

# Running In Place? Our “So-So” Regional Economy



# RUNNING IN PLACE? OUR "SO-SO" REGIONAL ECONOMY

In 2014, the real, inflation-adjusted growth rate of the Hampton Roads economy was 1.34 percent. Perhaps we should be grateful. This was higher than our annual regional rate of growth in five out of the past six years. As Table 1 discloses, twice during the 2008-14 time period we experienced negative growth rates and in only one year was our growth rate close to 2 percent.

Nevertheless, Table 1 (and Graph 1) clearly reveals that we've known much better times. Between 2000 and 2007, for example, our regional growth rate never fell below 2.6 percent and in one year (2003) was a magnificent 5.46 percent.

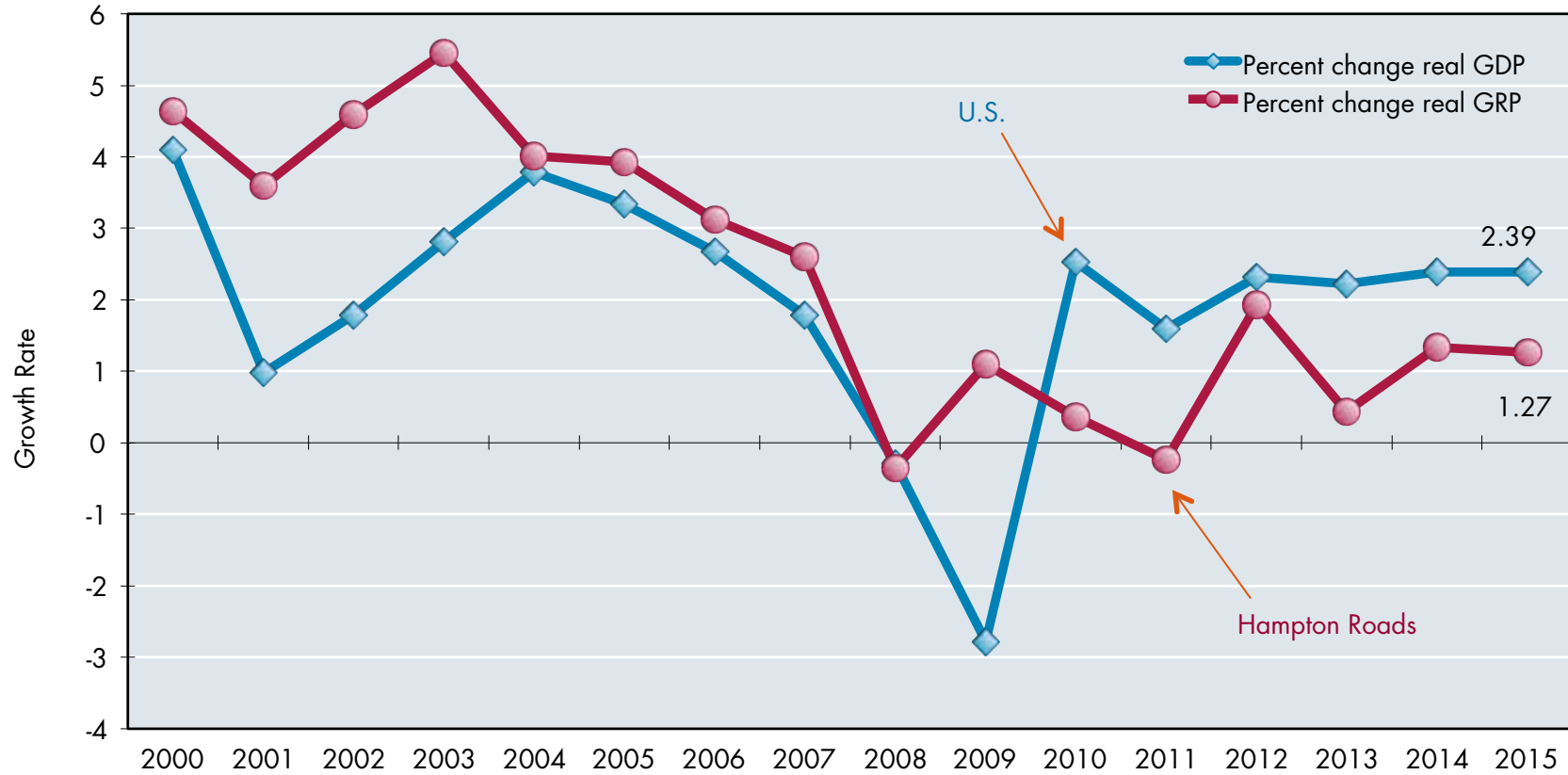
Our prediction for 2015 is a 1.27 percent growth rate for the economy in Hampton Roads, which we believe will be below both the national growth rate and that of Virginia (which we estimate to be 1.56 percent). By the end of 2015, our nominal gross regional product (GRP) will have grown to \$92.84 billion, a considerable number. If Hampton Roads were a separate country, we would have the 60th-largest economy in the world.

<b>YEAR</b>	<b>NOMINAL GRP BILLIONS OF \$</b>	<b>REAL GRP (2009=100) BILLIONS OF \$</b>	<b>REAL GRP GROWTH RATE PERCENT</b>
2000	50.35	61.49	4.64
2001	53.35	63.70	3.60
2002	56.66	66.63	4.59
2003	60.95	70.27	5.46
2004	65.14	73.09	4.01
2005	69.88	75.96	3.93
2006	74.27	78.34	3.12
2007	78.24	80.38	2.60
2008	79.48	80.08	-0.36
2009	80.96	80.96	1.10
2010	82.24	81.25	0.36
2011	83.74	81.06	-0.24
2012	86.89	82.62	1.93
2013	88.57	82.98	0.44
2014	91.09	84.09	1.34
2015	92.84	85.17	1.27

Source: Old Dominion University Economic Forecasting Project. Data incorporate U.S. Department of Commerce personal income revisions through September 2014. Base year is 2009. Real GRP is calculated using the GDP price deflator.

**GRAPH 1**

**RATE OF GROWTH OF GDP (U.S.) AND GRP (HAMPTON ROADS), 2000-2015**



Sources: Bureau of Economic Analysis and the Old Dominion University Economic Forecasting Project. Data on GDP incorporates latest BEA revisions in September 2014. Real GRP for Hampton Roads is calculated by using the GDP price deflator.

# Income Growth

As Graph 2 discloses, growth in median household income – 50th percentile household income – has stalled in Hampton Roads and actually was lower in 2014 than in 2008. This roughly mirrors national results, though the median household income of all Americans has edged upward slightly in recent years.

Median household income is a concept that frequently is used as an overall measure of economic welfare even though it has some deficiencies. Let's examine several of these problems. First, it is not adjusted for the cost of living. If it were, then we would see that "real" median household income has declined nearly everywhere since 2008.

Second, median household income doesn't control for the fact that the average size of households has declined significantly in recent decades. In 1967, the average size of an American household was 3.28; by 2013, it had fallen to 2.54 (Carpe Diem Blog, Feb. 4, 2015). Smaller households result in a smaller number of individuals earning income, and this exerts a downward influence on median household income.

Third, median household income does not include either the value of employee fringe benefits (which have become an increasingly important aspect of compensation) or the value of supplements such as SNAP, the Supplemental Nutrition Assistance Program (food stamps), and TANF, Temporary Assistance for Needy Families.

Fourth, median household income does not always reflect the increased quality of the goods and services that households are consuming. Personal computers and cellphones provide an apt illustration. The quality and power of these items have skyrocketed in recent years even while their prices have fallen dramatically. A dollar spent on similar items in 2015 provides much more value to a household than it did 10 years ago. Median household income ignores this.

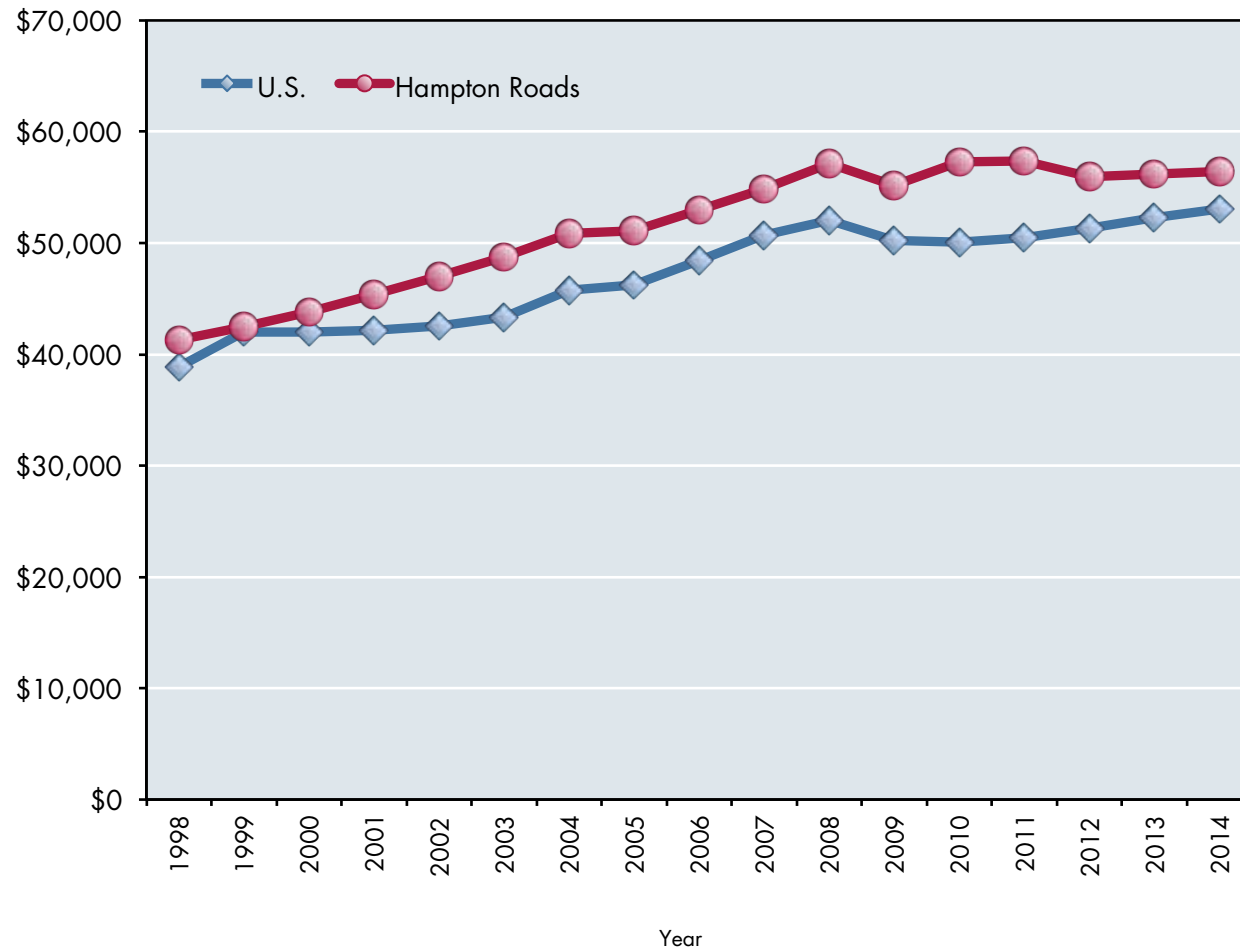
These omissions mean that median household income, despite its popularity as a concept, is a less than perfect measure of the economic prosperity

