

# NORTHERN VIRGINIA: TURNING THE CORNER?



**T**he Capital Region's economic health greatly influences the Commonwealth of Virginia's economic trajectory.

**Northern Virginia is a vital element of both the regional and the state economies. In June 2016, Northern Virginia represented 37 percent of Virginia's employment and 44 percent of the employment in the Washington-Arlington-Alexandria, DC-VA-MD-WV metropolitan statistical area (henceforth, simply the Washington, D.C., metro area).<sup>1</sup> The region has grown tremendously and now is the nation's sixth-largest metropolitan statistical area (MSA).**

Even with this growth, the region remains a government town, economically speaking. As noted in last year's State of the Commonwealth Report, the Capital Region and Northern Virginia remain highly dependent on federal employment and spending. This dependence creates both opportunities and challenges. Increased federal employment and procurement spending mitigated some of the worst impacts of the Great Recession of 2008, but reversals in those trends sank economic growth from 2011 through most of 2014.

Job growth, however, returned strongly in 2015 and 2016, occurring at a pace not seen since 2005. Since government spending has

<sup>1</sup> The region includes Washington, D.C.; Calvert, Charles, Frederick, Montgomery and Prince George's County in Maryland; Alexandria, Arlington County, Clarke County, Culpeper County, Fairfax, Fairfax County, Falls Church, Fauquier County, Loudoun County, Manassas, Manassas Park, Prince William County, Rappahannock County, Spotsylvania County, Stafford County, Fredericksburg and Warren County in Virginia; and Jefferson County in West Virginia. When we refer to Northern Virginia, we include the Virginia counties listed above.

been relatively stagnant, this means that nongovernmental sectors of the regional economy have been expanding. This provokes a very important question: Has Northern Virginia turned the corner in its economic evolution and is it becoming a diversified economic center similar to other large metropolitan regions?

In the following pages, we will examine recent trends influencing the Washington, D.C., metro area, with a particular focus on Northern Virginia's economic performance. There are indications that a transformation is underway in both the Washington metro area and Northern Virginia, more specifically. The region's economy is, and will continue to be, highly influenced by the federal government. However, there are signals that the region's crucial professional and business services sector is growing even as federal spending remains flat. This implies economic diversification, a long sought-after, but elusive, regional goal.

## The Washington, D.C., Metro Area

In 2015, the Washington, D.C., metro area boasted a \$442 billion economy. Graph 1 shows that since 2001, the region's economy grew relatively faster than the nation during the years prior to the Great Recession and subsequently did not decline as sharply during this recession. However, regional economic growth faltered after the recession and particularly since 2011. Whereas the rest of the country recovered during 2009-2014, economic growth in the Washington metropolitan region was relatively flat. Things changed in late 2014.

Graph 2 illustrates changes in monthly employment compared to the previous year for the entire Washington, D.C., metro area. As was true for many other metropolitan regions, Washington, D.C., lost employment between late 2008 and early 2010. Since then, the rest of the country has experienced a modest but steady recovery, but the Washington, D.C., metro area encountered a second rough stretch in 2013 as the consequences of the Budget Control Act and sequestration manifested

themselves. The region's major economic engine – federal employment and procurement activities – was sputtering.

One can track changes in monthly employment compared to the previous year for the entire Washington, D.C., metro area's federal employment in Graph 3. **Between mid-2011 and 2014, federal employment each month was consistently lower than the comparable month in the previous year. This had, and still has, significant consequences for the region because annual average wages per federal employee approximate \$100,000.** Reduced employment generated fewer dollars to spend and retailers across the region felt this in sales of items ranging from automobiles to pizzas. Even basic health care expenditures were impacted.

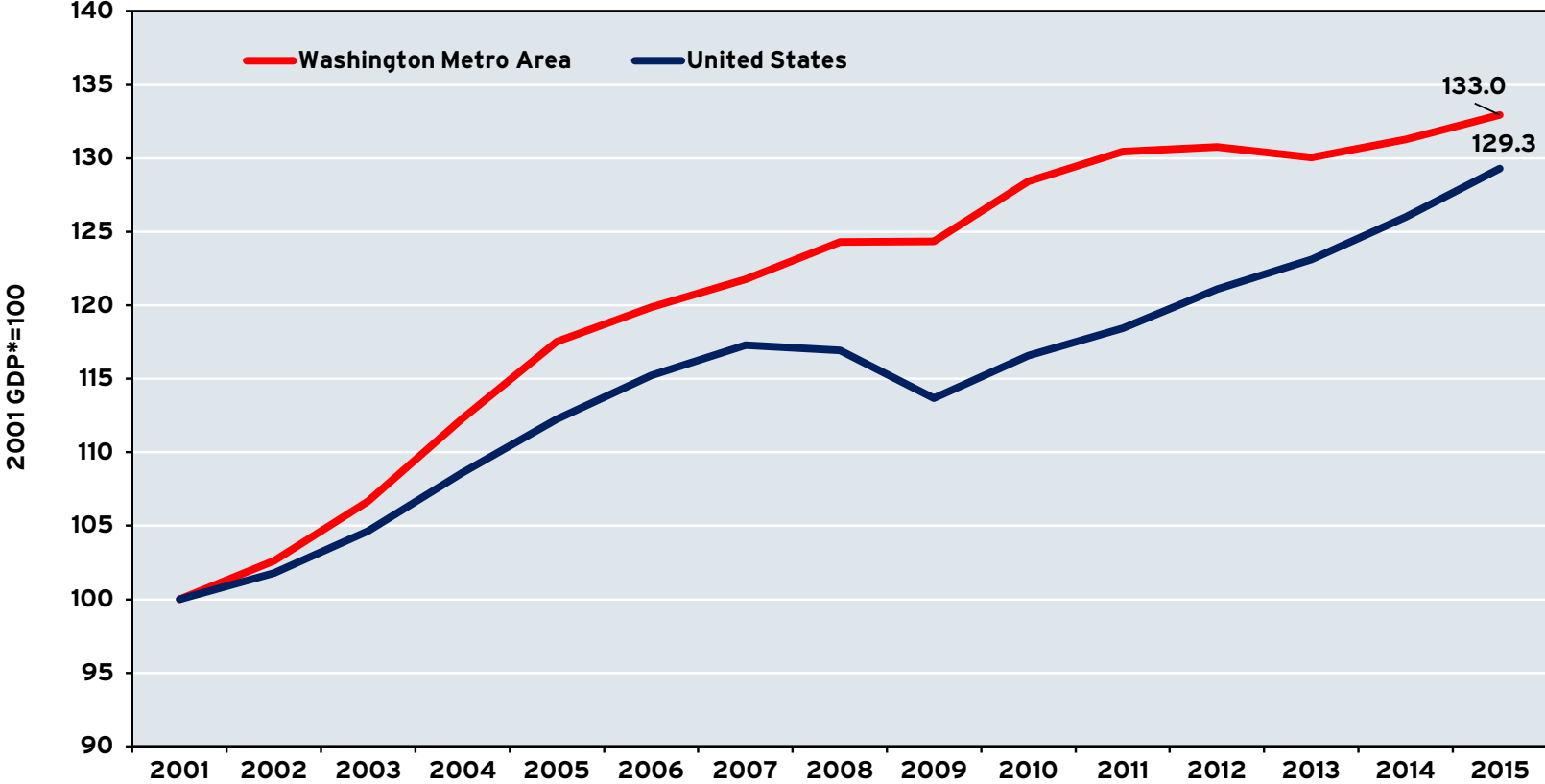
Similarly, cutbacks in federal procurement removed additional spending from the Washington, D.C., metro area. One can see in Graph 4 that the region received approximately \$71 billion in federal procurement spending in 2015. Much of this spending went to the region's professional and business services sector, which constitutes much of the region's economic base. However, federal procurement spending is down significantly from its peak of \$82.5 billion in 2010.

Even so, the region's continued population growth has continued to fuel growth of more locally focused jobs, albeit not jobs that ordinarily pay high wages. As a result, the Washington, D.C., metro area's postrecession economy can be characterized as one in which high-wage jobs often have been traded for jobs that involve more modest earnings.

While the region's job market lagged in 2013 and 2014, its performance was much stronger in 2015 and through the first half of 2016. By June 2016, Washington, D.C., metro area employment had grown to roughly 3.28 million jobs – 81,000 net additional jobs more than the previous year (June 2015 to June 2016). This represents an increase of 2.5 percent. As demonstrated in Graph 5, this growth places the Washington, D.C., metro area in the middle of the pack among large metropolitan regions in the United States. Only Sunbelt cities such as Phoenix, Dallas and Atlanta and West Coast cities such as Los Angeles, San Francisco and Seattle experienced larger growth in employment. Northeastern and Midwestern metropolitan regions such as New York, Boston, Chicago and Minneapolis grew more slowly than the Washington, D.C., metro area.

