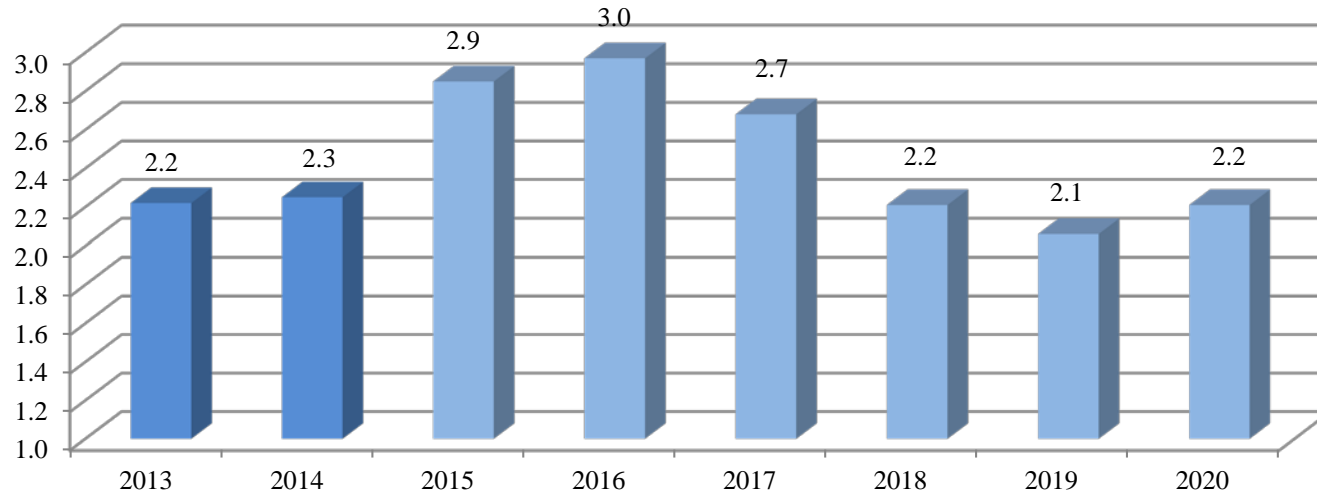


Economic Performance of the Washington Metro Region

Massoud Ahmadi, Ph.D.
February 2015

The U.S. economy is poised to grow and create jobs. Higher consumer spending, a more robust investment and greater household formation will drive the expansion

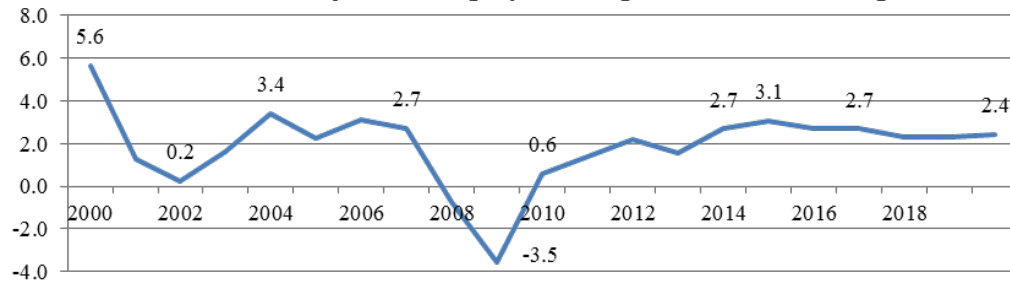
Real GDP Growth Rate: Percent



Growth in employee compensation, business investment and household formation in the U.S. will continue during the next several years

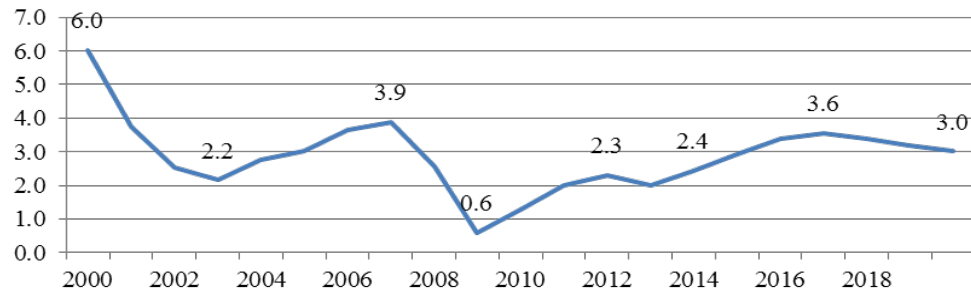
Growth in employee compensation supports faster growth in consumer spending

Inflation-Adjusted Employee Compensation: % Change



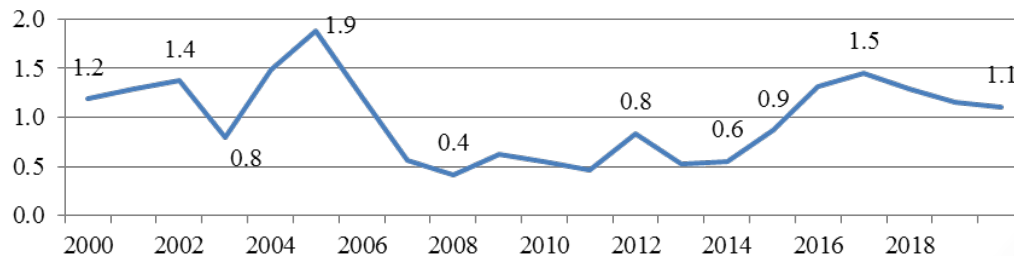
Increases in demand for goods and services will encourage business investment