of the American household. Even so, despite its imperfections, median household income does provide us with valuable information, and by consensus economists frequently utilize it as a measure of the economic welfare of the typical household. This has led to the conclusion that the economic welfare of the typical household has not increased very much (and may have declined) in recent years. Hampton Roads does not constitute an exception in this regard.



**GRAPH 2**

**COMPARISON OF *MEDIAN* HOUSEHOLD INCOME: HAMPTON ROADS AND THE U.S., 1998-2014**



Sources: U.S. Census Bureau and the Old Dominion University Economic Forecasting Project

# Jobs

Graph 3 tells us that our national economic recovery from the 2007-09 recession was slow indeed – it took more than six years (76 months) to recover all of the jobs lost. Graph 4, which focuses on Hampton Roads, reveals that our region has yet to recover all of the jobs it lost in the Great Recession. We're still about 22,000 jobs short of gaining back the jobs that went away (see Graph 5).

Virginia's economic recovery, while better than that of Hampton Roads in terms of jobs, has not been robust. The Commonwealth has generated only 29,700 additional jobs over and above its pre-recession level. Northern Virginia, however, is above its pre-recession peak by more than 75,000 jobs. Richmond has gained back the jobs it lost. Hence, it is the vast area of Virginia outside the Urban Crescent (the "Rural Horseshoe") that has sustained outsized job losses.

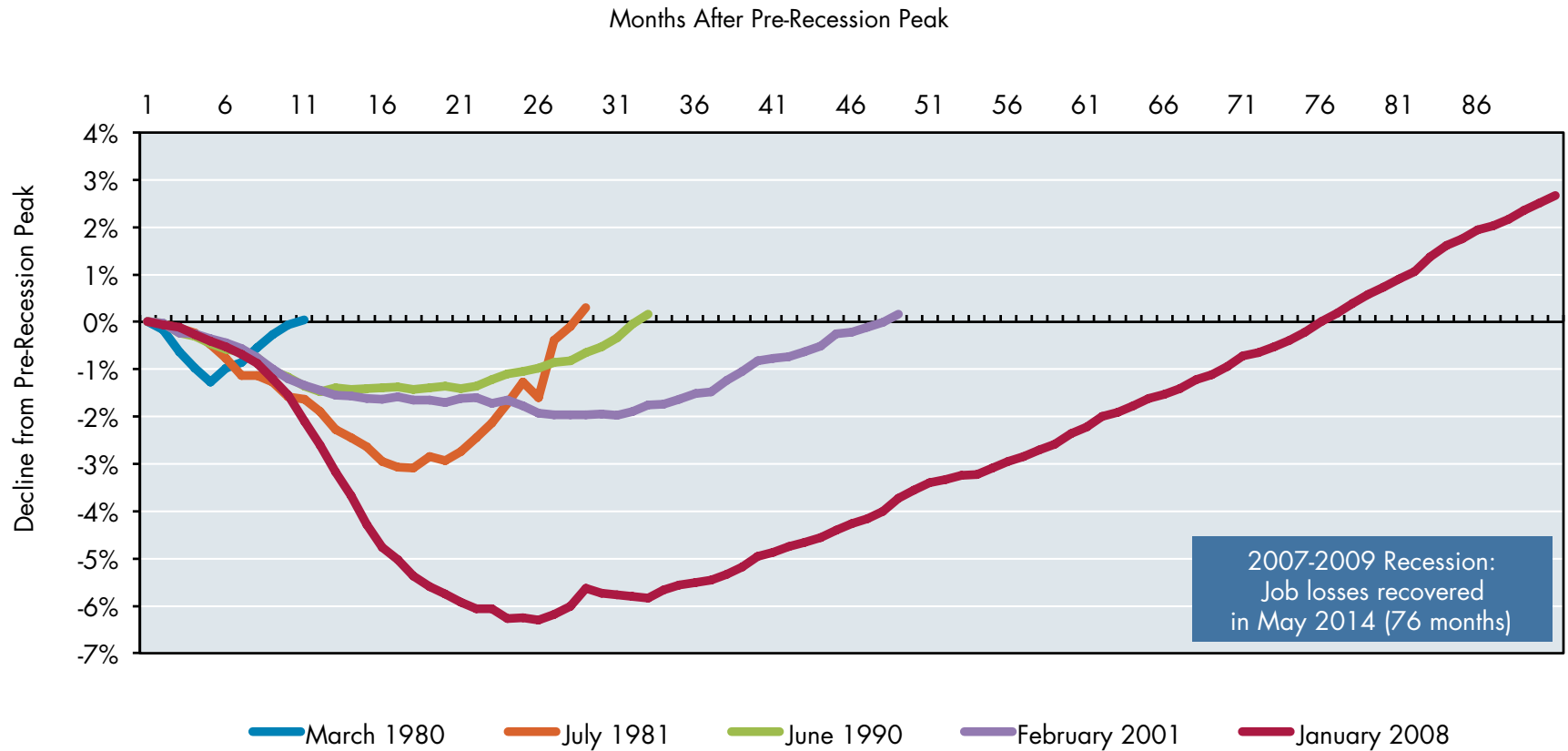
Graph 6 describes in broad terms the occupations that have gained or lost jobs since 2007. The health care/social assistance sector added more jobs than all of the other sectors combined, while construction shed the most jobs over this time period. It is interesting to note that since 2007, public-sector employers in Hampton Roads (federal, state and local) have regained all of the jobs they shed in the Great Recession; however, private-sector job growth has lagged and therefore is responsible for the overall decline in the number of jobs in our region.





**GRAPH 3**

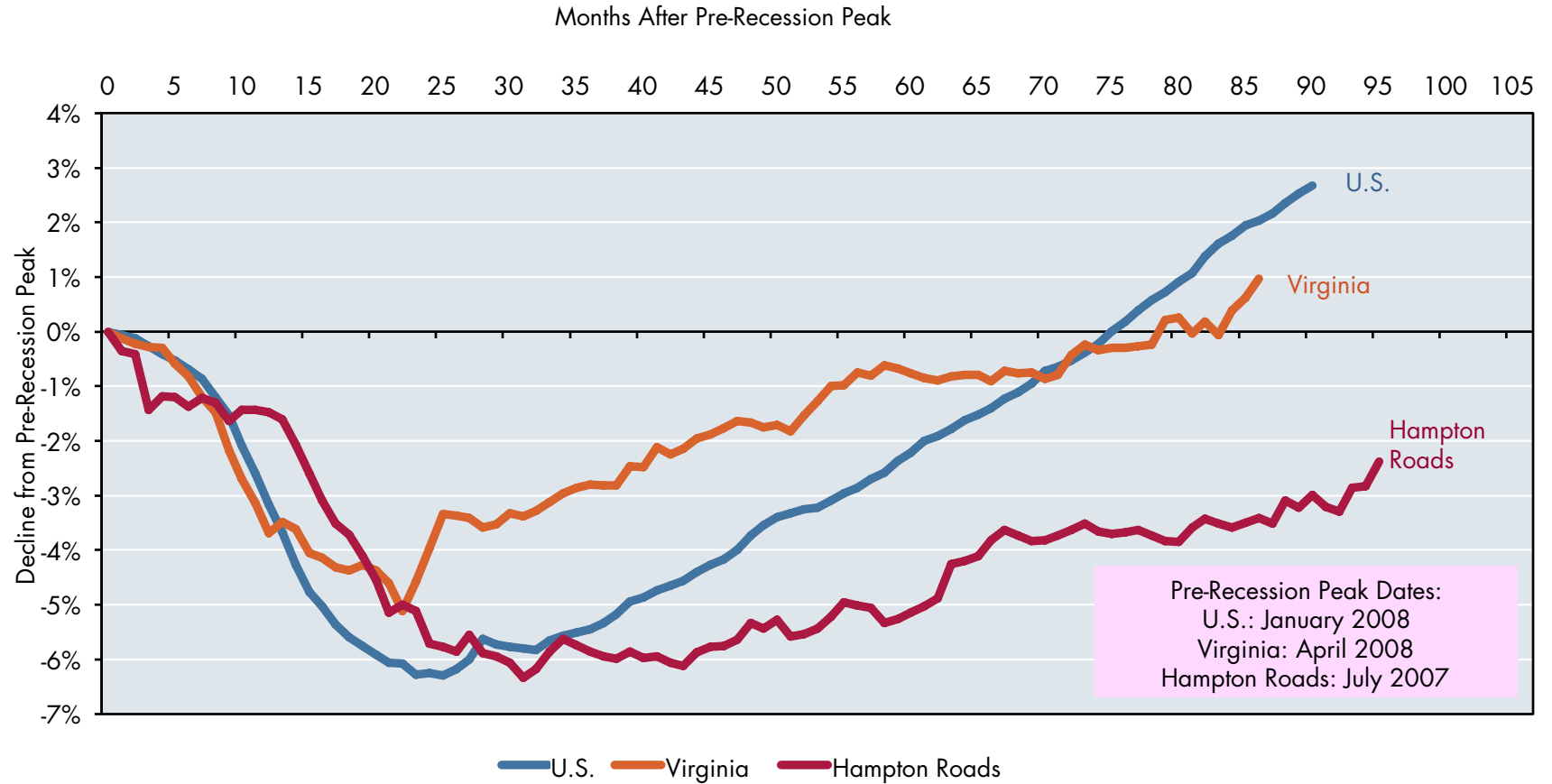
**COMPARING THE GREAT RECESSION TO OTHERS: JOB RECOVERY IN THE U.S.**



Sources: Bureau of Labor Statistics and the Old Dominion University Economic Forecasting Project