**GRAPH 1**

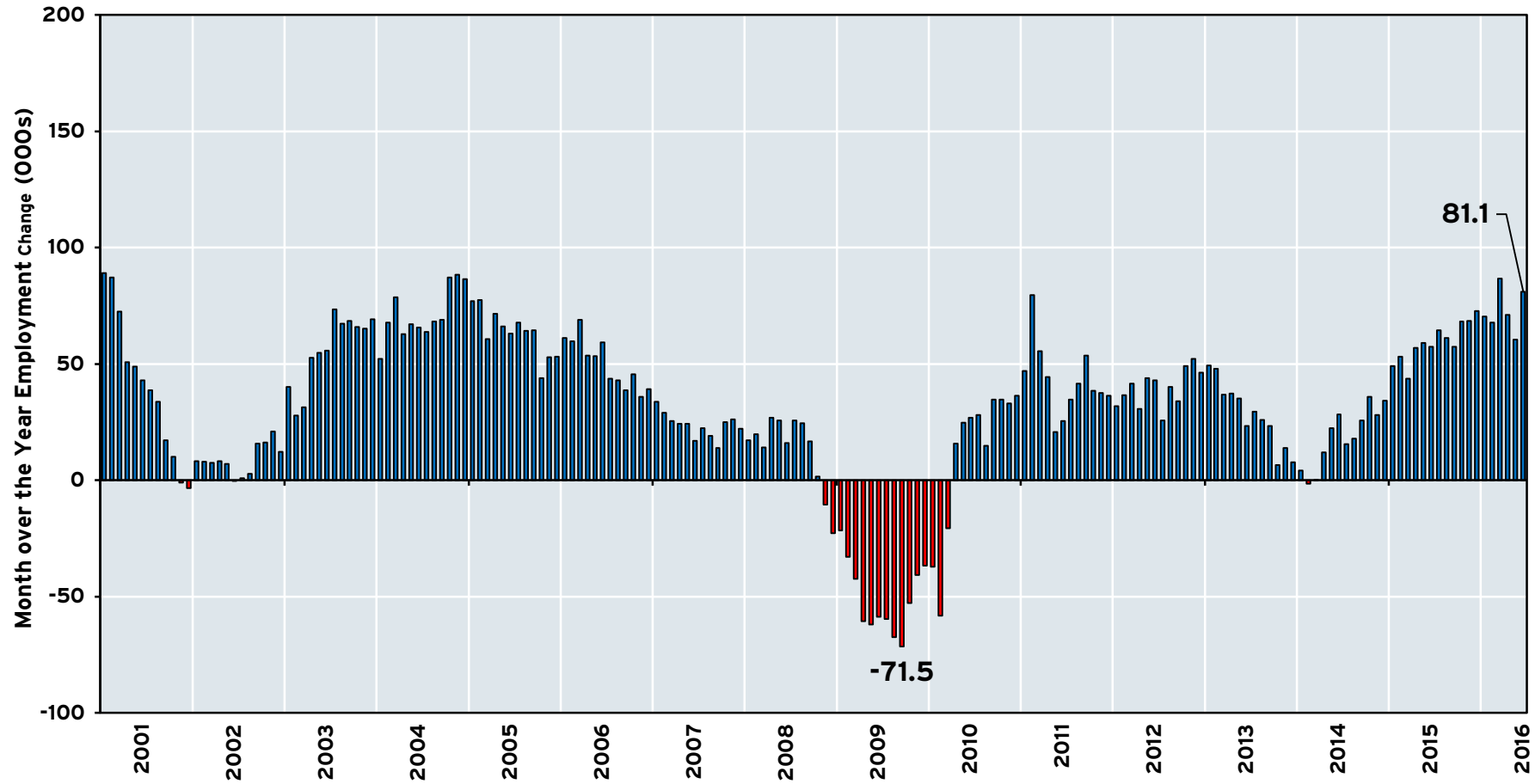
**GDP GROWTH IN THE U.S. AND WASHINGTON METRO AREA, 2001-2015**



Source: U.S. Bureau of Economic Analysis (\*2009 Chained Dollars)

GRAPH 2

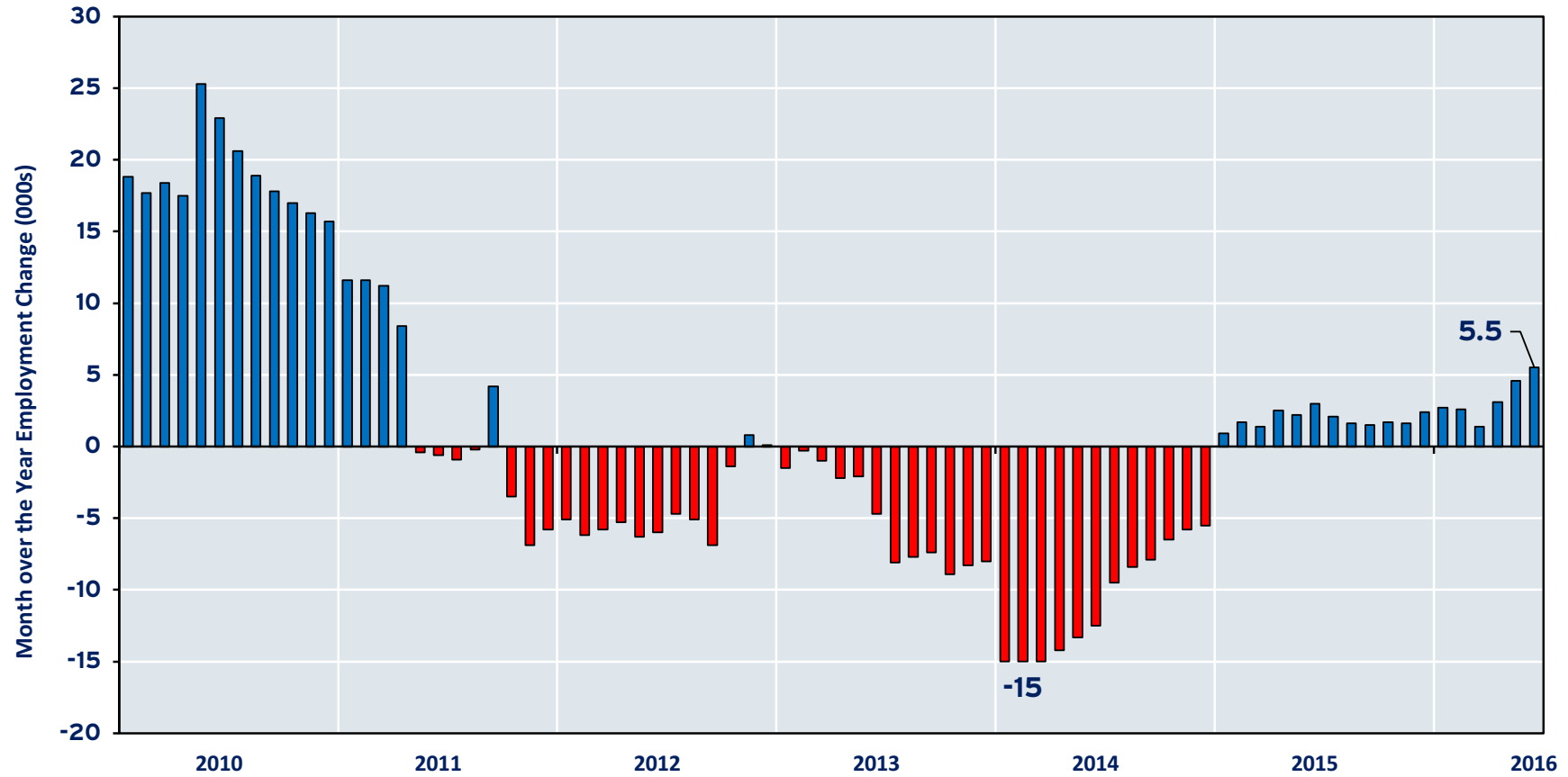
CHANGES IN MONTHLY EMPLOYMENT COMPARED TO THE PREVIOUS YEAR FOR THE WASHINGTON, D.C., METRO AREA, JANUARY 2001 TO JUNE 2016



Source: Bureau of Labor Statistics

**GRAPH 3**

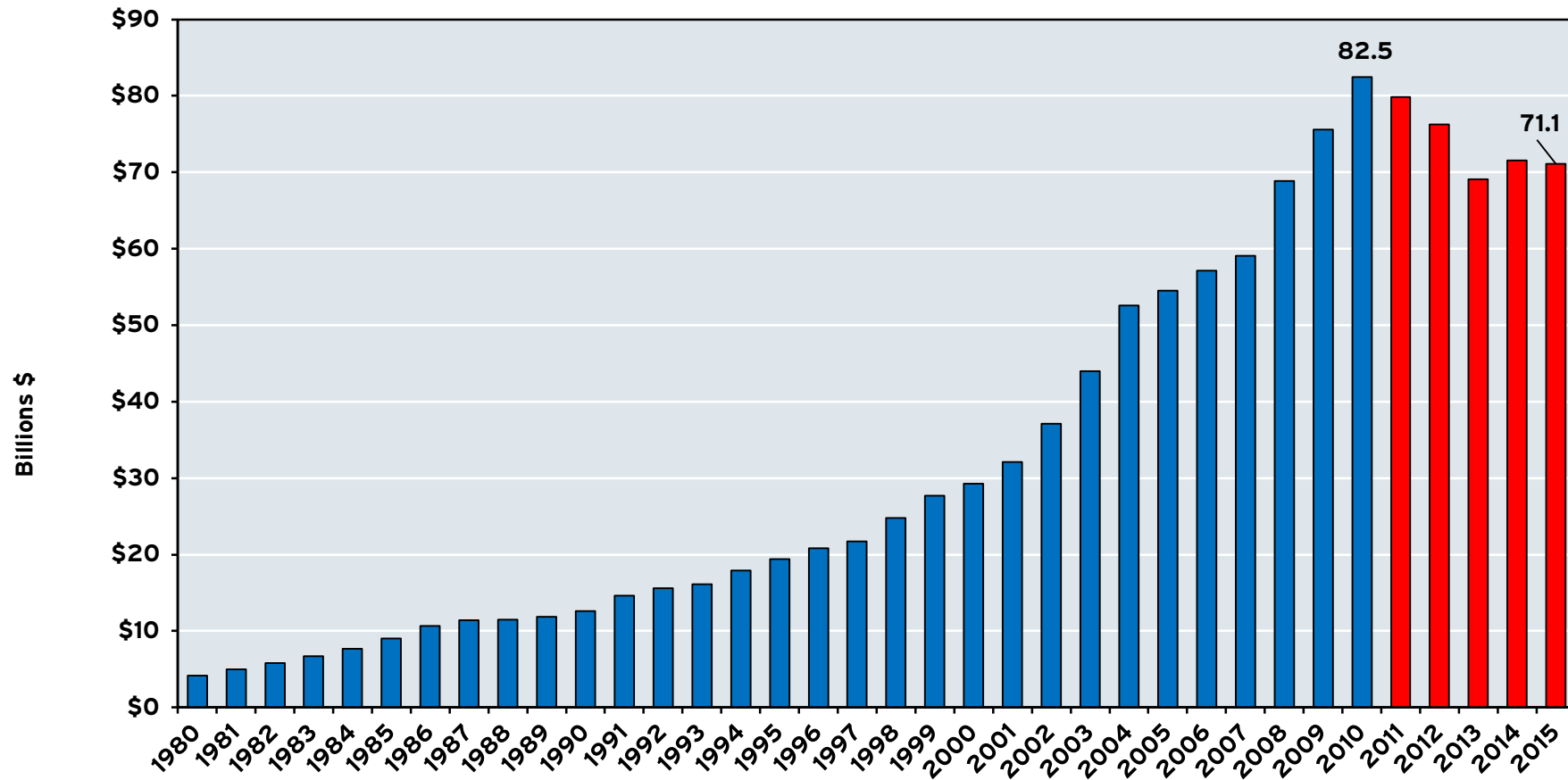
**CHANGES IN MONTHLY FEDERAL EMPLOYMENT IN THE WASHINGTON, D.C., METRO AREA COMPARED TO THE PREVIOUS YEAR,  
JANUARY 2010 TO JUNE 2016**



