global Insight													

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

Forecast	% chan	ge from pri	or year	% c	% change from prior year				
date	2014.4	2015.4	2016.4	2014.4	2015.4	2016.4			
·	Econo	my.com ba	seline	Ecor	nomy.com pe	ssimistic			
July	13.6	4.9	2.8	13.	6 0.4	1.9			
August	13.6	6.4	4.6	13.	6 4.3	1.0			
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			

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

#### Moody's Analytics cut its estimates for Personal Income growth in DC for FY 2016

- Employment: In FY 2016 growth is expected to be less in 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, but this reverses in FY 2017. DC's unemployment rate stays in the 6% to 7% range through FY 2017.
- •Income. Moody's Analytics sharply cut its estimate for DC Personal Income growth in FY 2016 and FY 2017—to 3.9% in FY 2016 (the same as FY 2015) and 2.4% in FY 2017. Global Insight has a 6.1% growth rate in FY 2017. Global Insight's 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	Glo	obal Insigl	nt: baselir	ne	Globa	al Insight:	pessimis	stic	Mood	dy's Anal	ytics: bas	eline	Mood	dy's Analy	tics: pessim	nistic
estimate	2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017
Jul	6.0	11.6	7.6	6.4	6.0	11.6	5.8	3.2	6.0	12.4	10.5	10.8	6.0	12.2	5.0	7.3
Aug	6.0	10.9	5.8	6.7	6.0	10.8	1.9	1.1	6.0	11.1	9.8	11.6	6.0	11.1	5.2	7.0
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

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 Global Insight: baseline				Globa	al Insight:	pessimis	stic	Moody's Analytics: baseline Moody's Analytics: pess					ics: pessim	nistic		
estimate	2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017
Jul	3.4	11.4	7.7	6.4	3.4	11.3	6.9	5.1	3.4	11.4	8.3	6.5	3.4	11.3	6.0	6.9
Aug	3.4	11.2	6.2	5.4	3.4	11.2	4.5	2.1	3.4	11.4	8.3	6.4	3.4	11.4	6.4	5.6
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

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

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

(percent	change fro	m prior y	ear)														
Date of Global Insight: baseline Global Insight							essimistic		Mood	y's Analy	ics: base	line	Mood	ly's Analyt	ics: pessir	imistic 2017	
estimate	2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017	
Jul	2.3	3.4	3.8	4.8	2.3	3.2	2.5	2.7	2.3	3.8	6.9	7.0	2.3	3.7	5.3	6.8	
Aug	2.3	3.4	3.8	4.7	2.3	3.3	2.0	1.1	2.3	3.4	7.1	7.2	2.3	3.4	5.6	6.6	
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	

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

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

(percent change from prior year)

(percent enange non	(percent change from prior year)											
		Global	Insight		Moody's Analytics							
Indicator	2014	2015	2016	2017	2014	2015	2016	2017				
Wage and salary jobs												
DC	0.8	1.5	0.8	0.8	0.8	1.5	0.8	1.1				
Metro area					0.4	1.7	1.3	1.6				
US	1.8	2.2	1.6	1.4	1.8	2.2	1.8	2.2				
Personal Income												
DC	2.7	4.1	4.5	6.1	2.7	3.9	3.9	2.4				
Metro area					2.2	4.0	6.3	6.9				
US	3.0	4.5	4.4	5.3	3.0	4.5	5.5	6.6				

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

(percent	change	from	nrior	(parl
(percent	CHAILE	110111	prior	y cai j

	Global I	Insight		Moody's Analytics									
2014	2015	2016	2017	2014	2015	2016	2017						
Wages a	nd salari	es earne	d in DC										
3.1 4.7 4.1 4.6 3.1 4.7 5.3 4.7													
DC reside	DC resident wages and salaries												
3.0	4.2	4.1	6.4	3.0	3.9	1.7	-0.9						
DC Unen	nploymer	nt rate (le	evel)										
7.9	7.4	6.5	6.3	7.9	7.4	6.8	6.8						
Source: IH	IS Global Ir	nsight and	Moody's A	nalytics (Eco	nomy.con	n). Baselin	e						

forecasts.