**GRAPH 4**

**RECESSION RECOVERY IN THE U.S., VIRGINIA AND HAMPTON ROADS MEASURED BY TOTAL JOBS RESTORED, 2007-2015\***

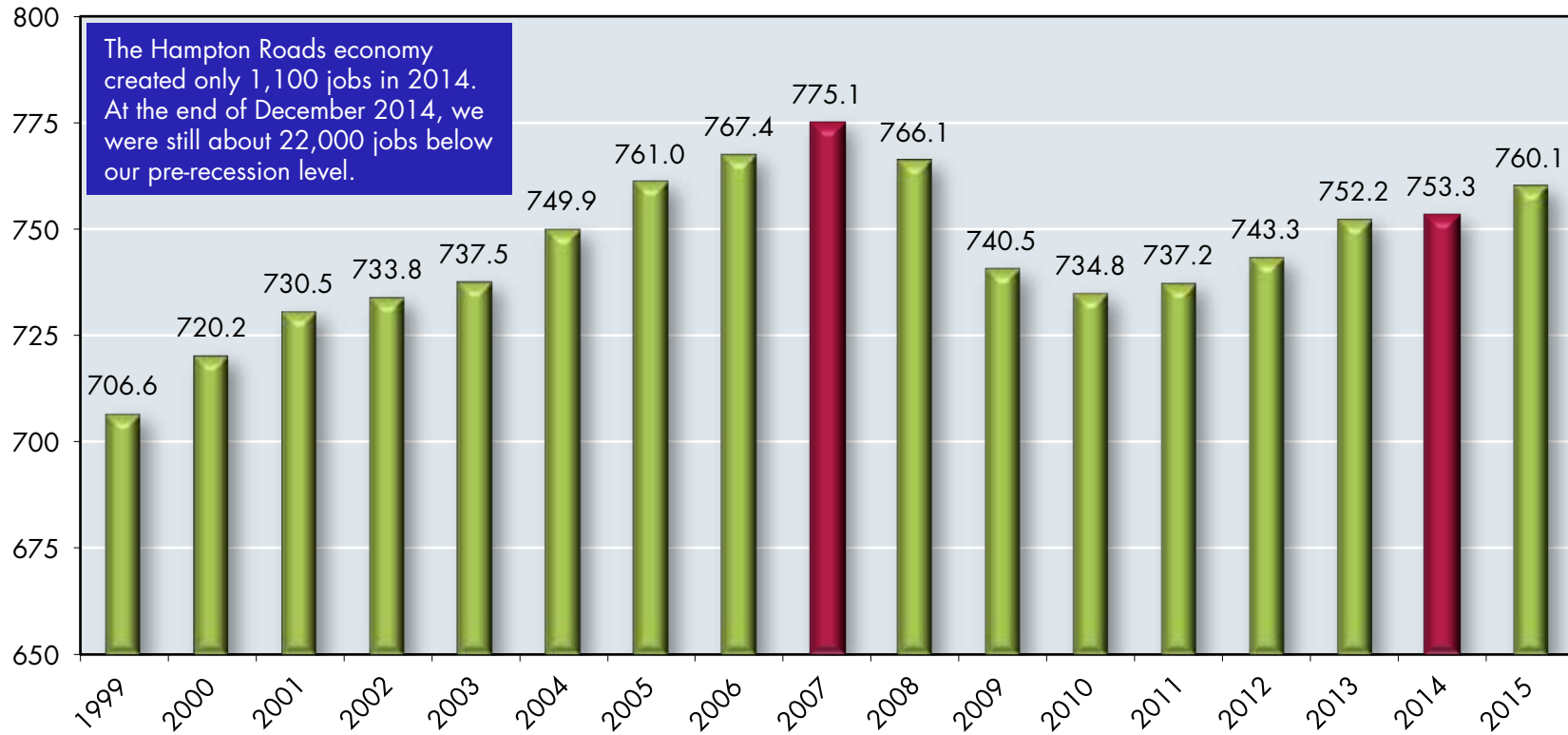


Sources: Bureau of Labor Statistics and the Old Dominion University Economic Forecasting Project. \*Data for Virginia and Hampton Roads are through June 2015.



**GRAPH 5**

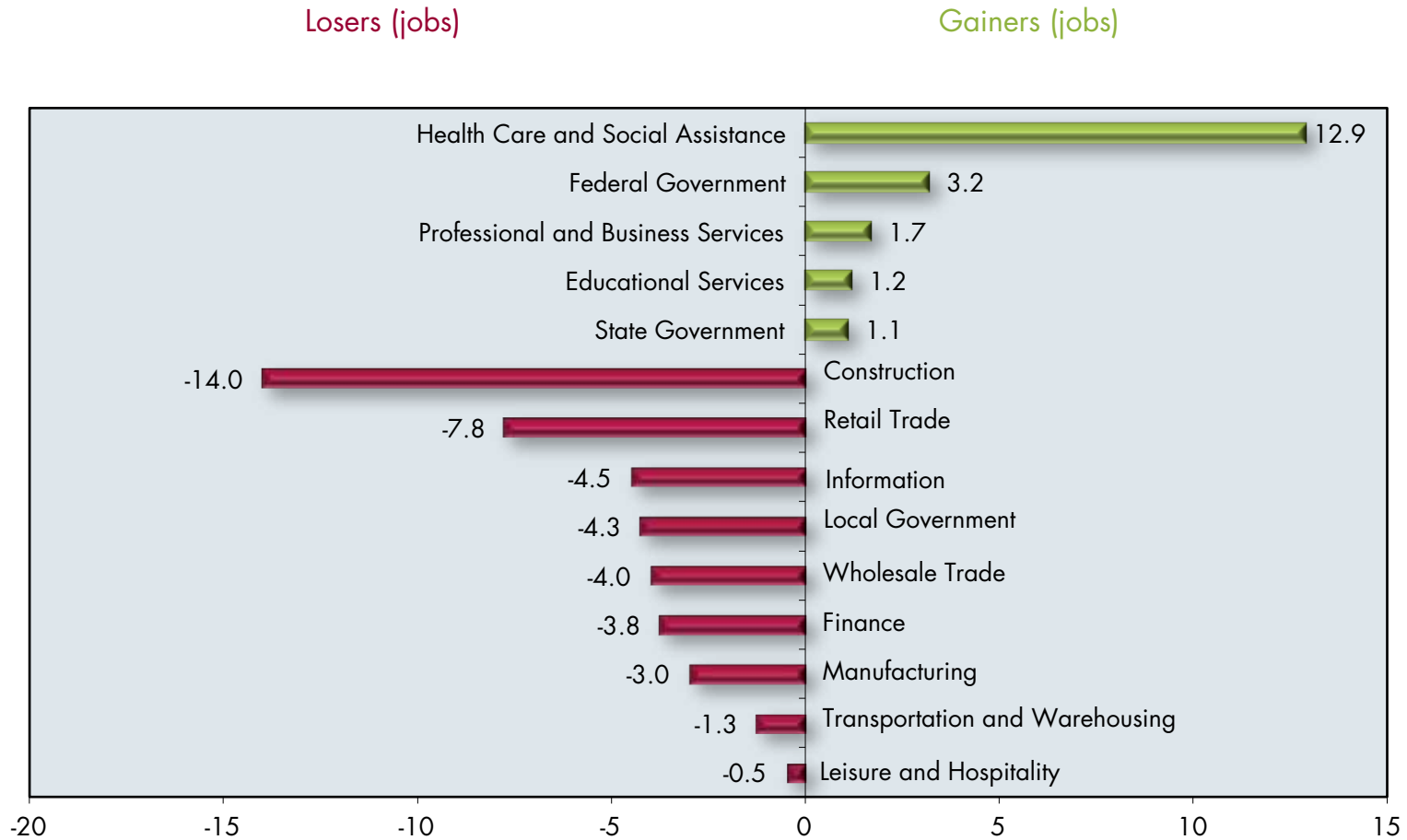
**ANNUAL CIVILIAN EMPLOYMENT (JOBS) IN HAMPTON ROADS, 1999-2015**



Sources: U.S. Department of Labor CES data and the Old Dominion University Economic Forecasting Project. Data are not seasonally adjusted.

### GRAPH 6

### JOB GAINS AND LOSSES (IN THOUSANDS) IN HAMPTON ROADS, 2007 AND 2014



Sources: U.S. Department of Labor CES data and the Old Dominion University Economic Forecasting Project. Data are not seasonally adjusted.

# Defense Spending

Between 2000 and 2012, direct Department of Defense (DOD) spending in Hampton Roads increased by an average of 5.6 percent annually. This provided a powerful economic thrust for our region. **Unfortunately, times have changed and we expect DOD spending in Hampton Roads in 2015 to be 3.2 percent below the peak we observed in 2012.** Graph 7, which depicts these changes, offers a powerful visual explanation of how the growth of our regional economy has slowed.