Source: Bureau of Labor Statistics, Current Employment Statistics

**GRAPH 4**

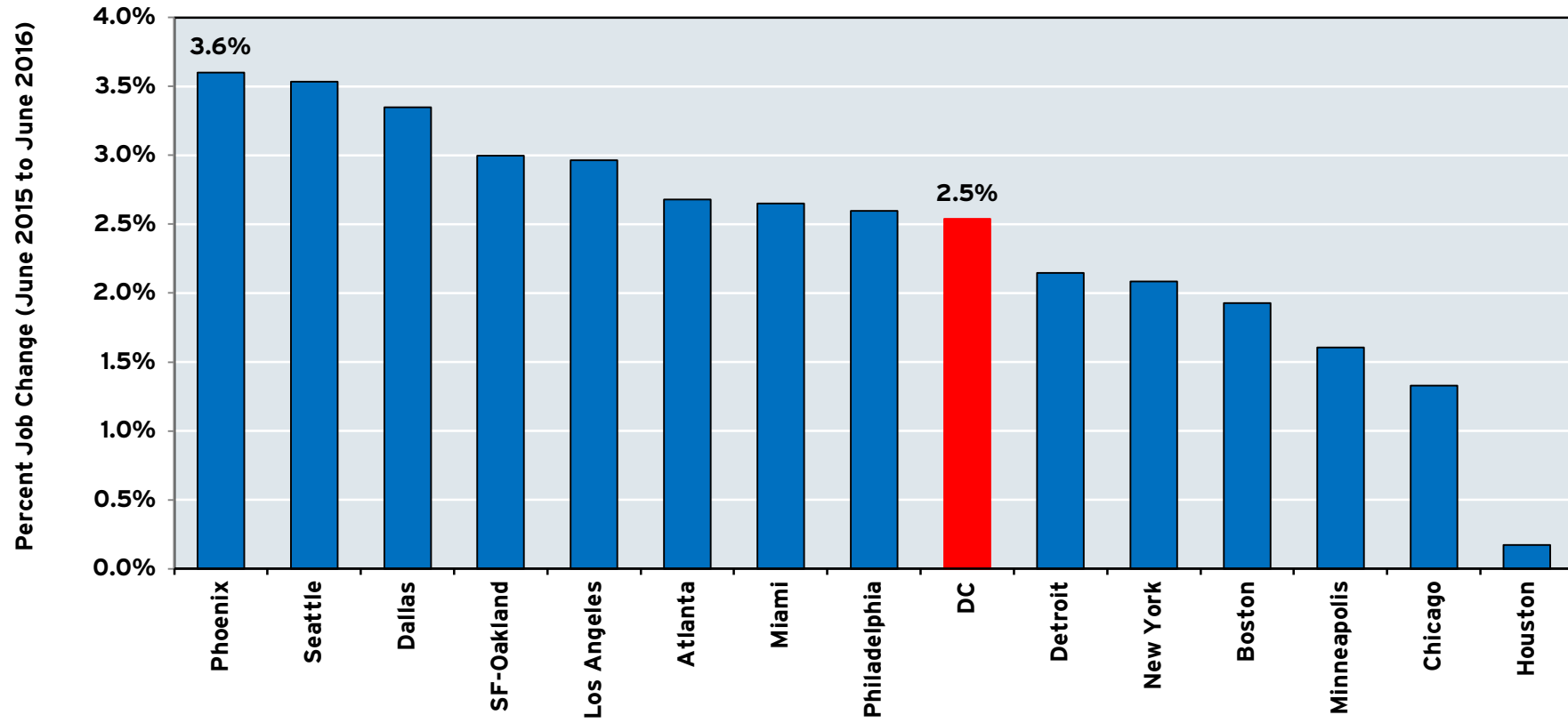
**ANNUAL FEDERAL PROCUREMENT IN THE WASHINGTON, D.C., METRO AREA, 1980-2015**



Sources: U.S. Census, Consolidated Federal Funds Report and usaspending.gov

**GRAPH 5**

**PERCENT JOB GROWTH IN THE LARGEST U.S. METROPOLITAN REGIONS, JUNE 2015 TO JUNE 2016**



Source: Bureau of Labor Statistics, Current Employment Statistics



## Northern Virginia

Northern Virginia's economy tends to mirror that of the Washington metro area because it is also driven by federal government employment and procurement. As shown in Graph 6, between late 2013 and early 2014, Northern Virginia lost employment relative to the previous year. Much of this was driven by the reduction of federal employment and procurement mandated by the Budget Control Act and sequestration. Graph 7 shows that Northern Virginia's total level of federal employment has slowly declined over the course of the present decade. Many of these jobs losses occurred between 2013 and 2014.

Federal employment in Northern Virginia stabilized at the end of 2014 and, in June 2016, the region was home to 86,400 federal jobs. The Department of Defense (DOD) employs many of these workers at large installations such as the Pentagon and Fort Belvoir. DOD employment in Northern Virginia represents approximately 23.3 percent of the Washington, D.C., metro area's federal workforce and almost half (48 percent) of Virginia's federal workforce.

However, direct federal employment only tells part of the story, as federal contracting also has declined. Many of the firms that contract with the federal government are located in Northern Virginia, particularly in inner suburban locations such as Crystal City and Roslyn, as well as outer suburban locations such as Tysons Corner, Springfield and along the Dulles Corridor.

Nevertheless, Graph 8 reveals that, much like the broader Washington, D.C., metro area, federal procurement spending in Northern Virginia has declined since the beginning of the decade and remained largely flat over the past several years. These reductions in federal spending<sup>2</sup> became quite noticeable in FY 2013, when firms in Northern Virginia received almost \$4.5 billion less than they had in FY 2012. Federal procurement levels have remained largely flat since that time.

Many of Northern Virginia's government contractors can be found in the professional and business services sector. It is clear that many companies

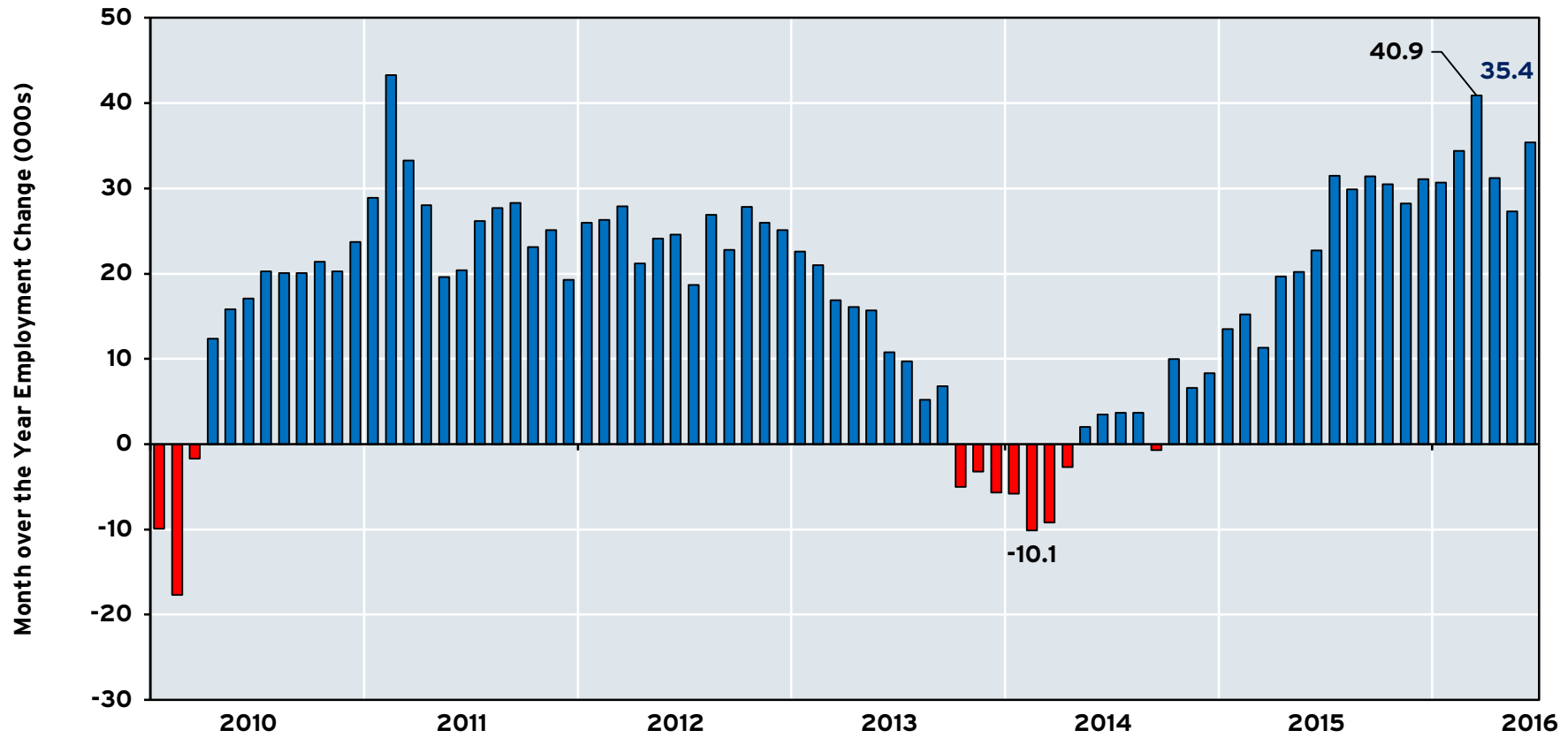
in this sector depend heavily upon government spending and procurement. This sector – which includes key activities such as legal, accounting, consulting and scientific research services, among others – has become a key element of Northern Virginia's economic base. Industries focused upon retail trade and many health care-related industries tend to recycle money within the regional economy and as a result population growth influences their growth patterns. By contrast, many professional and business services bring new money into the economy and therefore drive regional growth.