Capital Services (Input): % Change

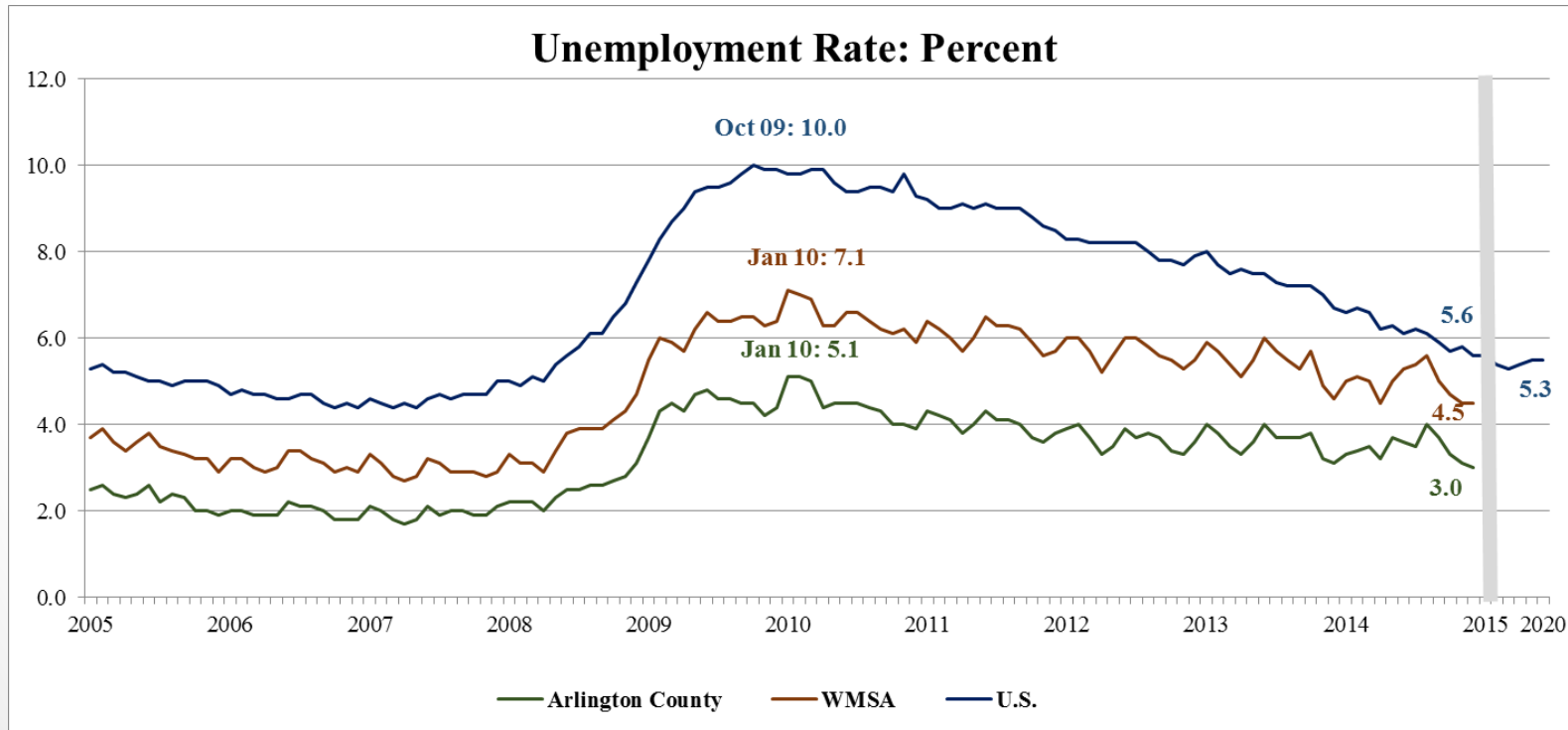


Steady growth in household formation will boost the demand for housing and spur residential investment

Household Formation: Millions



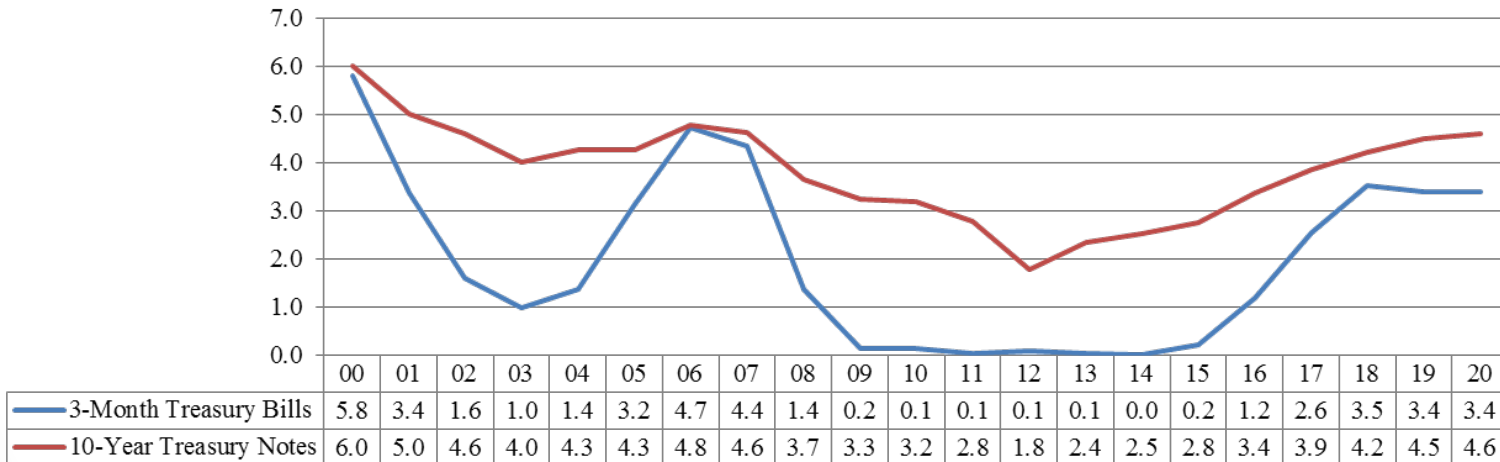
Unemployment rates have fallen to the lowest levels in over six years. Stronger demand for labor will cause the rates to further decline through 2017



Source: BLS, CBO and Strategic Impact Advisors

Interest rates will rise gradually by an anticipated tightening of monetary policy and by expectations of an improving economy

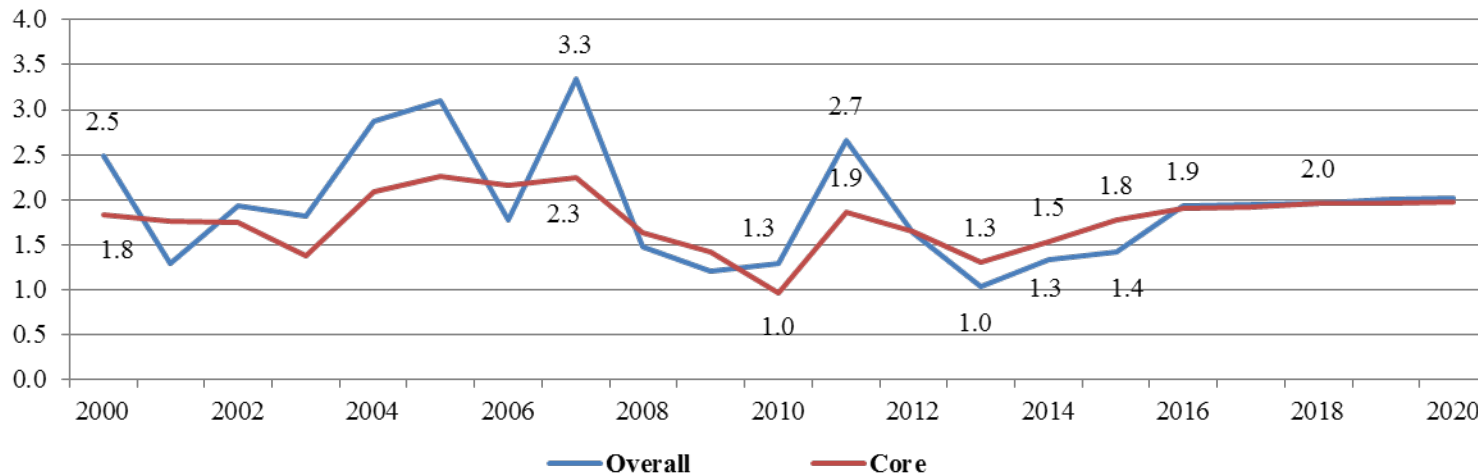
Interest Rate on Treasury Securities: Percent



Source: CBO and Strategic Impact Advisors

Inflation will rise modestly in the next five years due to the remaining excess capacity in the economy and lower inflationary expectations