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

#### DC revenue estimate

# The September revenue estimate: \$594 million more tax revenue in FY 2015, and another \$68 million in FY 2016.

- •Anticipated tax revenue growth (before earmarks) is 9.4% in FY 2015 and 1.0% 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 one-time revenue gain from settlement payments for past due sales taxes from on-line hotel booking.
- •The real property tax accounts for 31% of revenue growth in FY 2015, and 173% in FY 2016. Individual income tax revenue increases in both FY 2015 and FY 2016; sales (due to hotel booking settlement), deed taxes, and business income fall in FY 2016.
- •As a share of DC Personal Income, tax revenue in FY 2015 is expected to rise to 13.2% compared to 12.6% in FY 2014—and fall back to 12.5% 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: September 2015 revenue estimate

Tax		FY level (\$	million)		Char	nge from pr	ior year (\$ f	M)	% с	hange froi	m prior ye	ar
	2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017
Real property	2,015.6	2,202.0	2,318.9	2,380.4	100.7	186.4	116.9	61.6	5.3	9.2	5.3	2.7
Deed taxes	391.2	438.0	400.9	408.9	24.0	46.8	-37.1	8.0	6.5	12.0	-8.5	2.0
General sales	1,172.1	1,330.7	1,304.7	1,359.5	34.2	158.6	-26.0	54.8	3.0	13.5	-2.0	4.2
Individual income	1,679.2	1,830.1	1,864.3	1,947.9	38.3	150.9	34.2	83.6	2.3	9.0	1.9	4.5
Withholding	1,472.9	1,548.9	1,612.9	1,684.9	81.7	75.9	64.0	72.0	5.9	5.2	4.1	4.5
non-withholding	206.2	281.2	251.4	263.0	-43.4	75.0	-29.8	11.6	-17.4	36.4	-10.6	4.6
Business income	415.6	460.3	443.1	463.6	-37.7	44.8	-17.3	20.5	-8.3	10.8	-3.7	4.6
Other	616.4	623.0	620.0	624.7	30.1	6.6	-3.0	4.8	5.1	1.1	-0.5	0.8
Total	6,290.0	6,884.1	6,951.8	7,185.0	189.5	594.1	67.7	233.2	3.1	9.4	1.0	3.4

Source: ORA. September 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 os 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	762,813	771,228	779,626
1 year change	6,000	11,329	8,415	8,398
% change	0.8	1.5	1.1	1.1
DC resident				
employment	344,826	355,199	362,249	368,162
1 year change	3,434	10,374	7,050	5,913
% change	1.0	3.0	2.0	1.6
Unemployment rate	7.9	7.5	7.0	6.7
Source: ORA September 2015	5 revenue estii	mate, unchang	ed from June.	

Table 42. **DC Income and stock market assumptions:** 

<b>FY 2014 to FY 2017</b> (% cha	nge from pr	ior year)		
item	2014	2015	2016	2017
Wages and salaries				
earned in DC	2.2	3.8	4.4	4.7
Wages and salaries				
earned by DC residents	2.3	5.4	5.3	5.3
DC Personal income	2.5	4.4	4.6	5.6
S and P 500 stock index	13.6	6.0	3.6	2.2

Source: ORA September 2015 revenue estimate, unchanged from June. 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

Table 43. DC tax revenue (before earmaixs) and DC refsonal income. 11 2008 to 11 2017												
item	2008	2009	2010	2011	2012	2013	2014	2015 est	2016 est	2017 est		
Tax revenue (\$ million)												
Level	5,325	5,052	5,005	5,325	5,853	6,100	6,290	6,884	6,952	7,185		
Change from prior year	170	-273	-47	320	528	247	189	594	68	233		
Percent change from prior year												
Tax revenue	3.3	-5.1	-0.9	6.4	9.9	4.2	3.1	9.4	1.0	3.4		
Personal Income	9.6	1.3	2.7	9.0	5.4	2.6	2.5	4.4	4.6	5.6		
Tax revenue as percent of												
Personal Income	13.4	12.6	12.1	11.8	12.3	12.5	12.6	13.2	12.8	12.5		

Source: ORA. September 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.

It is no accident that the cranes dotting the city's landscape produced more apartments in the post-recession period than office buildings. More residential buildings could be expected because population grew at a faster rate than jobs. But that is not the only reason. While the percentage increase in total apartment units in DC was about the same as the percentage increase in households—both a little over 10%—the

percentage increase in office space lagged greatly the increase in jobs. The percent change in office space was less than half that of total wage and salary employment, and less than a quarter of the growth in private wage and salary jobs. The reasons for the relatively slower growth in office space include lack of office space requirements for many new jobs (e.g. in restaurants and retail), the trend toward reduced square feet per office worker, and a lower office vacancy rate.

So far, new office space and apartments have kept pace with demand. Which came first, offices or jobs, people or apartments? These chicken-and-egg questions involve the complexities of the interactions of real estate markets and the economy. If places to live and work aren't available at affordable prices, jobs and people go elsewhere. But it doesn't follow that build it and they will come.