Even while procurement spending remained relatively flat in FY 2015, employers in some sectors nevertheless continued to create jobs in Northern Virginia. Graph 9 contrasts employment trends in the professional and business services sector and the federal government in Northern Virginia. As the consequences of the Budget Control Act and sequestration took hold in late 2013 and into 2014, both the federal government and professional and business services sectors lost employment relative to the previous year in Northern Virginia. Since the middle of 2014, however, a new pattern has emerged. The professional and business services sector has begun to grow, even though federal employment and procurement remain relatively flat. While it is a bit early to declare that this signals the emergence of a new economic model for Northern Virginia, clearly this is a potentially significant change. It appears that professional and business services companies in Northern Virginia may be diversifying their markets and becoming less reliant on federal spending. If so, it bodes well for the region. While the federal government will always be important to Northern Virginia's regional economy, achieving greater economic diversity will stimulate economic growth and perhaps provide greater economic stability as well.

<sup>2</sup> By place of performance for the prime recipient transactions.

**GRAPH 6**

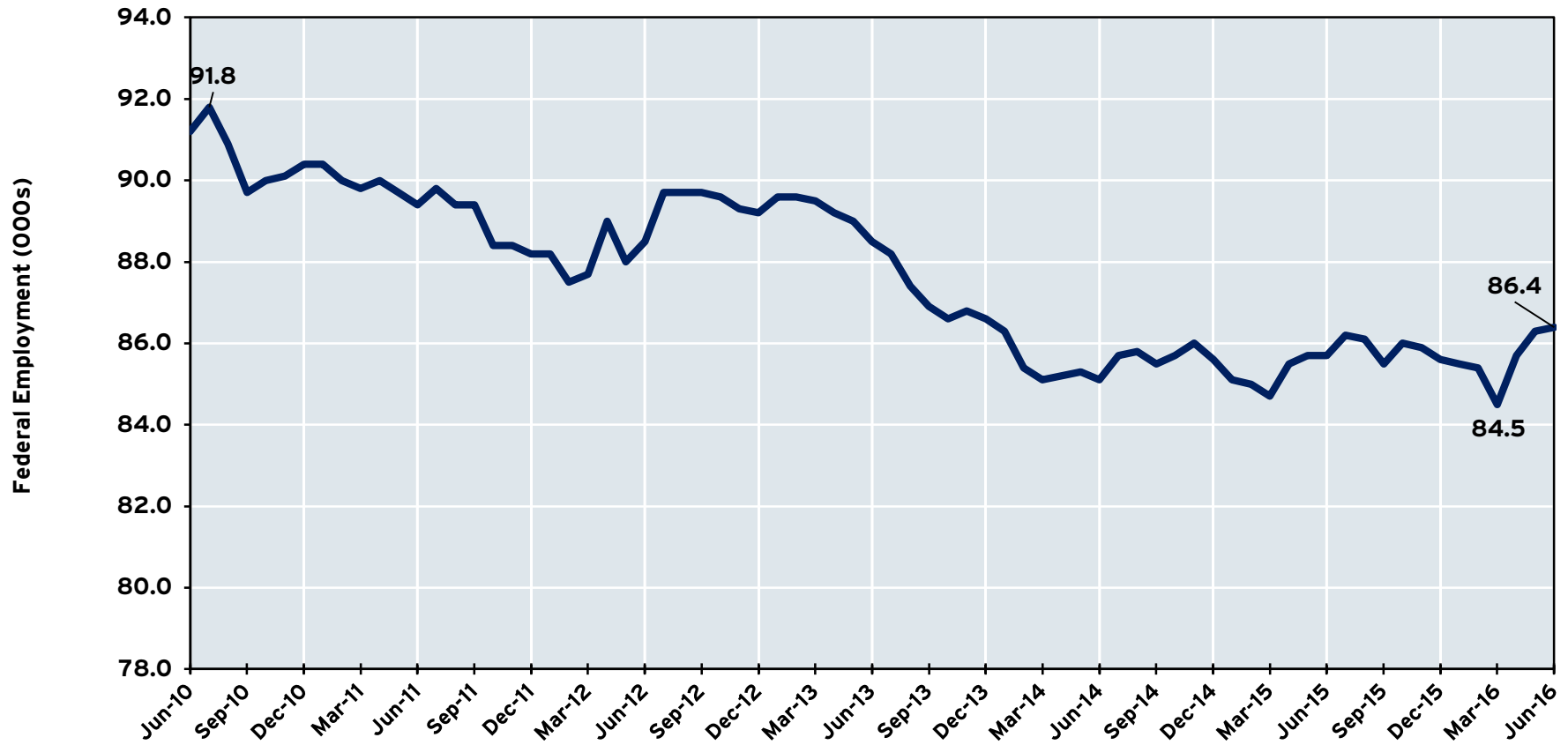
**CHANGES IN MONTHLY EMPLOYMENT IN NORTHERN VIRGINIA COMPARED TO THE PREVIOUS YEAR, JANUARY 2010 TO JUNE 2016**



Source: Bureau of Labor Statistics, Current Employment Statistics

**GRAPH 7**

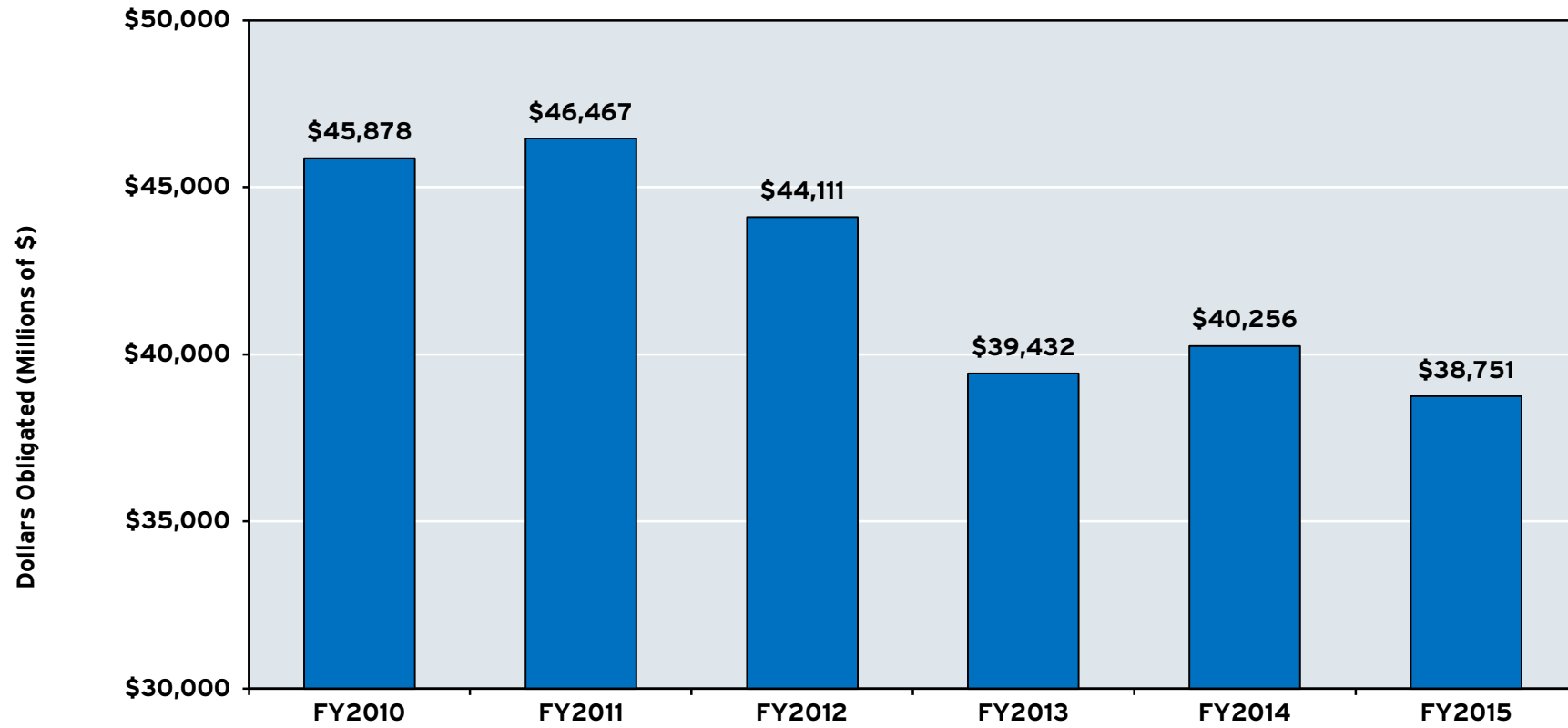
**FEDERAL GOVERNMENT EMPLOYMENT IN NORTHERN VIRGINIA, JUNE 2010 TO JUNE 2016**