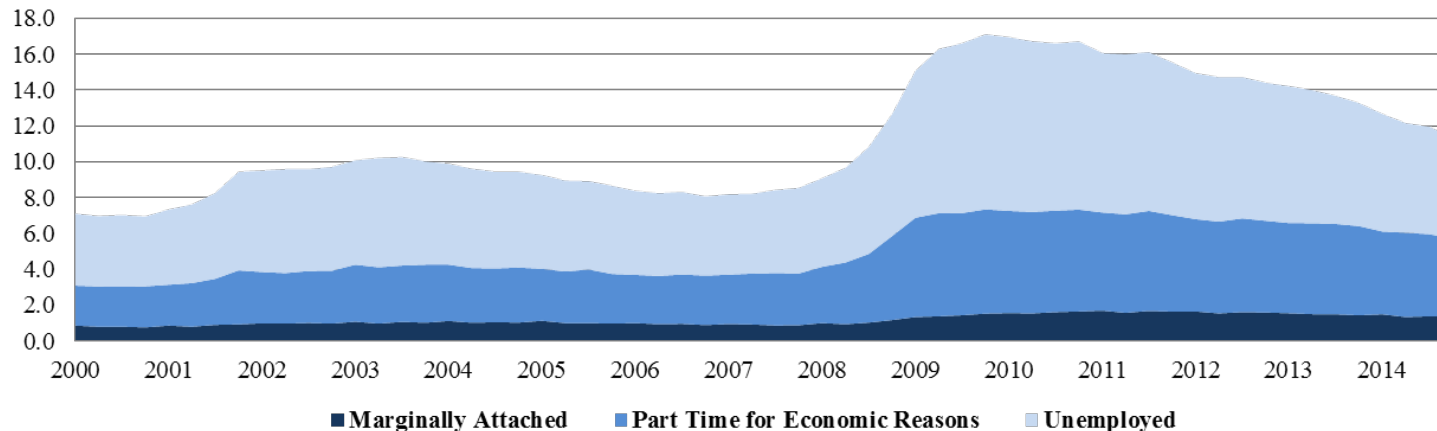
Inflation: Percent Change in PCE Index



Source: CBO and Strategic Impact Advisors

The U-6 measure of the underuse of labor has declined substantially since the end of the recession but remains well above the pre-recession levels. Higher underutilized labor reduces incentives to increase compensation to attract workers

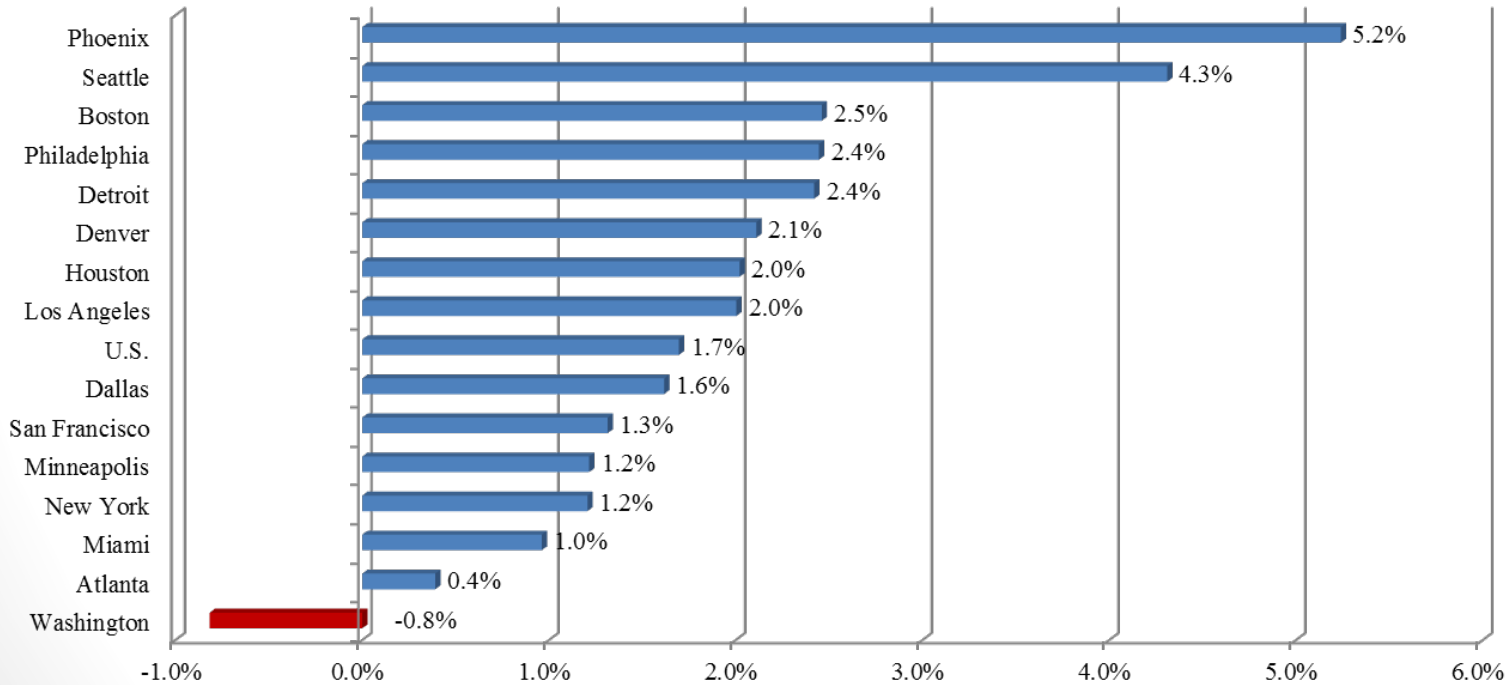
**The U-6 Measure of the Underuse of Labor in the U.S.
Percentage of the Labor Force**



Period	Marginally Attached	Part Time for Economic Reasons	Unemployed	U-6
2008Q1	1.0	3.1	4.9	9.1
2009Q4	1.5	5.8	9.8	17.1
2014Q4	1.4	4.3	5.6	11.4

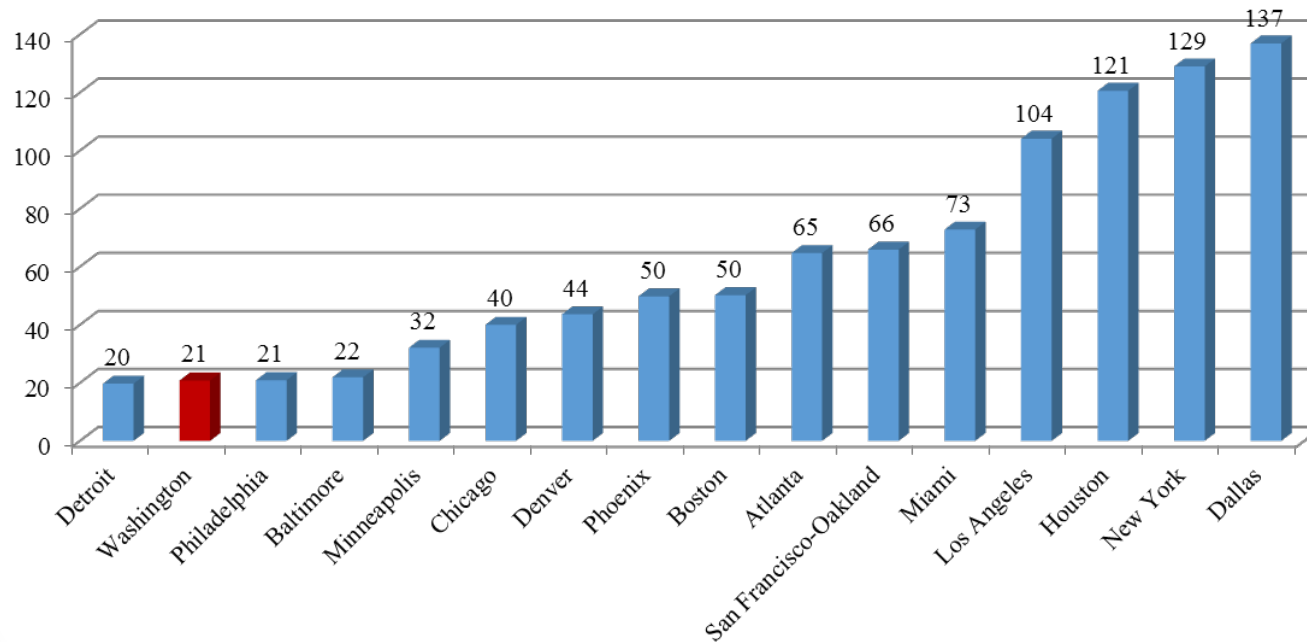
The Washington Metro Region was the only metro area in the nation that recorded negative economic growth between 2012 and 2013