**The upshot of declining DOD spending is that it has forcibly diversified the Hampton Roads economy. We estimate that only 40.3 percent of our regional economic activity could be attributed directly and indirectly to defense spending in 2014 (see Graph 8). This is down from 44.9 percent in 2011 and our all-time high of 49.5 percent in 1984. Thus, we have diversified our economy, but not as the result of strong private-sector growth. Instead, the reason is declining DOD spending.**

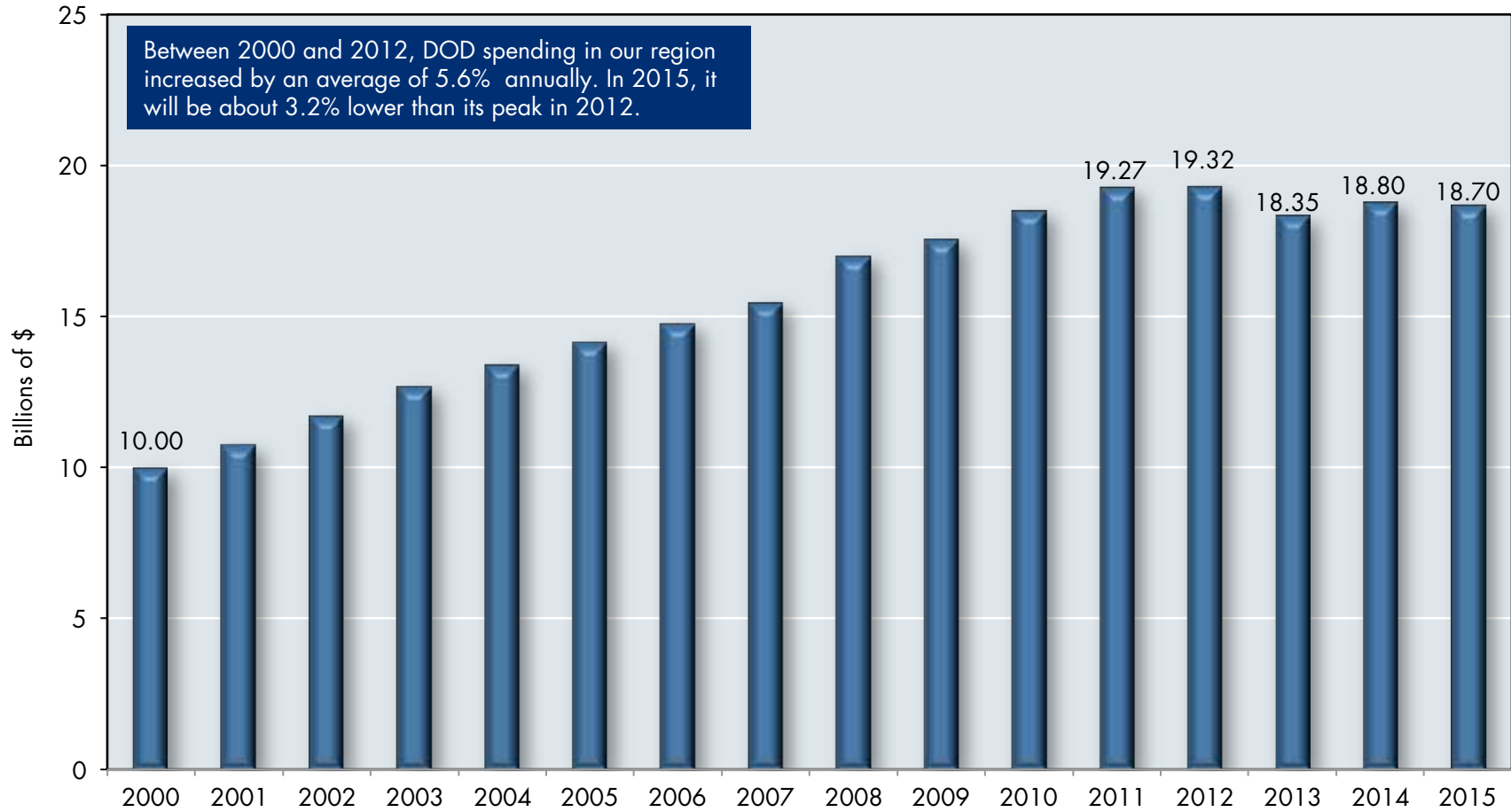
It has been our fate as a region to experience periodic ups and downs in DOD spending. Currently, DOD spending is contracting and our estimate is that it will account for only about 39 percent of our regional economic activity in 2015. A major driver of this change is the evolution that has occurred in the compensation of active-duty military personnel, civilian DOD personnel and federal government employees. Each of these employee segments is critically important to the economy of Hampton Roads. Table 2 reveals that total active-duty military compensation (wages plus all fringe benefits, including housing) grew 61.6 percent in our region during the past decade, but actually declined by 6.9 percent between 2010 and 2013. This reflects both a decline in the number of such individuals posted in our region and the much more moderate increases in the compensation of these individuals.

The bottom line, economically speaking, is that our region has lost one of its major growth engines – we no longer enjoy rising *total* military and federal employee compensation. Indeed, Table 3 examines *average* compensation per employee and it is apparent that a change in the mix of military and federal employees in our region has led to lower average compensation per employee as well.



### GRAPH 7

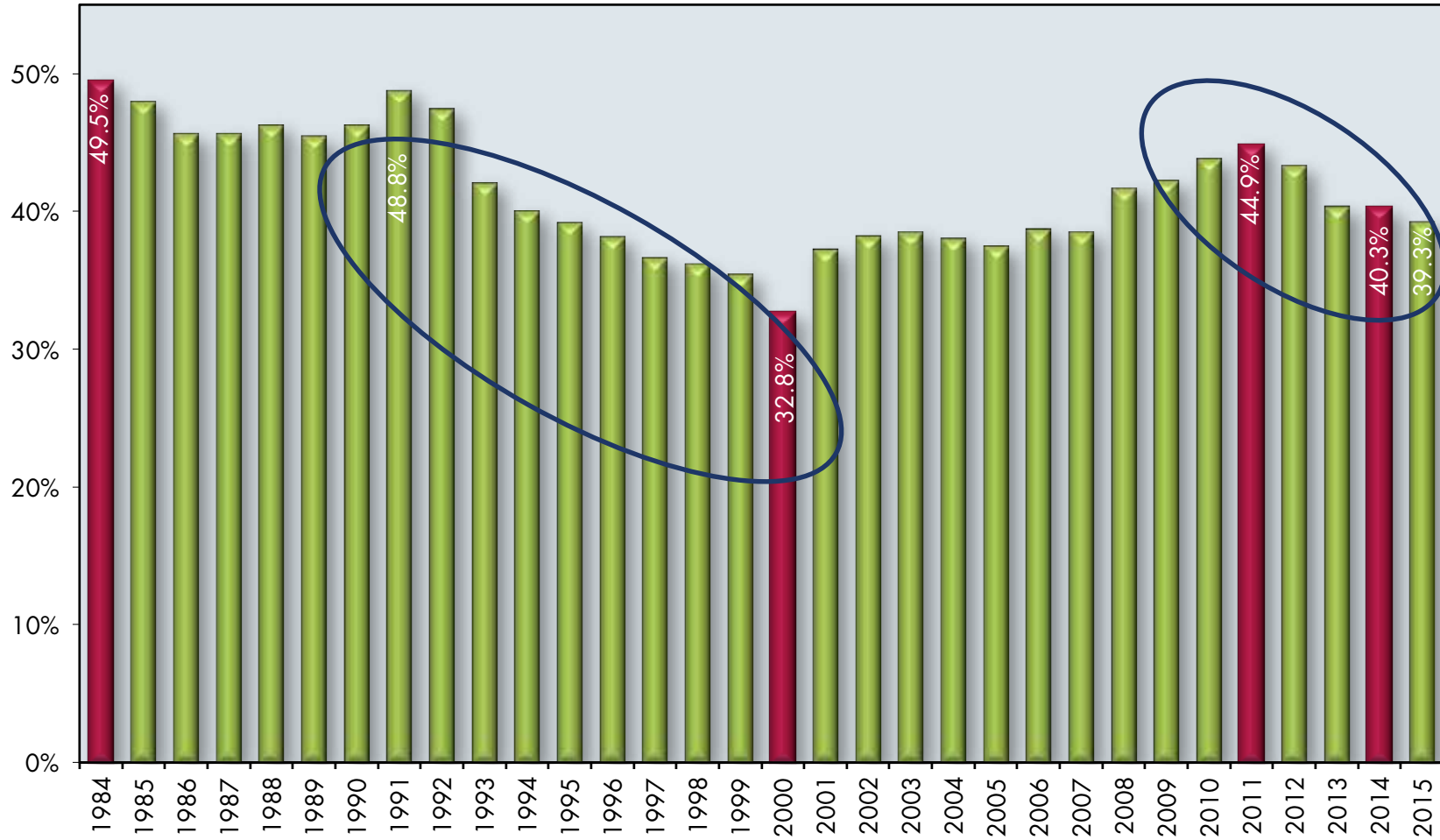
#### ESTIMATED DIRECT DOD SPENDING\* IN HAMPTON ROADS, 2000-2015



Sources: U.S. Department of Defense and the Old Dominion University Economic Forecasting Project. \*Includes federal civilian and military personnel and procurement.