Source: Bureau of Labor Statistics, Current Employment Statistics

**GRAPH 8**

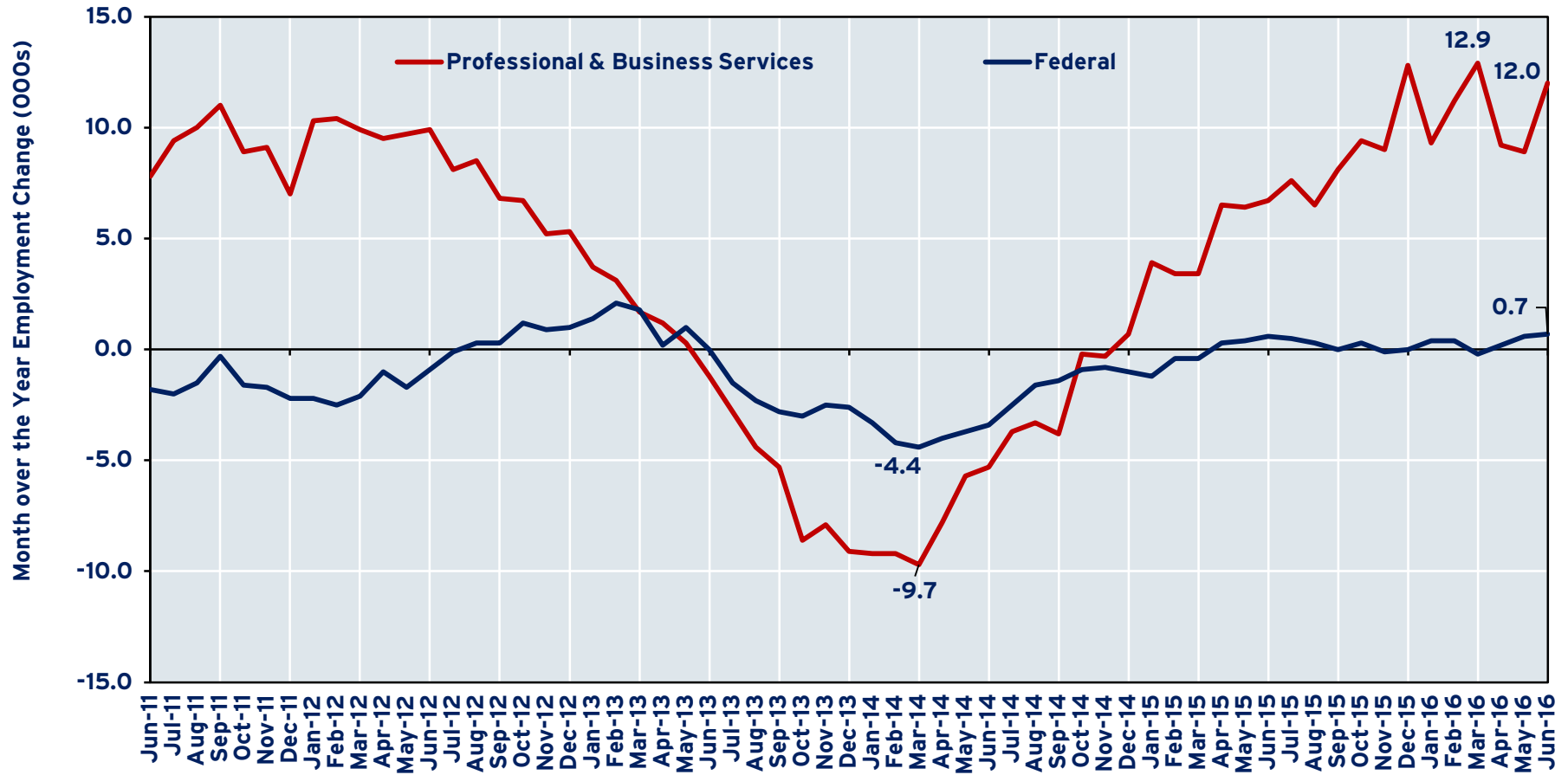
**FEDERAL PROCUREMENT IN NORTHERN VIRGINIA, FY 2010 TO FY 2015**



Source: [usaspending.gov](http://usaspending.gov)

GRAPH 9

**MONTHLY CHANGES IN PROFESSIONAL AND BUSINESS SERVICES EMPLOYMENT AND FEDERAL EMPLOYMENT IN NORTHERN VIRGINIA COMPARED TO THE PREVIOUS YEAR, JUNE 2011 TO JUNE 2016**



Source: Bureau of Labor Statistics, Current Employment Statistics

**In spite of the economic challenges of the past half-decade, labor markets in Northern Virginia have remained strong relative to the Washington, D.C., metro area and the nation at large.** Graph 10 shows that Northern Virginia's unemployment rate has been below 5 percent for almost five years and has been below the unemployment rate for the Washington metro area and the United State every year since 2008. To the extent that the region's private-sector economy can disconnect itself from its reliance on federal spending, the more likely it is that the region's labor markets will remain strong.

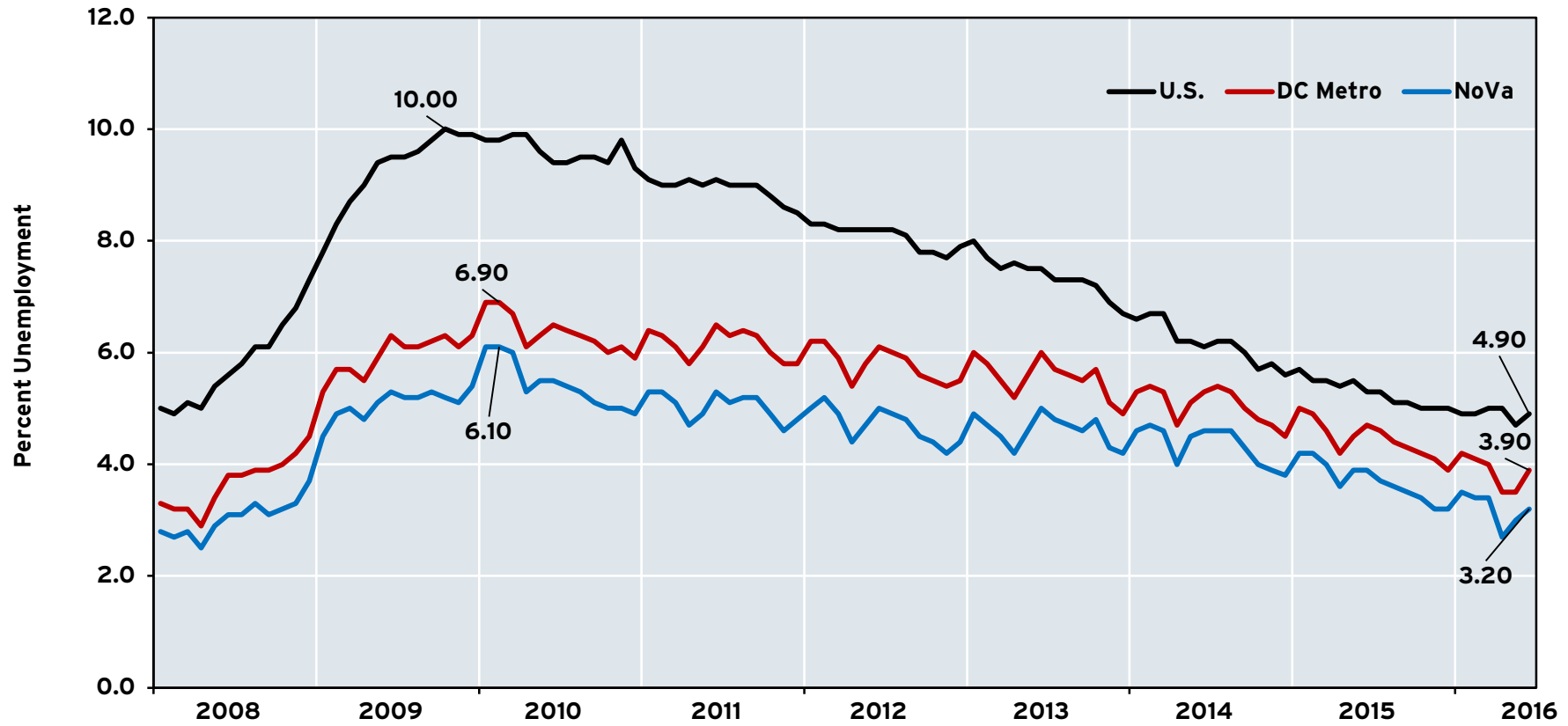
Though 2013 and 2014 were difficult years for the region's professional and business services sector, its recent growth is a reminder that it is one of the region's most important economic drivers. **By itself, professional and business services contributed roughly one-third of the 35,400 net new jobs created in Northern Virginia between June 2015 and June 2016.** However, several other sectors also have been instrumental in growing the regional economy. Graph 11 depicts changes in employment by major sector between June 2015 and June 2016. The leisure and hospitality sector (which includes accommodation and food services, as well as the arts, entertainment and recreation-related industries) added 6,800 net new jobs during this period, or roughly one of the region's every five net new jobs. Other sectors adding substantial employment during this period included education and health services (4,200 net new jobs) and retail trade (5,000 net new jobs).

Several other key sectors saw employment levels remain relatively flat. The information sector and the transportation and utilities sector posted only modest gains, and the financial activities and manufacturing sectors lost employment. The overall government sector remained relatively unchanged between June 2015 and June 2016, as modest net increases in federal employment were offset by similar declines in state and local government employment.