Gross Regional Product by Major Metro Areas: 2012-13 Growth Rate



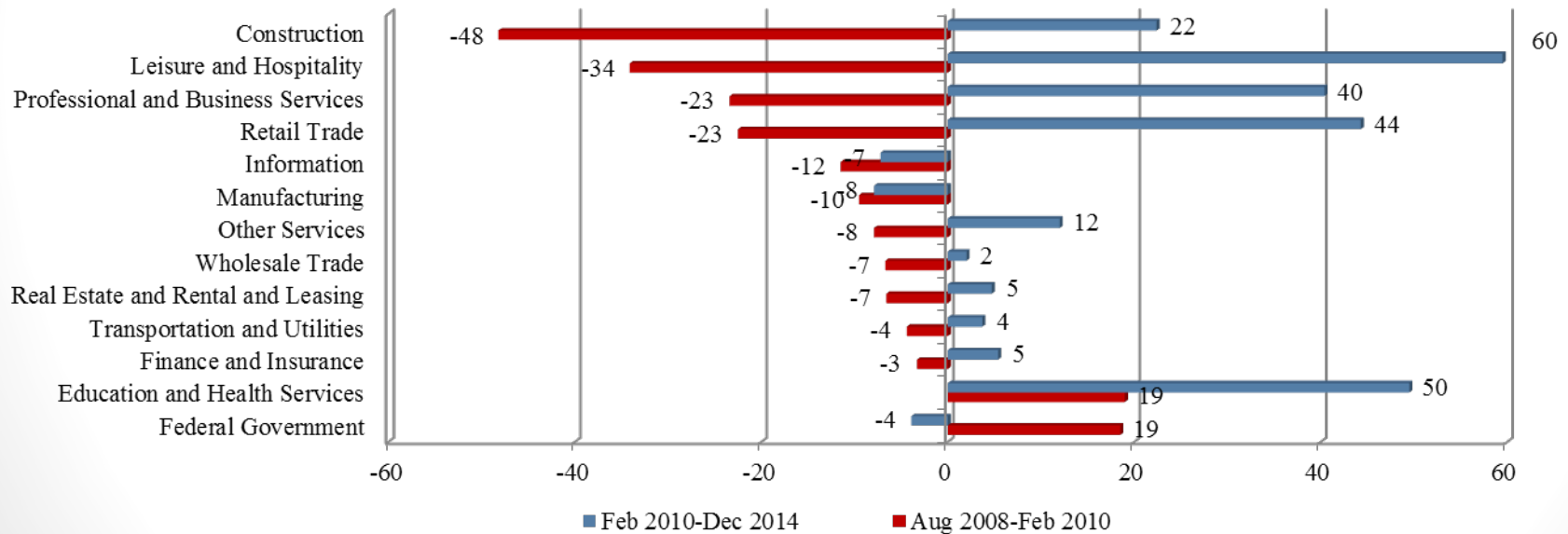
The Washington Metro Region posted the second lowest job growth among all major metro areas in the nation

Payroll Job Growth by Metro Area: 2013-14
(000s)



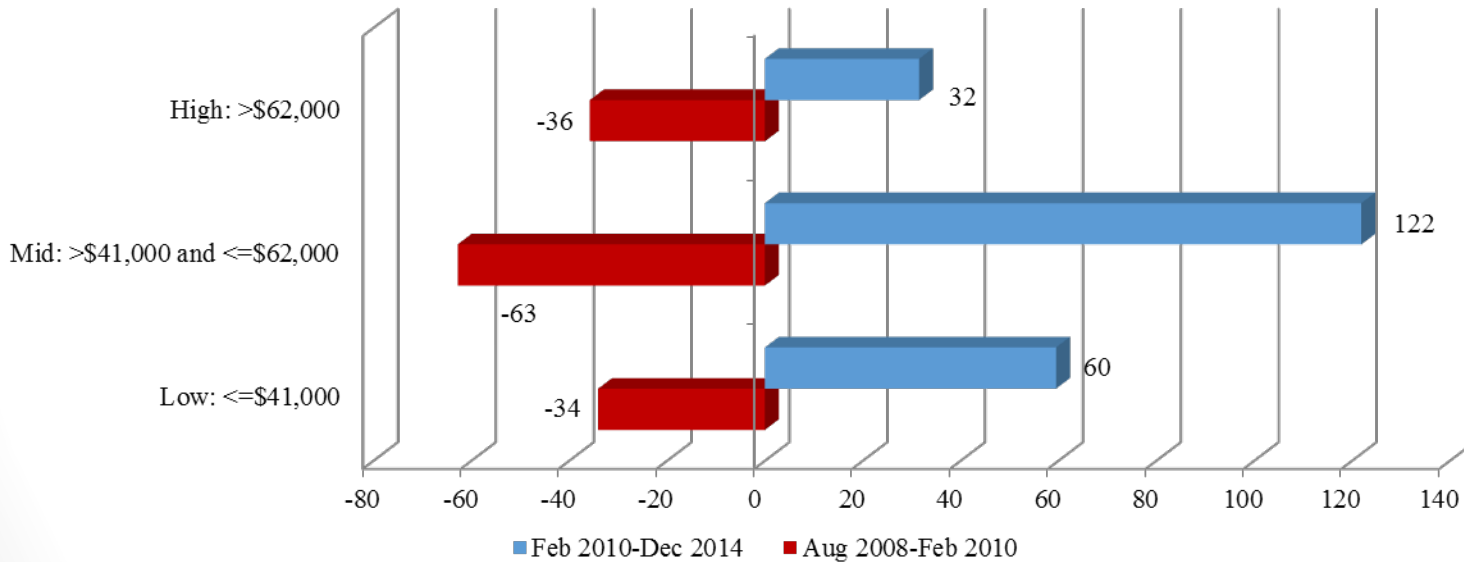
In the Washington Metro Region, leisure and hospitality, education and health care, retail and professional services recorded the most robust employment expansion since the start of the recovery, accounting for over 78% of total employment growth