**GRAPH 8**

**HAMPTON ROADS GROSS REGIONAL PRODUCT ATTRIBUTABLE TO DOD SPENDING, 1984-2015**



Sources: U.S. Department of Defense, U.S. Department of Commerce and the Old Dominion University Economic Forecasting Project

**TABLE 2**

**GROWTH IN EMPLOYMENT AND TOTAL COMPENSATION\* (WAGES, SALARIES AND FRINGE BENEFITS) FOR MILITARY, FEDERAL CIVILIAN GOVERNMENT AND PRIVATE NONFARM SECTORS, HAMPTON ROADS, 1991-2000, 2001-2010 AND 2010-2013**

	<b>Percent Change 1991-2000</b>	<b>Percent Change 2001-2010</b>	<b>Percent Change 2010-2013</b>	<b>Percent Change 2012-2013</b>
Military Employment	-21.3%	-13.6%	-9.2%	-2.2%
Military Compensation	5.9%	61.6%	-6.9%	-4.7%
Federal Civilian Government Employment	-20.6%	13.3%	1.1%	-1.6%
Federal Civilian Government Compensation	11.0%	68.6%	4.2%	-2.3%
Private Nonfarm Employment	22.3%	5.3%	3.3%	1.5%
Private Nonfarm Compensation	69.3%	36.4%	9.3%	2.7%

Sources: U.S. Bureau of Economic Analysis (BEA) and the Old Dominion University Economic Forecasting Project. \*BEA calls compensation as earnings.

**TABLE 3**

**ESTIMATED AVERAGE COMPENSATION\* (WAGES, SALARIES AND FRINGE BENEFITS) FOR SELECTED CATEGORIES IN HAMPTON ROADS, 2001, 2012 AND 2013**

	<b>Earnings in 2001</b>	<b>Earnings in 2012</b>	<b>Earnings in 2013</b>	<b>Percent Change 2001-2010</b>	<b>Percent Change 2010-2013</b>	<b>Percent Change 2012-2013</b>
Military	\$47,077	\$92,741	\$90,364	87.1%	2.6%	-2.6%
Federal Civilian Govt. Employees	\$63,631	\$98,299	\$97,596	48.8%	3.1%	-0.7%
State and Local Govt. Employees	\$40,251	\$55,406	\$56,067	37.1%	1.6%	1.2%
Private Nonfarm	\$29,415	\$39,860	\$40,330	29.6%	5.8%	1.2%

Sources: U.S. Bureau of Economic Analysis (BEA) and the Old Dominion University Economic Forecasting Project. \*BEA calls compensation as earnings.

## SEQUESTRATION

If it can be said that there exists a public “dirty word” in the economic lexicon of Hampton Roads, then that word probably is “sequestration.” The sequestration process approved by the U.S. Congress a few years back sequestered (removed) funds that otherwise would have been spent by the federal government on a wide range of activities, including defense.

Graph 9 illustrates the impact of sequestration on DOD discretionary spending. This is DOD spending that is separate from most expenditures made as a part of special operations, such as those in the Middle East and Afghanistan. The blue line indicates what DOD spending would have been without any sequestration reductions. The red line depicts the level of DOD spending after the sequestration (reduction) agreement. The total sequestration reduction in DOD spending amounted to \$483 billion through the federal government’s FY 2012 year.

The green line in Graph 9 represents sequestration relief (\$31.6 billion in restored spending) that was agreed to by Congress for FY 2014 and FY 2015. The area of the purple trapezoid reflects this \$31.6 billion restoration, which will disappear in FY 2016 unless Congress comes to an agreement to maintain such spending.

If sequestration continues, then the “cap” it places on discretionary DOD spending will increase slightly to \$523.1 billion in FY 2016 – only 0.35 percent. This is a recipe for continuing economic stagnancy in Hampton Roads, even though most of the proposed cuts will focus on the U.S. Army and U.S. Air Force.

**A portion of the decline in DOD spending in Hampton Roads relates specifically to a significant reduction in the number active-duty military personnel posted in our region. Since the turn of the century, this number peaked at 113,400 in 2003 and declined every year since then to 86,500 in 2013 (see Graph 10). There are several reasons for this:**

- Stagnant or declining DOD expenditures in Hampton Roads, coupled with higher compensation rates, necessarily translates to a need for fewer people.
- The increasing cost of major assets and equipment (such as aircraft carriers and airplanes) means that the DOD cannot purchase as many of these items. Fewer ships and planes also result in the need for fewer people.
- A refocusing of the defense posture of the United States away from the Atlantic and toward the Pacific Rim has drained personnel from our region.

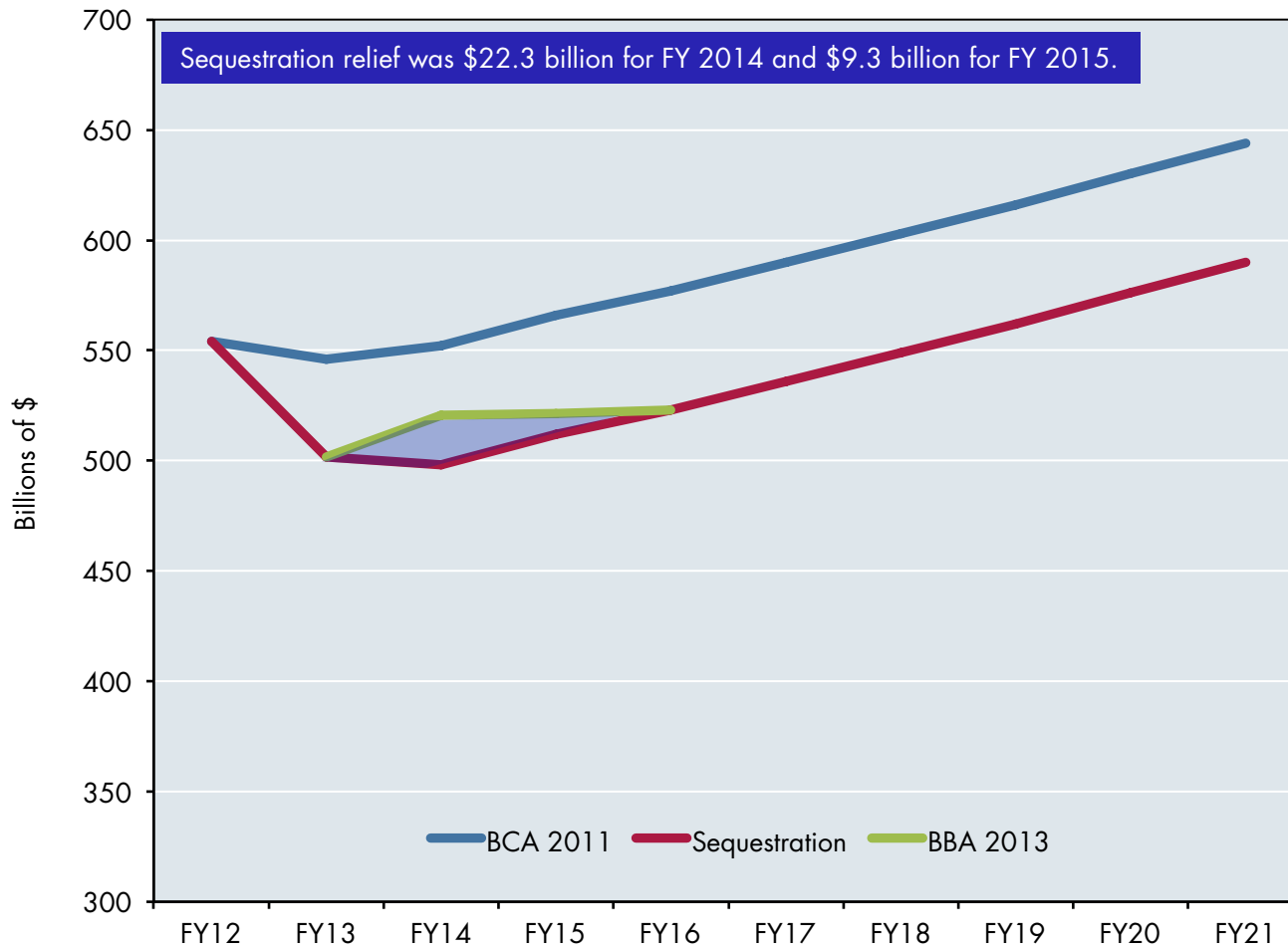
**The DOD budgetary picture for Hampton Roads is not completely bleak, however. There is some good news for 2015 and beyond.** Congress stated its intention to maintain 11 large aircraft carriers in the fleet; continued funding for construction of the Gerald R. Ford and for refueling and overhaul of the George Washington; rejected requests to close bases; provided funding for two Virginia-class submarines in 2015; limited the number of guided missile cruisers that can be deactivated; provided \$190 million in funding for DOD construction projects for Hampton Roads; and provided a 1 percent pay raise for most military and civilian government employees. In June 2015, the DOD announced that Huntington Ingalls had been awarded a \$3.35 billion contract for the design and construction of new aircraft carrier John F. Kennedy.

Each of these developments will preserve employment in our region. Given our continued dependence on DOD spending, it is appropriate to observe that things could have been much worse for Hampton Roads where sequestration is concerned.