GRAPH 10

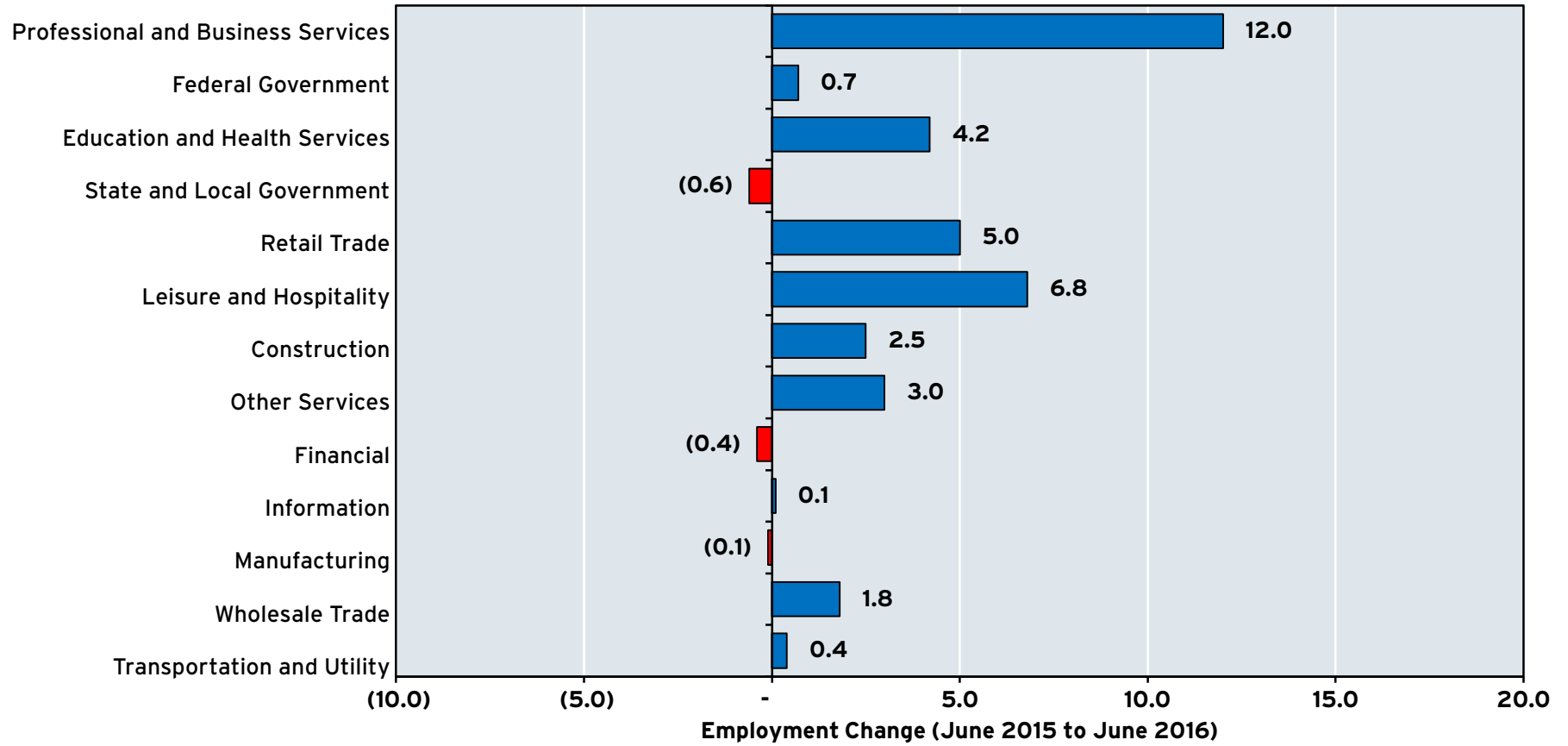
UNEMPLOYMENT RATES: U.S., D.C. METROPOLITAN REGION AND NORTHERN VIRGINIA, JANUARY 2008 TO JUNE 2016



Source: Bureau of Labor Statistics, Current Employment Statistics

**GRAPH 11**

**GAINS AND LOSSES IN JOBS BY MAJOR SECTOR IN NORTHERN VIRGINIA, JUNE 2015 TO JUNE 2016**

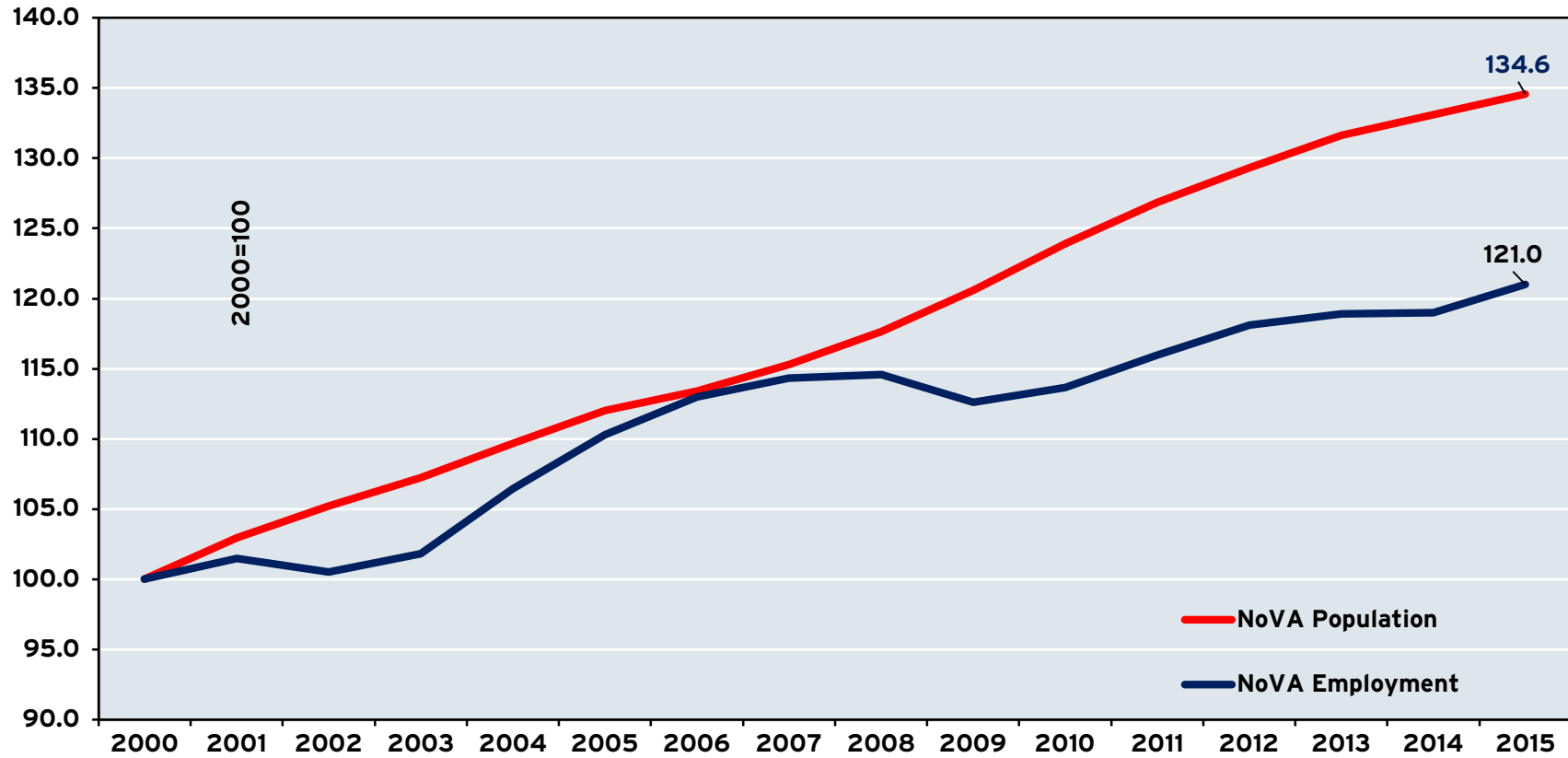


Sources: Bureau of Labor Statistics and Bureau of Economic Analysis



GRAPH 12

POPULATION GROWTH VERSUS EMPLOYMENT GROWTH IN NORTHERN VIRGINIA, 2000-2015



Sources: Bureau of Labor Statistics, Current Employment Statistics, and U.S. Census Bureau

# Demographics

Northern Virginia's employment base continues to grow, but not as rapidly as its population. Graph 12 indexes population and employment growth in Northern Virginia since 2000 (2000 = 100). As the region recovered from the early 2000s recession, its pace of employment growth converged with the pace of population growth. The recession, though, set these two variables on different trajectories. Northern Virginia's population now is almost 35 percent greater than it was in 2000, but its nonfarm employment is only 21 percent greater than it was in 2000.

Slow growth in the region's economic base sectors (professional and business services, federal government) over the first part of this decade held consequences for the region's population. Graph 13 illustrates the three primary components of population growth in Northern Virginia between 2010 and 2015 – natural increase (births minus deaths), international migration and domestic migration.

Northern Virginia gained almost 33,000 net new residents over the time period, which turned out to be about half of the Washington, D.C. metro area's total. However, one can see in Graph 13 that actually there was net domestic out-migration from Northern Virginia to other metropolitan areas and states during the 2013-2015 time period. Setting aside births minus deaths and international migration into the region, more people were leaving Northern Virginia for other regions (often in other states) than were coming into the region. Several economic studies has shown that similar flows of people among regions and states are highly sensitive to job creation and job availability. Since Northern Virginia's job creation has trailed its population growth, some residents have departed the region in search of improved job prospects elsewhere. The same studies reveal that the cost of living, especially housing costs, also exercises an influence over domestic migration. "Real," price-adjusted magnitudes count. Not surprisingly, elevated housing costs stimulate out-migration and tend to discourage in-migration. We will have more to say about this shortly.