Payroll Job Change in Washington, MSA: Recession and Recovery
 (000's)

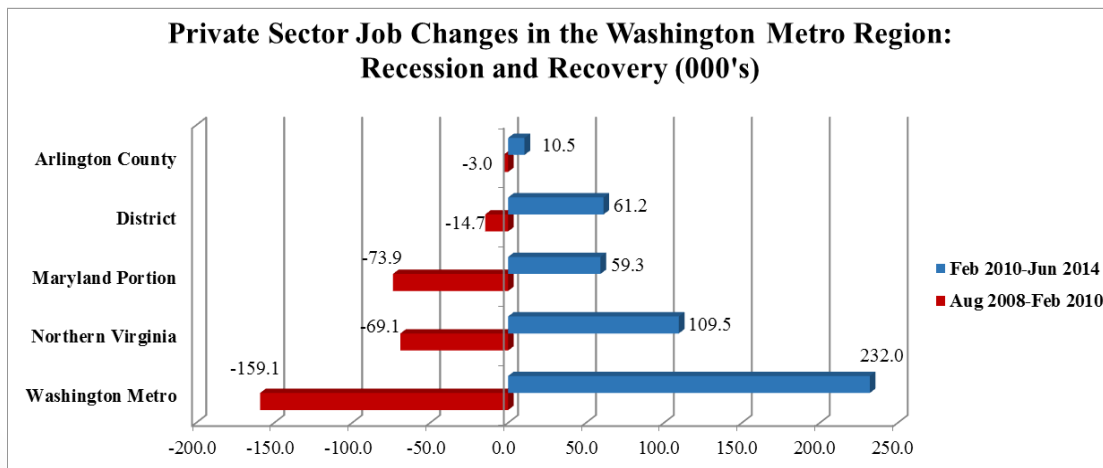
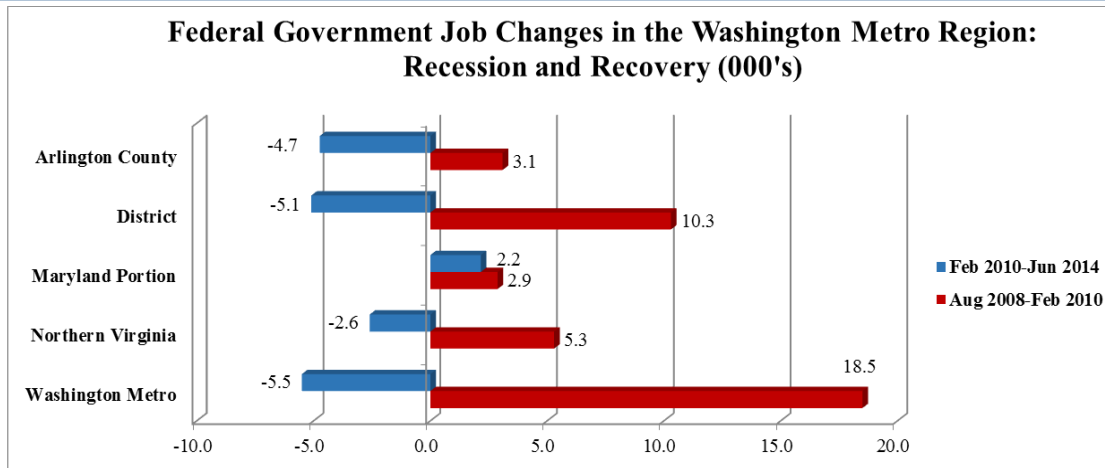


Most of the post recession job growth in the Washington Metro region, about 122,000 jobs, occurred in industries with mid-range average payroll

Job Growth in Washington MSA by Income Group: Recession and Recovery (000's)



Post recession Federal Government contraction in Arlington was the most severe in Northern Virginia. Arlington gained three times as many private jobs since 2010 as it lost during the recession



Arlington has added private companies at a steady pace since 2001, though Federal establishments posted the largest contraction rate in the region

Business Formation in the Region and the U.S.: Compound Annual Rate

Business Formation

	All		
	2001-07	2008-09	2010-13
Loudoun	8.3%	5.5%	2.9%
Prince William	5.1%	3.1%	2.5%
Arlington	2.3%	2.4%	2.5%
MSA	2.6%	0.7%	1.1%
Fairfax	2.3%	1.7%	0.7%
U.S.	1.9%	0.2%	0.6%

	Private		
	2001-07	2008-09	2010-13
Loudoun	8.0%	5.5%	3.0%
Arlington	2.3%	2.2%	2.6%
Prince William	5.1%	3.1%	2.5%
MSA	2.5%	0.7%	1.1%
Fairfax	2.2%	1.7%	0.7%
US	1.9%	0.2%	0.6%

	Federal		
	2001-07	2008-09	2010-13
Prince William	6.9%	1.6%	2.2%
Fairfax	8.3%	2.5%	0.8%
MSA	4.1%	1.1%	0.2%
Loudoun	7.6%	3.3%	-1.1%
US	3.4%	1.5%	-1.3%
Arlington	6.6%	0.0%	-2.0%

Arlington recorded a low level employment growth in the region during the past five years due to a significant decline in Federal jobs since the beginning of the recovery

Employment Growth in the Region and the U.S.: Compound Annual Rate

	All		
	2001-07	2008-09	2010-13
Prince William	3.2%	-0.8%	3.4%
Loudoun	4.6%	0.2%	3.1%
MSA	1.2%	-0.9%	1.1%
U.S.	0.6%	-2.5%	1.0%
Arlington	-0.3%	1.6%	1.0%
Fairfax	1.1%	-1.2%	0.7%

	Private		
	2001-07	2008-09	2010-13
Prince William	3.1%	-2.0%	3.6%
Loudoun	4.4%	-0.3%	3.3%
Arlington	-0.3%	1.0%	1.5%
U.S.	0.5%	-3.1%	1.4%
MSA	1.1%	-1.6%	1.1%
Fairfax	0.9%	-1.5%	0.6%

	Federal		
	2001-07	2008-09	2010-13
Prince William	4.1%	10.1%	5.2%
Fairfax	3.6%	2.1%	3.3%
MSA	1.0%	2.8%	0.8%
U.S.	0.0%	1.8%	-0.5%
Loudoun	0.8%	-1.5%	-0.6%
Arlington	-0.7%	4.4%	-1.1%

Wages and salaries are growing at the slowest annual pace in Arlington since 2010. Private companies posted the second lowest payroll growth in the region, while the overall Federal payroll declined at an annual rate of one percent