**GRAPH 9**

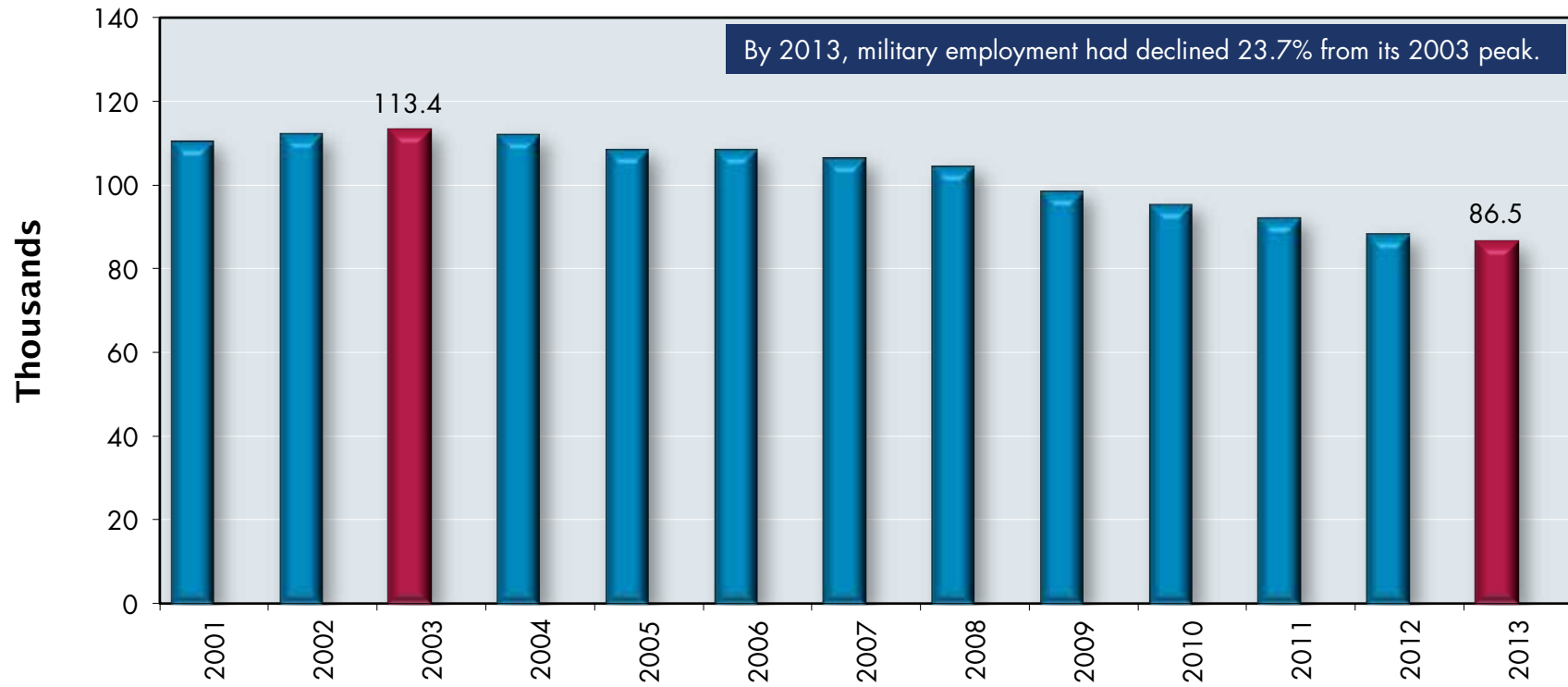
**CAPS ON DEPARTMENT OF DEFENSE DISCRETIONARY SPENDING, FY 2012 TO FY 2021**



Sources: Budget Control Act 2011, budget requests for FY14, Congressional Budget Office Sequestration Update Report and the Old Dominion University Economic Forecasting Project

**GRAPH 10**

**MILITARY EMPLOYMENT IN HAMPTON ROADS, 2001-2013**



Sources: Bureau of Economic Analysis and the Old Dominion University Economic Forecasting Project

# Comparing Hampton Roads To Others

We've already seen that Hampton Roads has yet to recover all of the jobs that it lost in the Great Recession. How do we compare to other Atlantic Coast metropolitan regions in this regard? The answer, as one can see in Table 4, is "not so well." Regions such as Charlotte and Raleigh have absolutely left Hampton Roads in their dust insofar as job creation is concerned. Between 2007 and 2014, while we lost 21,800 jobs, Charlotte gained 42,700 jobs and Raleigh augmented 37,400 jobs. If we back up to 2004 to include times that were more attractive for Hampton Roads, the growth in our total regional jobs was only 0.46 percent, well below Virginia's 5.2 percent or the country's 5.54 percent.

Even though Hampton Roads has not been creating many new jobs, our rate of unemployment has been falling and is well below the U.S. average. Graph 11 compares our unemployment rates to those of the United States since 2000 and it is apparent we have consistently reported a lower rate of unemployment than the nation as a whole.

How can this be? Part of the answer is lower labor force participation in our region. One is not counted as unemployed if one either is employed or has stopped actively looking for a job. We appear to have a large proportion of people who fall into this latter category. One collateral piece of supporting evidence is provided in Graph 12, which reveals a significant decline in the number of individuals applying for unemployment benefits. One has to be seeking a job in order to claim unemployment benefits.

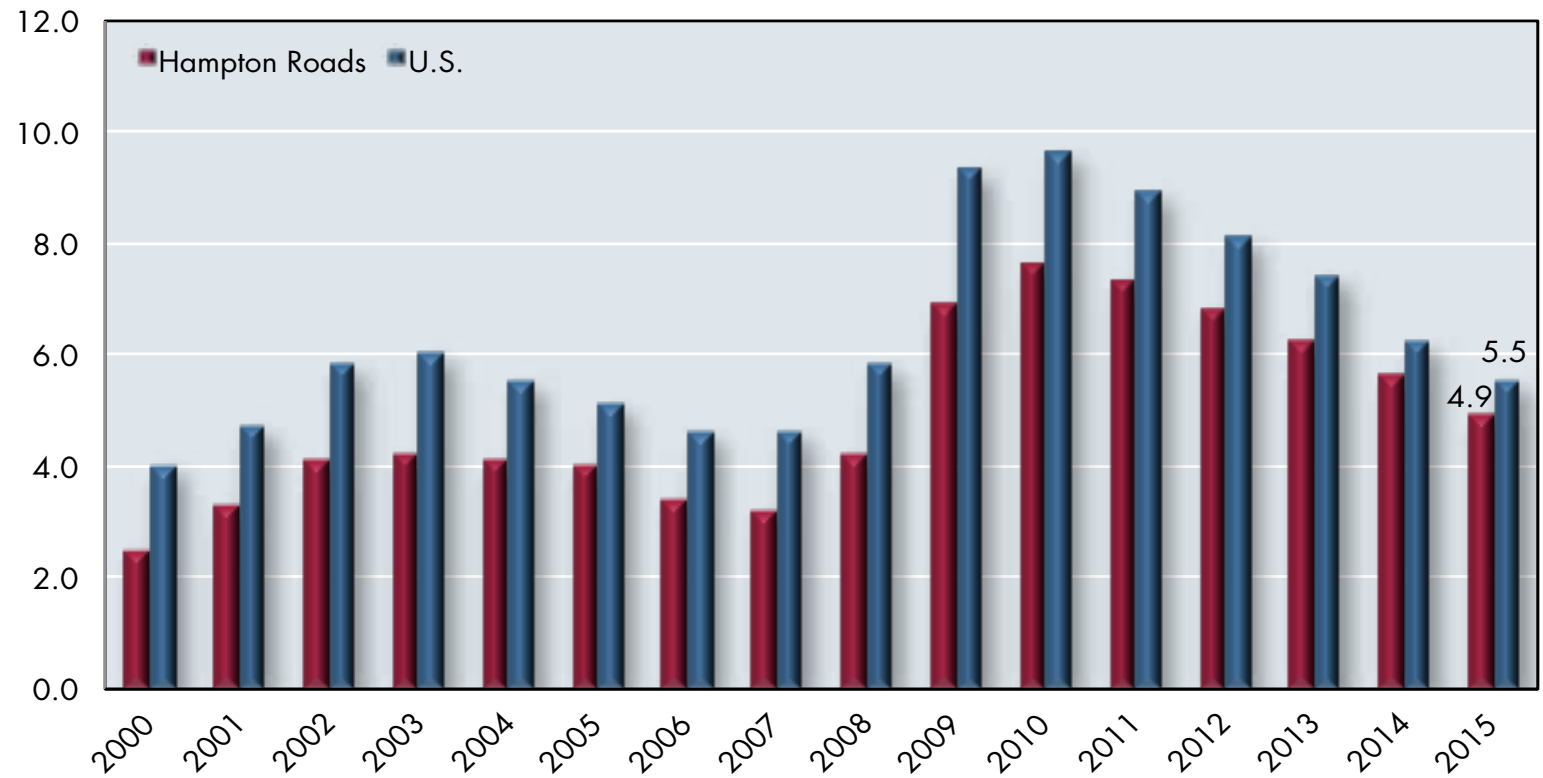
We do not have the space here to address the falling labor force participation rate issue in detail; however, this "drop out of the labor force" phenomenon cannot be seen as good news for our region. It results in sharply diminished economic prospects for the individuals who have "dropped out" and also generates increased social costs relating to welfare payments and criminal activity.

<b>Area</b>	<b>2004-07</b>	<b>2007-14</b>	<b>2004-14 Change and Percent of Total</b>	
Hampton Roads	25.2	-21.8	3.4	(0.46%)
Charlotte	98.2	42.7	140.9	(15.26%)
Durham*	24.9	8.4	33.3	(12.93%)
Jacksonville	55.2	-8.2	47.0	(8.16%)
Raleigh*	73.2	37.4	110.6	(24.63%)
Richmond	28.9	8.3	37.2	(6.26%)
U.S.	6,187.7	1,105.9	7,293.6	(5.54%)
Virginia*	184.0	2.7	186.7	(5.20%)
North Carolina	307.4	0.7	308.1	(8.04%)

Sources: U.S. Department of Labor CES seasonally unadjusted data and the Old Dominion University Economic Forecasting Project. \*Peak employment in Durham, Raleigh and Virginia occurred in 2008. Changes for these areas are shown for 2004 through 2008 and 2008 through 2014.