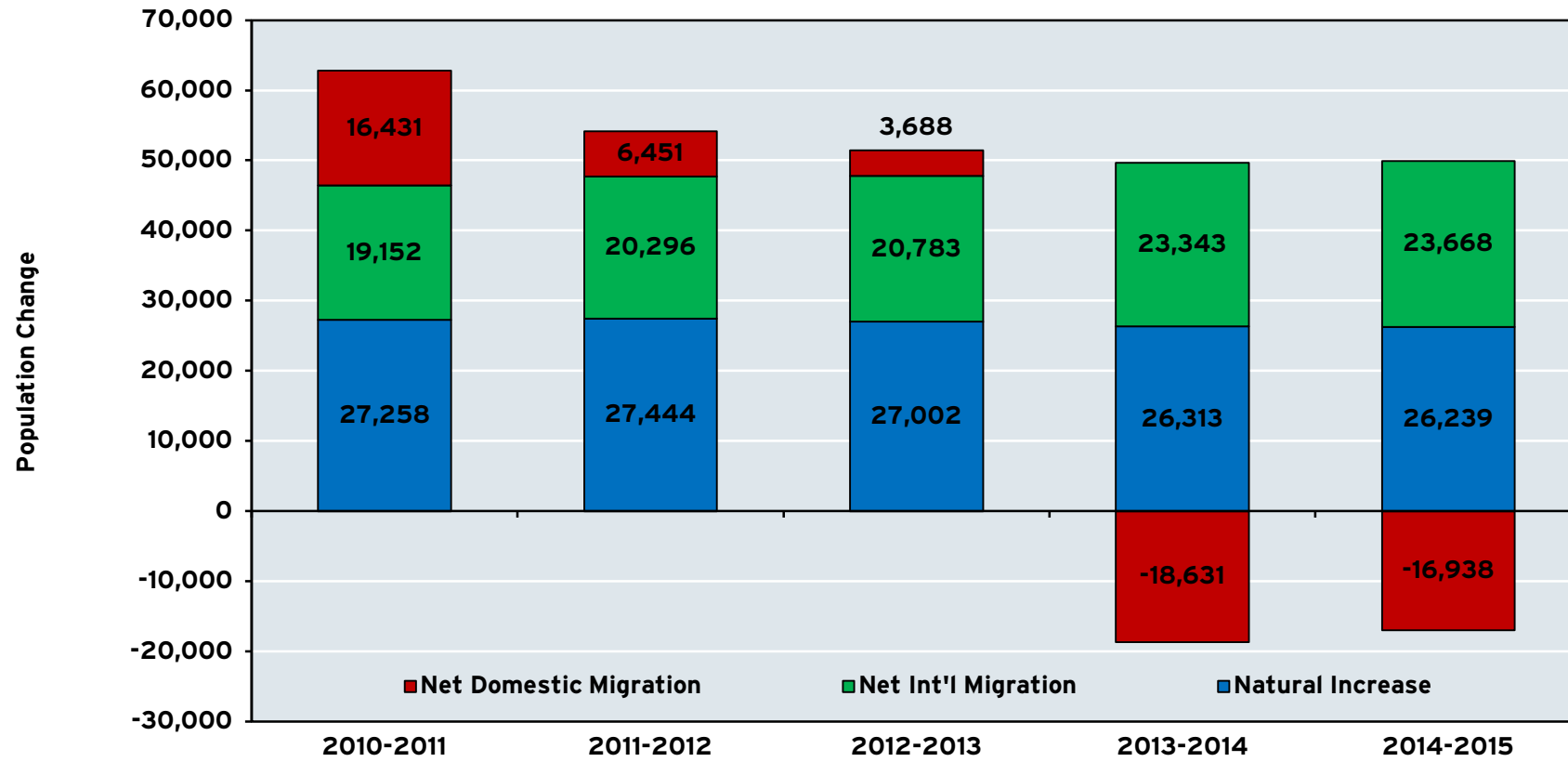
**Counteracting the region's domestic outflow of individuals, however, has been a robust and valuable inflow of international immigrants.**

International migration has become an increasingly important source of economic stimulus for Northern Virginia, not the least because these new residents tend to be better educated than the region's existing population and many have become entrepreneurs. Of all Northern Virginians who hold an advanced or professional degree, 24 percent are foreign born.



**GRAPH 13**

**ELEMENTS OF POPULATION CHANGE IN NORTHERN VIRGINIA, 2010-2015**



Source: U.S. Census Bureau, Population Estimates Program, 2015

# Housing

The high cost of living – particularly in the form of relatively high housing costs – influences migratory patterns and can pose real challenges for working families. The Bureau of Economic Analysis (BEA) produces an index known as Regional Price Parities (RPP), which is an overall measurement of cost of living differentials. **The RPP tells us that in 2014, housing in the Washington, D.C., metro area was almost 20 percent more expensive than the nation as a whole.** Housing costs played a major role here – the RPP for rent, for example, revealed a discouraging 70 percent cost differential for the Washington, D.C., metro area relative to the rest of the country.

The region’s economic trends directly influence these housing-related issues. During the first half of the decade, job losses in the federal government and the professional and business services sector, plus the uncertainty created by the government shutdown and sequestration, put a damper on the region’s housing industry. Similarly, tighter lending requirements, higher rents and accumulating student loan debts inhibited and delayed the ability of millennials to enter the housing market.

A commonly used standard concerning housing affordability is that households experience housing-based financial stress when their housing costs exceed 30 percent of their income. The U.S. Census Bureau’s American Community Survey (ACS) provides interesting information in this regard. The ACS reports that during the 2010-2014 period, roughly two-thirds of Northern Virginia households were owners and a third were renters. Table 1 shows that approximately 44 percent of those who were renting and 27 percent of those who were homeowners were cost-burdened because they were paying more than 30 percent of their incomes to meet their housing costs. Almost 20 percent of all renters and 9 percent of homeowners were severely cost-burdened, as they were paying more than 50 percent of their household incomes on housing.

Affordability concerns notwithstanding, the broad trends for housing markets in Northern Virginia are generally positive. One of the most visible and frequently cited measures of the health of residential housing markets is the median price paid for existing, single-family homes. Graph

14 reveals that the median price of existing, single-family homes in Northern Virginia has rebounded after a momentous 44 percent decline between 2006 and 2009. The median sales price of an existing, single-family home was almost \$442,000 in 2015, a figure 3 percent below its previous 2006 peak.

The healing of the market for single-family homes in Northern Virginia has been slow and is by no means complete. The number of active listings in Northern Virginia in 2015 still was only 42 percent of the feverish maximum it hit in 2006.

**TABLE 1**

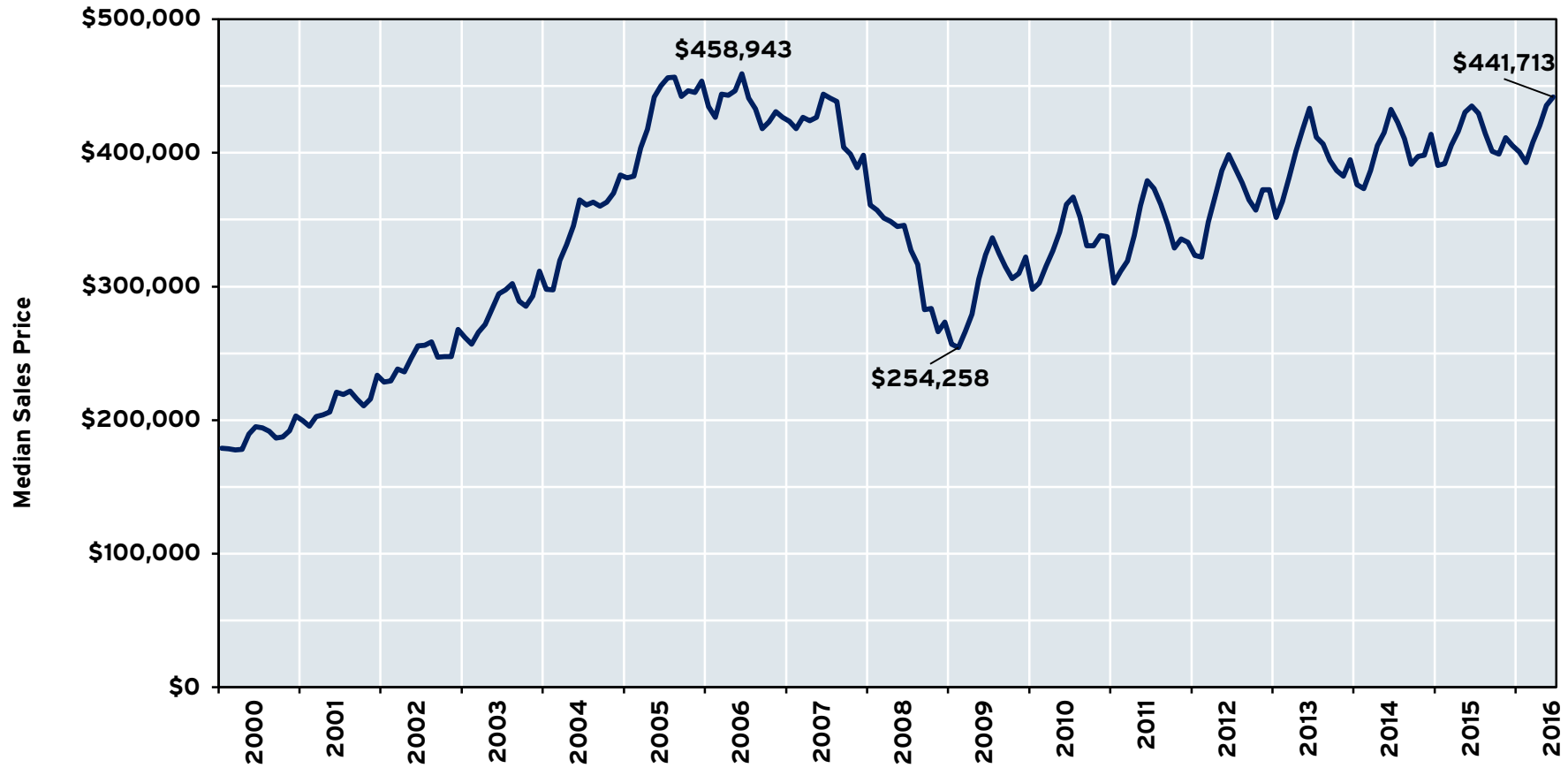
**PERCENT OF HOUSEHOLD INCOME SPENT ON HOUSING IN NORTHERN VIRGINIA**

Percent of Household Income Spent on Housing	Renters	Owners
Less than 10.0 percent	2.6%	13.8%
10.0 to 14.9 percent	8.0%	14.6%
15.0 to 19.9 percent	13.7%	17.3%
20.0 to 24.9 percent	14.7%	15.4%
25.0 to 29.9 percent	12.9%	11.5%
30.0 to 34.9 percent	9.5%	7.6%
35.0 to 39.9 percent	6.6%	4.9%
40.0 to 49.9 percent	8.5%	5.3%
50.0 percent or more	19.5%	9.2%
Not computed	4.0%	0.3%
Housing Cost Burdened (>30% AMI)	44.1%	27.1%
Severe Housing Cost Burdened (>50% AMI)	19.5%	9.2%