Payroll Growth in the Region and the U.S.: Compound Annual Rate

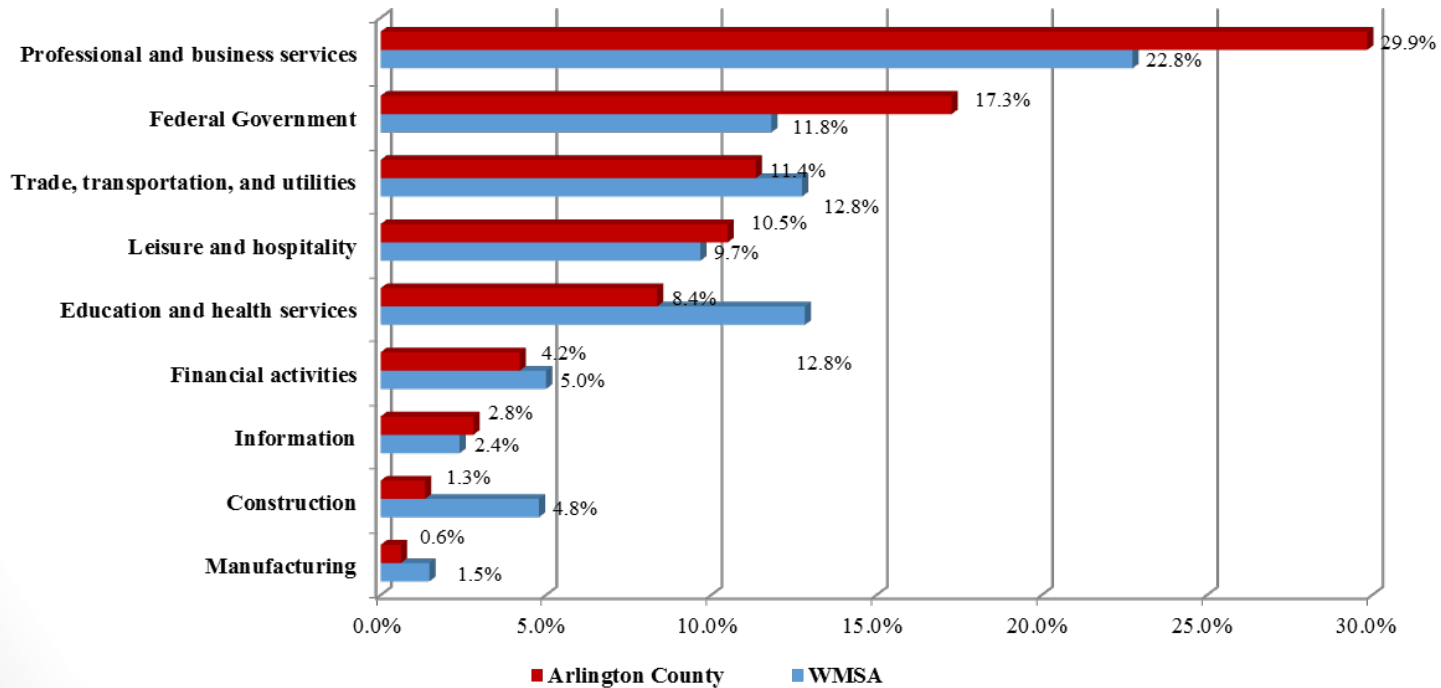
	All		
	2001-07	2008-09	2010-13
Loudoun	3.0%	0.7%	5.0%
Prince William	7.3%	1.3%	4.7%
U.S.	3.9%	-1.3%	3.3%
Fairfax	5.4%	1.6%	2.7%
MSA	5.1%	1.8%	2.7%
Arlington	4.0%	4.2%	2.3%

	Private		
	2001-07	2008-09	2010-13
Loudoun	2.3%	0.0%	5.5%
Prince William	6.8%	-1.1%	4.7%
U.S.	3.8%	-2.3%	3.8%
Arlington	3.7%	2.7%	3.5%
MSA	4.8%	0.4%	3.0%
Fairfax	5.2%	1.3%	2.7%

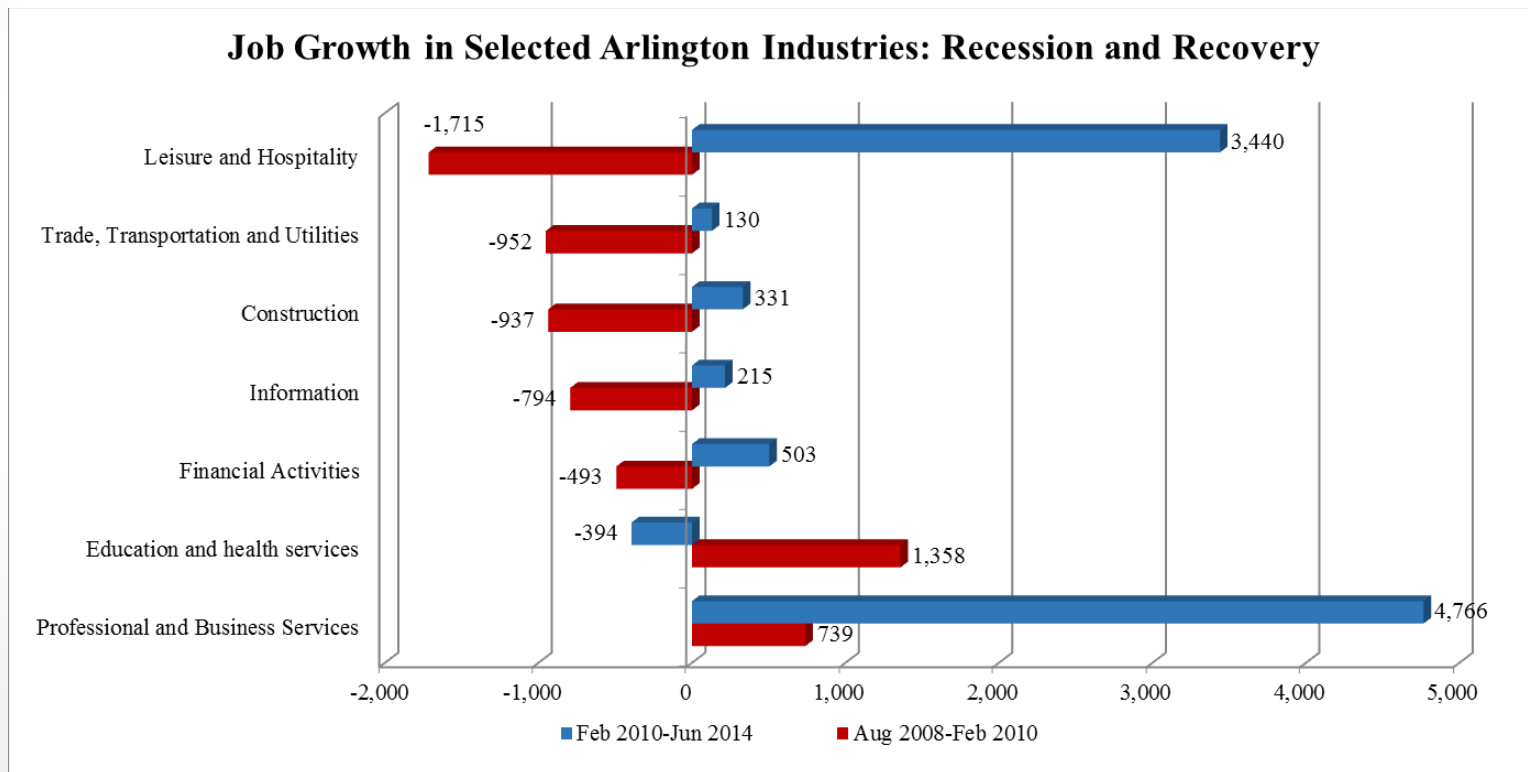
	Federal		
	2001-07	2008-09	2010-13
Prince William	11.3%	16.0%	7.6%
Fairfax	9.5%	5.8%	4.6%
MSA	6.3%	6.5%	2.0%
U.S.	4.5%	4.1%	1.3%
Loudoun	2.7%	1.4%	0.8%
Arlington	4.6%	8.6%	-1.0%