**GRAPH 11**

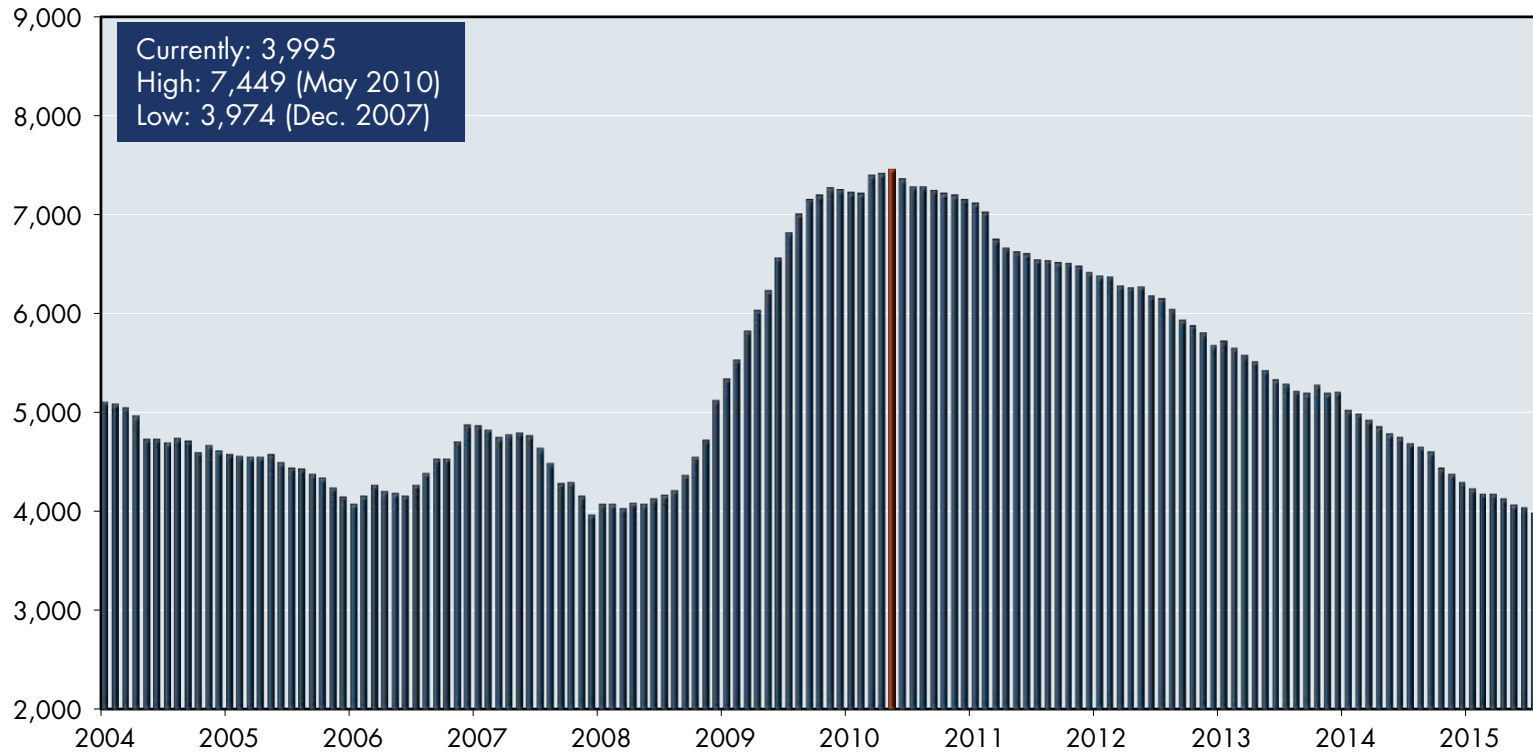
**HAMPTON ROADS AND U.S. UNEMPLOYMENT RATES, 2000-2015**



Sources: U.S. Department of Labor and the Old Dominion University Economic Forecasting Project. Data are not seasonally adjusted. Revised data April 18, 2014.

## GRAPH 12

### MONTHLY INITIAL UNEMPLOYMENT CLAIMS FOR HAMPTON ROADS, JANUARY 2004 THROUGH JULY 2015 (12-MONTH MOVING AVERAGE)



Sources: Virginia Employment Commission and the Old Dominion University Forecasting Project

# Comparing Our Major Cities

The economies of some of our cities are growing, while others have been stagnant or even contracting. Graph 13 reports the growth in “real” (after inflation has been considered) nonfarm earnings of each of our largest seven cities between 2001 and 2013. All of the cities’ growth rates are indexed to 1.00 in 2001. **One can see that Suffolk, energized by considerable population growth, experienced a 63 percent increase in its total, after inflation, nonfarm income between 2001 and 2013. A bit more surprising, perhaps, is the performance of Portsmouth, which recorded a 40 percent increase during the same period. Prior to the imposition of tolls, Portsmouth’s economic base was growing rather nicely.**

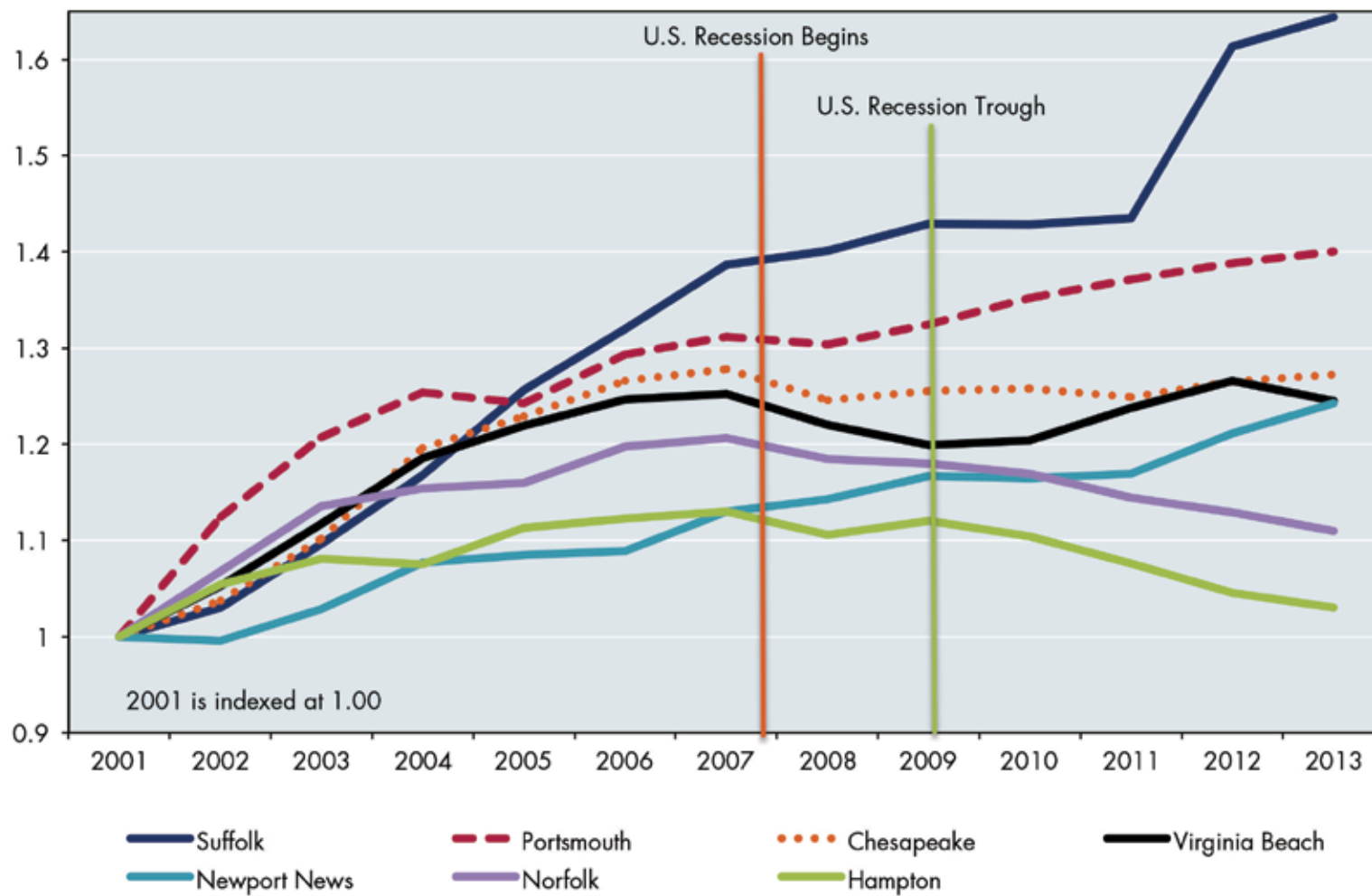
In general, total incomes in western Hampton Roads cities grew faster than those in eastern Hampton Roads and on the Peninsula since the turn of the century.

Graph 14 abbreviates the window of comparison to 2009 to 2013. Suffolk remains in first place, but now is followed by Newport News and Portsmouth. Note that total, after inflation, nonfarm incomes earned in Norfolk and Hampton actually declined – and not by a little bit, either. Norfolk’s decline was about 6 percent and Hampton’s about 8 percent. In real terms, these two cities’ economies have contracted since the Great Recession.