Source: U.S. Census Bureau, 2010-2014 American Community Survey where AMI = area median income

GRAPH 14

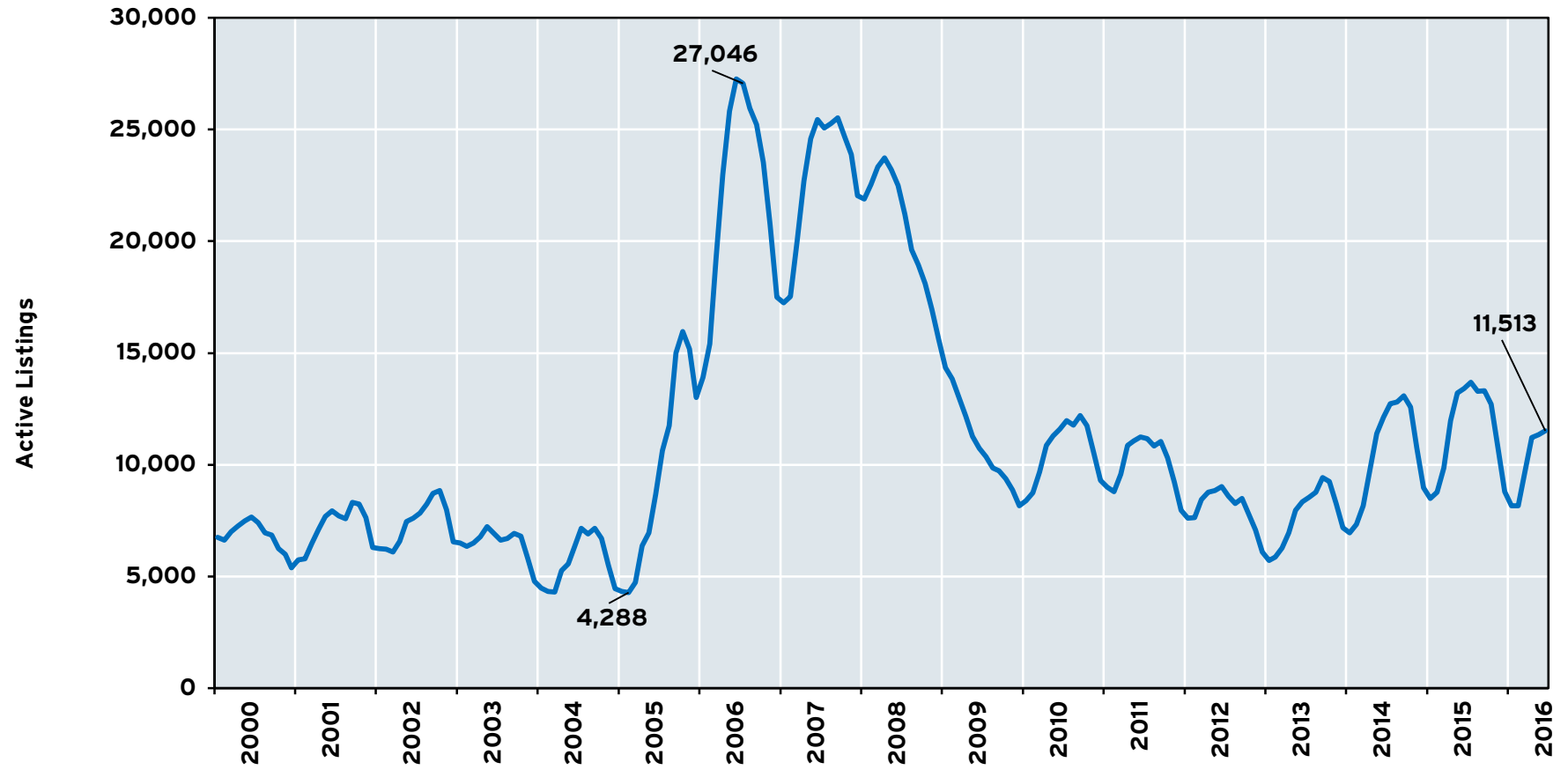
MEDIAN SALES PRICES OF EXISTING HOMES IN NORTHERN VIRGINIA, JANUARY 2000 TO JUNE 2016



Source: Metropolitan Regional Information Systems (MRIS)

**GRAPH 15**

**ACTIVE LISTINGS OF HOMES FOR SALE IN NORTHERN VIRGINIA, JANUARY 2000 TO JUNE 2016**



Source: Metropolitan Regional Information Systems (MRIS)



## Turning the Corner?

The Washington, D.C., metropolitan area's regional economy rebounded relatively quickly from the Great Recession, in part due to increased federal spending associated with the American Recovery Act, plus other increases in governmental spending. As noted earlier, however, Budget Control Act spending caps and resulting sequestration took billions in annual federal spending out of the Northern Virginia economy.

These cutbacks were most visible in declining employment in the high-value professional and business services sector of the economy. Regional job growth continued modestly through the downturn in federal spending, but was dominated by relatively low-wage jobs in the retail and hospitality sectors. There were some bright signs, however. **Even though federal spending in the region in 2015 dropped by almost \$1.5 billion from the previous year, and Northern Virginia experienced its best overall job growth since before the Great Recession, professional and business services job growth rebounded strongly.**

Job growth numbers for Northern Virginia are not consistent with the recently released estimates of growth in gross regional product, which at less than 1.3 percent would suggest very tepid job growth. It is possible that 2015 productivity in Northern Virginia took a dive, but we are inclined to focus more of our economic assessment of the region's job growth.

Northern Virginia – and the Washington, D.C., metro area more generally – always will be the beneficiary of government spending, especially expenditures related to national defense. Government spending doubtless will grow over time, ensuring that both the overall Washington, D.C., metro area and Northern Virginia also are going to grow at least at a middling pace. **The salient question, however, is whether the region can evolve and become more than a “company town,” in which the quintessential dominant company is the federal government.** In last year's report we presented the choices to be made as a fork in the economic road – continue to rely mostly on government employment and federal spending, or pivot the regional economy to a more diversified market structure. Given the impressive job growth in 2015 that continued

through the first half of 2016, this year we must ask: Has Northern Virginia, and the Washington, D.C. region more broadly, turned an economic corner and now sees a different future?

Recent jobs data, especially in professional and business services, suggest that change is afoot. For this to continue, firms in the region must continue their move beyond their heretofore-dominant business-to-government (B2G) model and instead place greater emphasis on expanding business-to-business (B2B) opportunities. This will not be easy. The low-hanging private-sector fruit in this effort will likely come from cybersecurity, as businesses catch up with historic underspending for these services. Biotechnology that leverages the huge research and development complex of the National Institutes of Health and Johns Hopkins University on the Maryland side of the Potomac also has promise. However, other industries will need to emerge for solid economic diversification to take hold. Exports also offer a significant opportunity, given the relative dearth of export-based industries in Northern Virginia.

In order to transition to a new model, Northern Virginia must be an attractive place for talented workers to live and work. In a knowledge-based economy, human capital, in the form of smart, motivated people, is the ultimate resource. For the past half century, Northern Virginia has played this game well and in the process has attracted large numbers of talented individuals, many of whom are highly educated. Nevertheless, the high cost of living and traffic congestion offer challenges to current and potential residents.

Housing costs present a well-recognized challenge in Northern Virginia, with more than 44 percent of renters and 27 percent of homeowners spending more than 30 percent of their incomes on housing. Regional mobility is an increasing challenge, especially considering the well-publicized challenges facing the Metrorail system. The 2015 Urban Mobility Scorecard, published by the Transportation Institute at Texas A&M, ranks the Washington, D.C., metro area first (worst) among the 15 largest metropolitan areas in the United States in terms of congestion costs per auto commuter, as well as first in terms of yearly delay per auto commuter.<sup>3</sup>

<sup>3</sup> Data in this paragraph come from the 2015 Urban Mobility Scorecard, Texas A&M Transportation Institute, <http://d2dt15nnlpr0r.cloudfront.net/tti.tamu.edu/documents/mobility-scorecard-2015-wappx.pdf>.

Working families face difficult trade-offs between affordability and workplace proximity. The ability of Northern Virginia organizations to retain their workforces will have a direct bearing on future economic competitiveness. But finding the right balance of infrastructure investment, policy choices, including tax policies, and the provision of key public services remains elusive for most jurisdictions. Witness the recent struggles of the Washington Metropolitan Area Transit Authority.

**Recent migration data for Northern Virginia deserve attention. For the two most recent years ending in July 2015, the region experienced negative net domestic migration, meaning that more households moved out of Northern Virginia than into Northern Virginia from domestic sources.** The losses, which likely reflect some retirement-driven moves, were more than offset by natural population increase and net international migration, but primarily reflect tepid job generation.

Net domestic out-migration may represent the temporary effects of the BCA-driven economic downturn, but bears watching to see if recent job growth reverses this trend. Just as important is the region's continued ability to attract new international migrants. Perhaps different from other areas of the country, the proportion of international immigrants living in the Washington, D.C., metro area that possesses a college degree is almost exactly the same as for the native population. These individuals provide valuable economic thrust to the region. Having a continuing flow of workers with a wide range of skills is an important asset for Northern Virginia employers, especially as regional businesses adapt to global market opportunities.

At the end of the day, it is fair to observe that Northern Virginia is superbly located and is home to some remarkable human capital. The test now is whether the region can deal effectively with the growth that this superb location and remarkable human capital have energized. Northern Virginia has the assets to turn the corner and become a more business-oriented, globally competitive region, but will it happen? Stay tuned.