Federal Government and professional services represent over 47 percent of Arlington's payroll employment in 2014

Share of Selected Industries in Total Non-Farm Employment: 2014

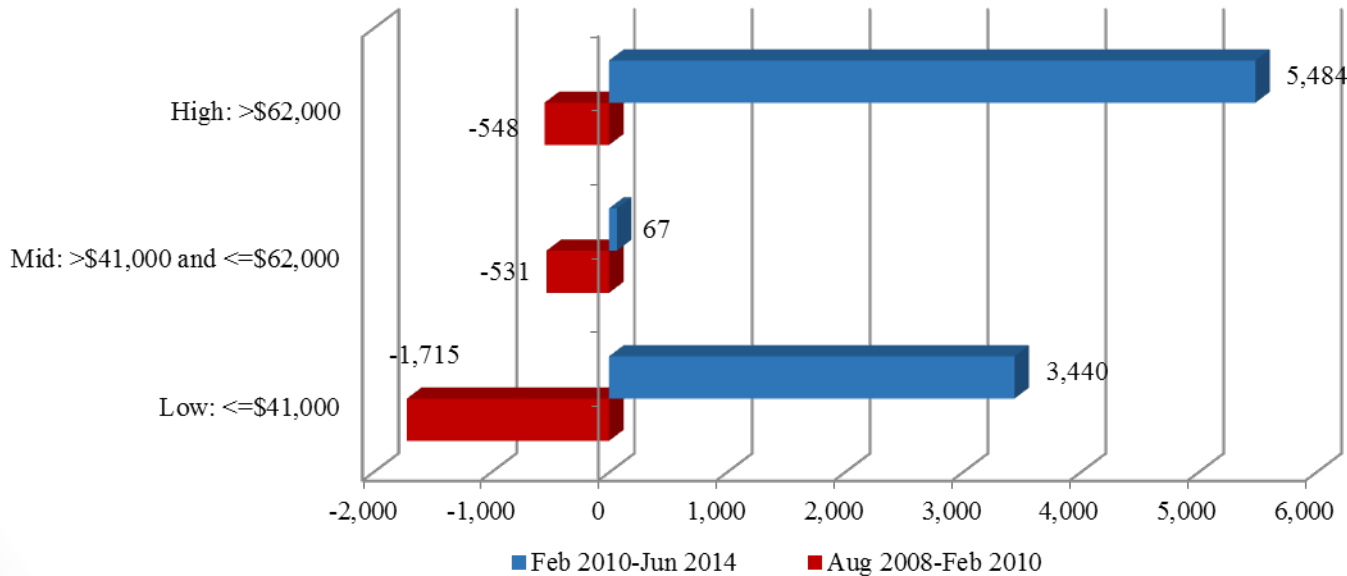


**Professional/business services (45%), and leisure/hospitality (33%)
 accounted for the bulk of the private sector job growth in Arlington
 since the end of the recession**



Post recession private job growth in Arlington was highly concentrated in industries with either high average payroll (5,484 jobs) or low average payroll (3,440)

Job Growth in Selected Arlington Industries by Income Range: Recession and Recovery



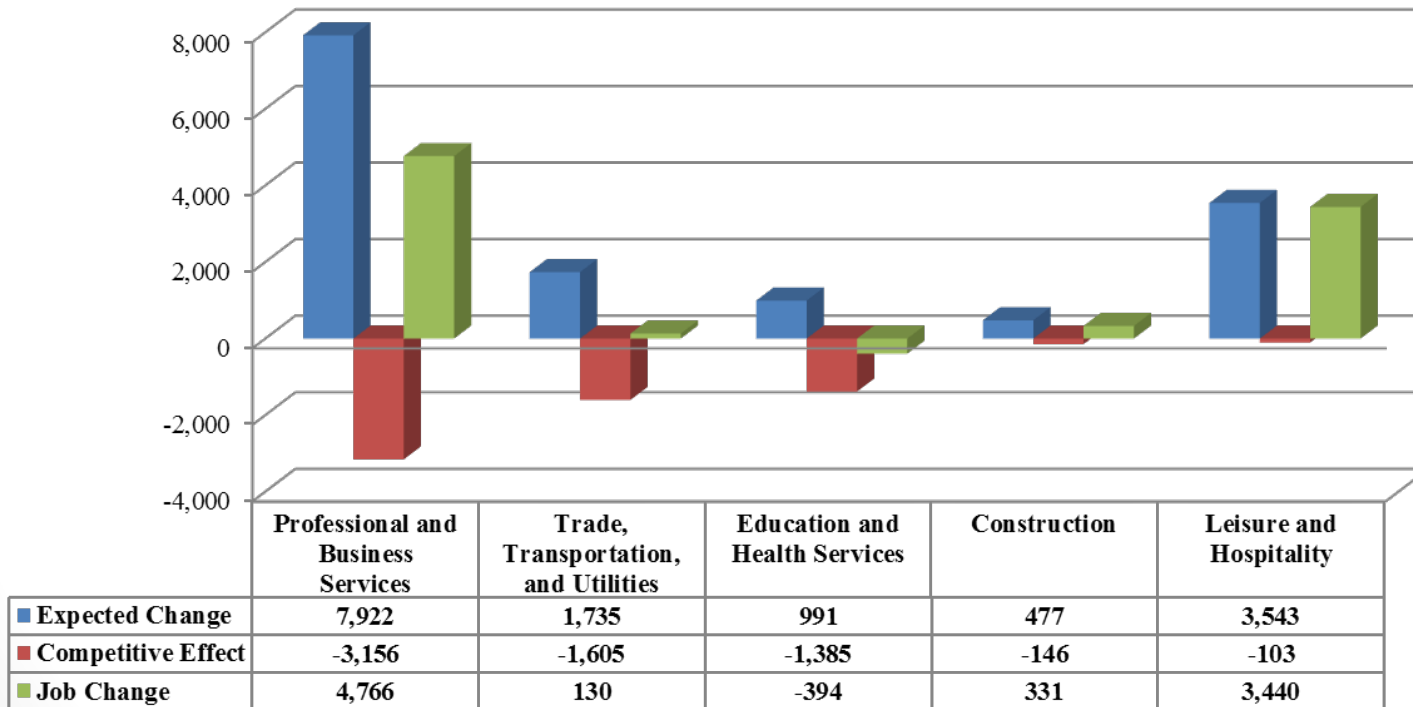
Most economic sectors in Arlington are less competitive than similar industries in the U.S. and are growing at a slower pace

Shift-Share Analysis of the Arlington Economy: Feb 2010- Jun 2014

		US Growth Effect	US Industrial Mix Effect	Arlington Competitive Effect	Total Employment Change	Location Quotient
Lagging	Professional and Business Services	5,307	2,615	-3,156	4,766	2.2
	Trade, Transportation, and Utilities	2,227	-492	-1,605	130	0.6
	Education and Health Services	1,693	-702	-1,385	-394	0.5
	Construction	239	238	-146	331	0.3
	Leisure and Hospitality	1,763	1,780	-103	3,440	1.0
Competitive	Information	533	-510	192	215	1.4
	Financial Activities	791	-500	211	503	0.7
	Total	12,552	2,431	-5,992	8,991	