# DC Population, apartments, jobs, and office space: 2009.3 to 2015.3

(Percent change over the 6 year period)								
Population	13.0%							
Households	10.6%							
Apartment inventory	10.4%							
Occupied apartments	11.9%							
All wage and salary jobs	8.5%							
Private sector wage and salary jobs	15.6%							
Inventory of office space	3.6%							
Occupied office space	4.7%							

Source: Moody's Analytics (population), BLS (jobs), and CoStar (apartments and office space)

In an ideal world developers want to have the supply of apartments and offices grow along with demand. This can be difficult to achieve because it takes years, sometimes many years, for a project to come online, and the are incentives for each developer to be first to market. It appears that in the post recession period to date the additional office space and apartments supplied by the market have been fairly closely linked to rising demand. Despite the addition of 91 new buildings, vacancy rates in Class A apartments and offices are lower now than they were in 2009.3. In addition, the market managed to make quite a switch to accommodate the relatively greater increase in the demand for apartments. In 2009.3 there were just 5 Class A buildings under construction, less than 10% of the number that came online in the next 6 years. By contrast, in 2009.3 there were 12 office buildings already under construction, close to half of the net increase that occurred by 2015.3. The market turned up the spigot for apartments and turned down the one for offices. —Stephen Swaim, ORA

Apartments in DC-- total, large Class A, and all other: 2009.3 to 2015.3

	Invent	ory		Status	Under construction		
Class and			Occupied				
period	Buildings	Units	units	Vacant units	Vacancy rate	Buildings	Units
Class A with 50	or more units						
2009.3	109	21,490	19,946	1,544	7.2	5	1,328
2015.3	174	36,533	34,518	2,015	5.5	45	10,051
Net change	65	15,043	14,572	471			
% change	59.6	70.0	73.1	30.5			
All other units							
2009.3	3,023	134,834	130,421	4,413	3.3	4	249
2015.3	3,059	135,985	133,680	2,305	1.7	50	1,179
Net change	36	1,151	3,259	-2,108			
% change	1.2	0.9	2.5	-47.8			
All units							
2009.3	3,132	156,324	150,367	5,957	3.8	9	1,577
2015.3	3,233	172,518	168,198	4,320	2.5	95	11,230
Net change	101	16,194	17,831	-1,637			
% change	3.2	10.4	11.9	-27.5			
Source: CoStar.	Private bulding	s with 5 or m	ore units.				

Commercial office space in DC--total, large Class A, and all other: 2009.3 to 2015.3

	Invent	ory		Status		Under construction		
Class and			Occupied					
period	Buildings	msf	msf	Vacant msf	vacancy rate	buldings	msf	
Class A with 5	50,000 square fe	et or more						
2009.3	304	85.214	72.497	12.717	14.9	12	4.195	
2015.3	330	92.656	82.049	10.607	11.4	11	3.141	
Net change	26	7.442	9.552	-2.110				
% change	8.6	8.7	13.2	-16.6				
All other build	dings							
2009.3	2,025	62.660	57.936	4.724	7.5	0	0	
2015.3	1,976	59.703	54.523	5.180	8.7	6	0.122	
Net change	-49	-2.957	-3.413	0.456				
% change	-2.4	-4.7	-5.9	9.7				
All office build	dings							
2009.3	2,329	147.874	130.433	17.441	11.8	12	4.195	
2015.3	2,306	152.359	136.572	15.787	10.4	17	3.263	
Net change	-23	4.485	6.139	-1.654				
% change	-1.0	3.0	4.7	-9.5				

Source: CoStar. msf = million square feet.

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

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

#### Recent ORA reports:

Revised revenue estimate, September 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, 2014. Details on all DC taxes.

**Tax Rates and Tax Burdens 2013 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 (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	September	November 20
D.C. Personal Income	BEA	2015.2	December 21
D.C. Tax Collections	OTR/ORA	September	c. November15
D.C. Housing Sales	MRIS*	September	c. November 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	September	c. November 25
Consumer Price Index	BLS	September	November 17
U.S. Jobs and Labor Force	BLS	September	November 6
U.S. GDP and Personal Income	BEA	2015.3	November 24
S and P 500 Stock Index	Financial press	September	November 1
Interest rate on 10-Year Treasury Securities	Financial press	September	November 1
IHS Global Insight D.C. forecast	Global Insight	October	c. November 25
Moody's Analytics D.C. forecast	Moody's Analytics	October	c. November 25
Blue Chip Economic Indicators for the U.S.	Aspen Publishers	October	c. November 10

For further information or to comment on this report, contact: Stephen Swaim (202-727-7775) or <a href="mailto:stephen.swaim@dc.gov">stephen.swaim@dc.gov</a> See also the *Economic Indicators* and *Cash Reports* 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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