Major Arlington industries display competitive disadvantages due to their heavy reliance on a shrinking Federal Government

**Employment Performance in Arlington:
Lagging Sectors Job Change, Feb 2010-Jun 2014**



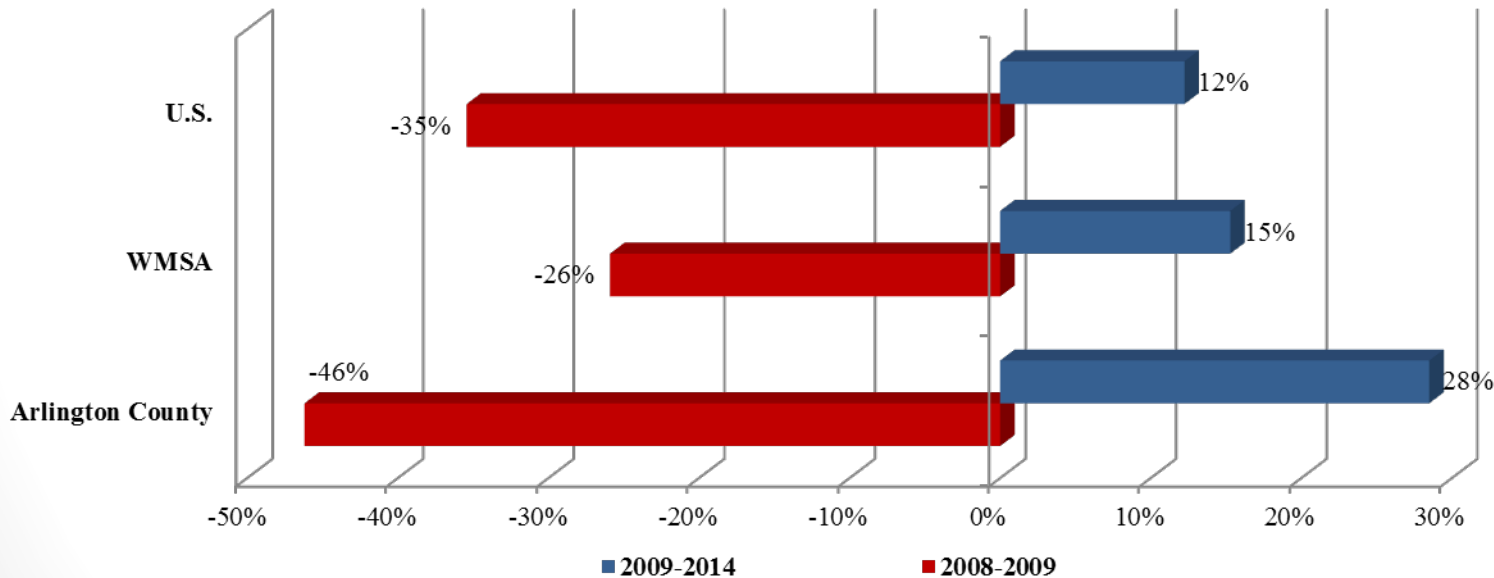
With the exception of professional and business services, all lagging Arlington industries also underperform when compared with the Washington Metro region

Growth Rate of Arlington Industries: Feb 2010 - Jun 2014

		Growth Rate			Location Quotient	
		Arlington	WMSA	U.S.	Arlington	WMSA
Lagging	Professional and Business Services	11%	7%	18%	2.2	1.7
	Trade, Transportation, and Utilities	1%	9%	9%	0.6	0.7
	Education and Health Services	-3%	11%	7%	0.5	0.8
	Construction	17%	19%	24%	0.3	1.1
	Leisure and Hospitality	23%	31%	24%	1.0	0.9
Competitive	Information	5%	-7%	1%	1.4	1.2
	Financial Activities	8%	7%	4%	0.7	0.9

Arlington residential construction activity declined significantly during the recession, but picked up steam during the recovery, outpacing the national and regional performance

Compound Annual Change in Residential Building Permits



There is an acute shortage of affordable and available rental housing units for families earning less than 50% of the area median income in Arlington

Shortage of Affordable and Available Rental Housing Units, 2011

Income Range	per 100 Renter Households	Total Shortage (Units)	
		District 8	Arlington County
Income at or below 30% of AMI	71	15,439	5,718
Income at or below 50% of AMI	62	23,663	8,829
Income at or below 80% of AMI	26	13,389	5,017

Summary

- ❑ Unemployment rate has declined to a six year low of 3.0 percent in Arlington County as of December of 2014, by far the lowest rate among Northern Virginia counties.
- ❑ Arlington economy is highly sensitive to fluctuations in two economic sectors, Federal government and professional/business services. Over 47 percent of all jobs in Arlington is supported by these two sectors.
- ❑ Federal sequestration, Base Realignment and Closure (BRAC) and the Federal shut down have resulted in a significant contraction of the Federal jobs while slowing down the growth of the private sector in Arlington. Arlington recorded a compound annual Federal job loss of 3.8 percent since the beginning of the economic recovery -- a total of 4,700 job -- the highest loss among all jurisdictions in the region.
- ❑ Arlington County's private sector job growth during the past five years is comparable to the growth in the Washington metro region and Northern Virginia, though substantially below the comparable growth in the District.

Summary

- ❑ Compared to the U.S., most economic sectors of Arlington are less competitive and are growing at a slower pace. If Arlington industries had followed the national trends, they would have gained an estimated 15,000 jobs since the beginning of the recovery. Instead, Arlington recorded a gain of 9,000 jobs. An estimated 6,000 fewer jobs in the county are due to its competitive disadvantages. Heavy reliance on a shrinking Federal government and a rigid, non-diversified economy are contributing factors to the slow employment growth.
- ❑ Residential construction activity in Arlington declined significantly during the recession, but picked up steam during the recovery, outpacing the national and regional performance. Since 2010, the county's residential building permits grew twice as fast as the 15 percent growth rate in the metro region.
- ❑ Approximately 67 percent of lower income renter households in Virginia's 8th Congressional District are severely cost burdened as they spend more than 50 percent of their income on rent and utilities.
- ❑ There is an acute shortage of affordable and available rental housing units for families earning less than 50% of the area median income. Over 8,800 additional affordable rental units are needed to close the affordable housing gap in Arlington.

Summary

- ❑ Federal Government's presence is a mixed blessing for Arlington. It helped shape the region into a knowledge-based economy that thrives with a highly skilled workforce. Through its counter-cyclical spending, the Federal Government has cushioned the impact of recessions on the regional economy. However, the region's heavy reliance on Federal Government has made it quite vulnerable to the effects of downsizing through reductions in Federal jobs and procurement spending.
- ❑ Future economic growth in Arlington requires diversification of its economic base.
- ❑ Arlington must take advantage of its current competitive advantage in information services and financial activities by helping expand business formation in these sectors.
- ❑ Residents of nearby jurisdictions in Maryland and other Northern Virginia communities represent 86% of Arlington jobs, while local residents account for the remaining 14%. As a result, a significant portion of Arlington's potential tax base associated with real estate and residential spending is exported to locations outside the county.
- ❑ An adequate supply of both affordable housing and local skilled workforce will help bring jobs to local residents from future economic expansions in Arlington. This assumes that county's fiscal capacity is flexible enough to accommodate future growth.