**GRAPH 13**

**INDEXED NONFARM EARNINGS, LARGEST CITIES, CONSTANT DOLLARS, 2001-2013**

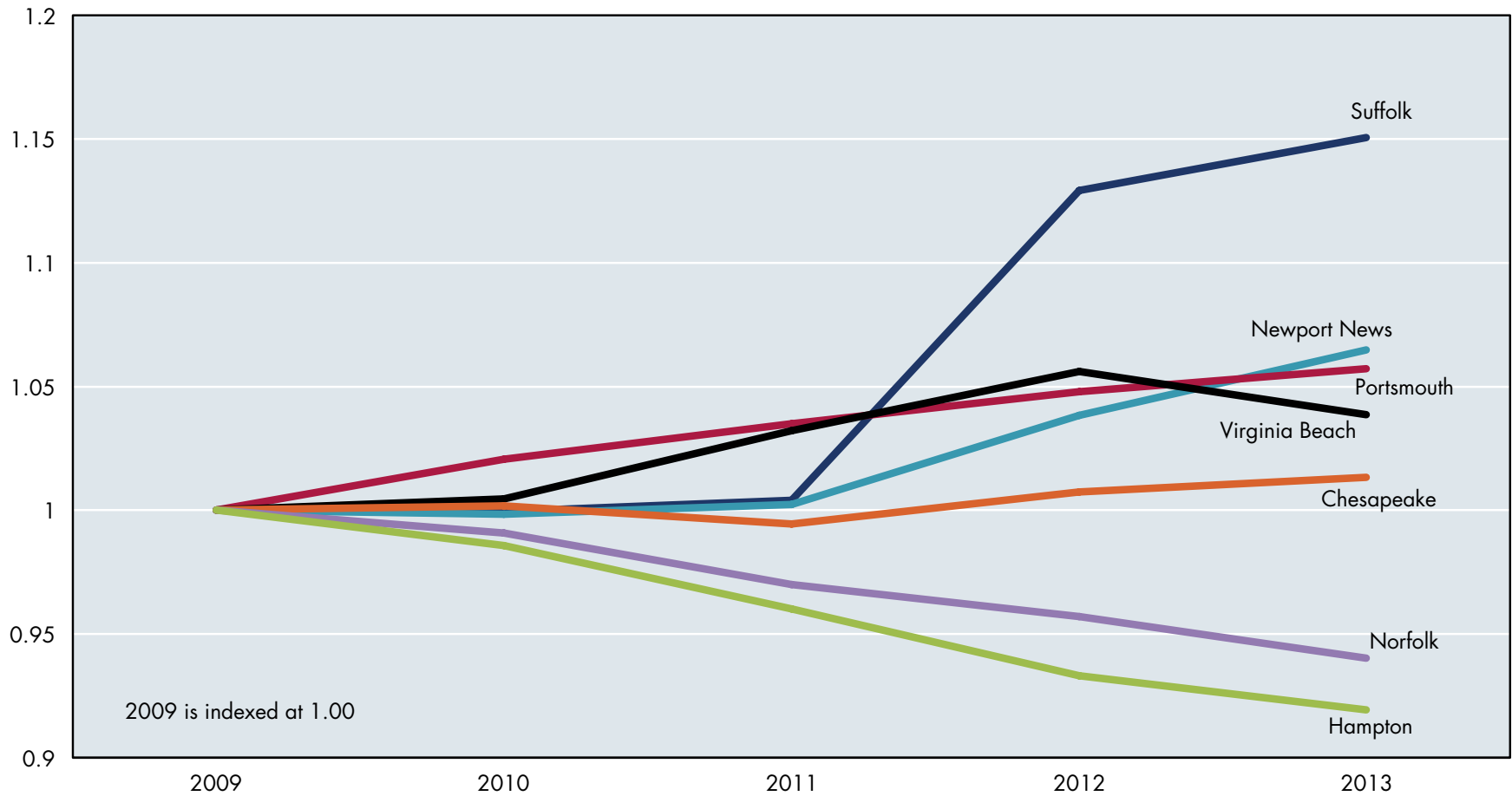


Source: Bureau of Economic Analysis, U.S. Department of Commerce



**GRAPH 14**

**INDEXED NONFARM EARNINGS, LARGEST CITIES, CONSTANT DOLLARS, 2009-2013**



Source: Bureau of Economic Analysis, U.S. Department of Commerce

# Tourism And Hotels

In 2014, total hotel revenues in Hampton Roads still had not recovered to the record \$714.4 million level our region recorded in 2007 (see Graph 15). We may finally surpass the 2007 level in 2015.

While the recovery of our travel and tourism industry from the Great Recession has been sluggish, there have been important underlying changes occurring in that market. Graph 16 reports that the Historic Triangle (Williamsburg) has lost significant tourism market share since 1999. One of the major beneficiaries has been Virginia Beach, which now claims 41.3 percent of the overall regional travel and tourism market.

**Experienced analysts prefer an alternative measure of the health of the travel and tourism market – REVPAR – because it takes into account both the supply and demand sides of the market. REVPAR stands for revenue per available room and measures the average number of dollars earned per available room on the market. Table 5 discloses that REVPAR rose 13.3 percent in the United States between 2007 and 2014, but fell by 6.8 percent in Hampton Roads, 12.2 percent in Norfolk/Portsmouth, 16.2 percent in Williamsburg and 17.2 percent in Chesapeake/Suffolk during the same time period.**

Lower demand for hotel and motel rooms explains the Norfolk/Portsmouth and Williamsburg numbers, but not those for Chesapeake/Suffolk. Neither Norfolk/Portsmouth nor Williamsburg added many new hotel and motel rooms and therefore their REVPAR declines represent a decrease in the demand for their properties. In the case of Chesapeake/Suffolk, however, the story is different. As Graph 17 reveals, the number of occupied hotel and motel rooms in those two cities increased noticeably in recent years, but not nearly as fast as the supply of rooms, which ballooned from 1,405 in 2007 to 1,986 in 2014. Simply put, there was overbuilding of hotel and motel capacity in Chesapeake/Suffolk. These cities likely will be able to grow out of this problem, though it may take the remainder of this decade for them to do so. It is doubtful that either Williamsburg or Norfolk/Portsmouth can count on this occurring.

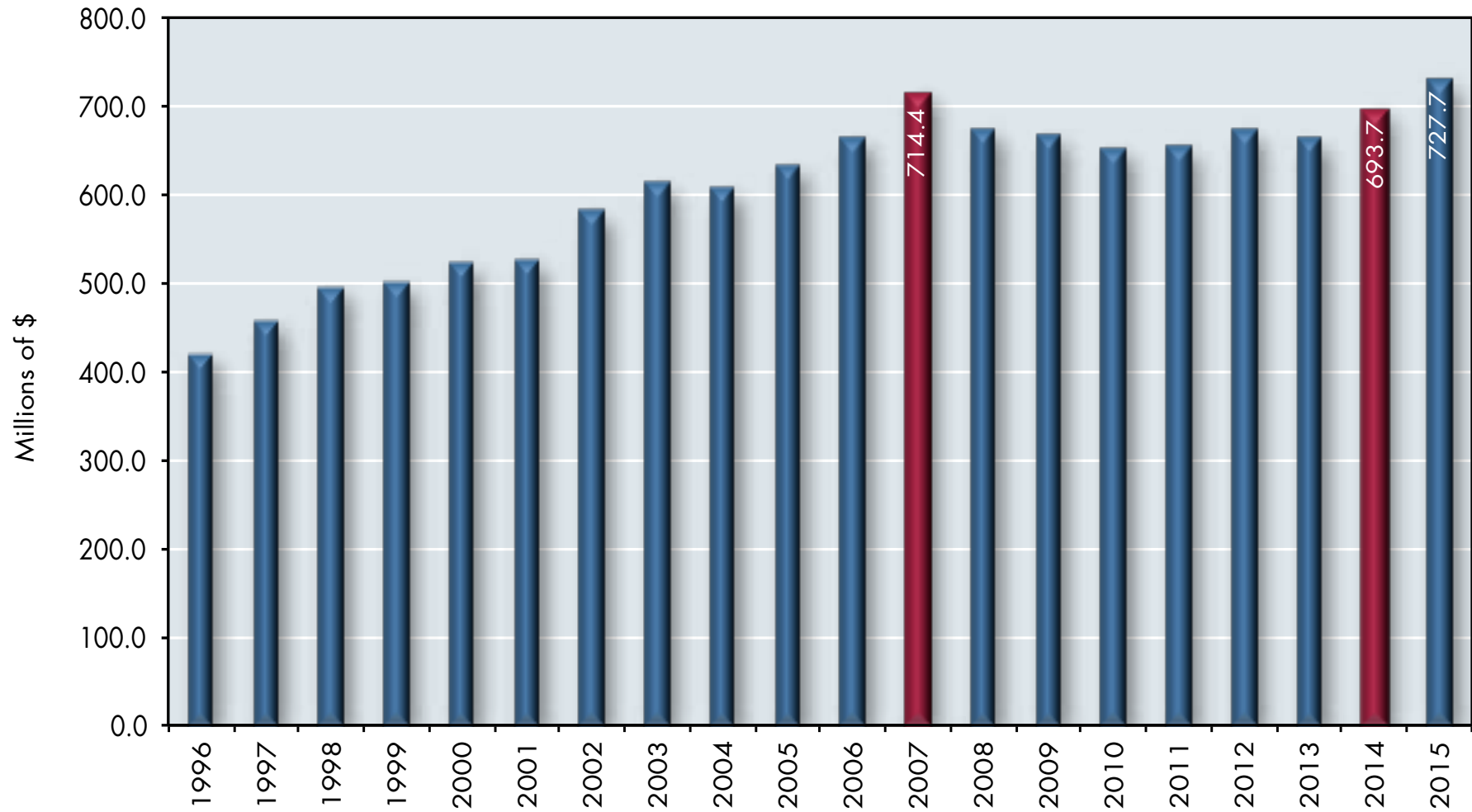
All things considered, it is not an auspicious time to be adding new hotels and motels. The single exception to this dictum may be Virginia Beach because of the gradually growing demand for tourism there.

	<b>2007</b>	<b>2014</b>	<b>Percentage Change</b>
<b>U.S.</b>	<b>\$65.54</b>	<b>\$74.28</b>	<b>+13.3%</b>
Virginia	\$61.95	\$59.42	-4.1%
<b>Hampton Roads</b>	<b>\$52.90</b>	<b>\$49.30</b>	<b>-6.8%</b>
Myrtle Beach	\$54.07	\$64.12	+ 18.7%
Coastal Carolina	\$55.83	\$61.22	+ 9.7%
<b>Ocean City</b>	<b>\$71.74</b>	<b>\$72.38</b>	<b>+0.9%</b>
<b>Virginia Beach</b>	<b>\$64.64</b>	<b>\$67.22</b>	<b>+ 3.9%</b>
Newport News/ Hampton	\$41.49	\$37.69	-9.2%
Norfolk/Portsmouth	\$54.05	\$47.48	-12.2%
Williamsburg	\$47.53	\$39.81	-16.2%
Chesapeake/Suffolk	\$52.90	\$43.78	- 17.2%

Source: Smith Travel Research Trend Report, Jan. 21, 2015, and the Old Dominion University Economic Forecasting Project

**GRAPH 15**

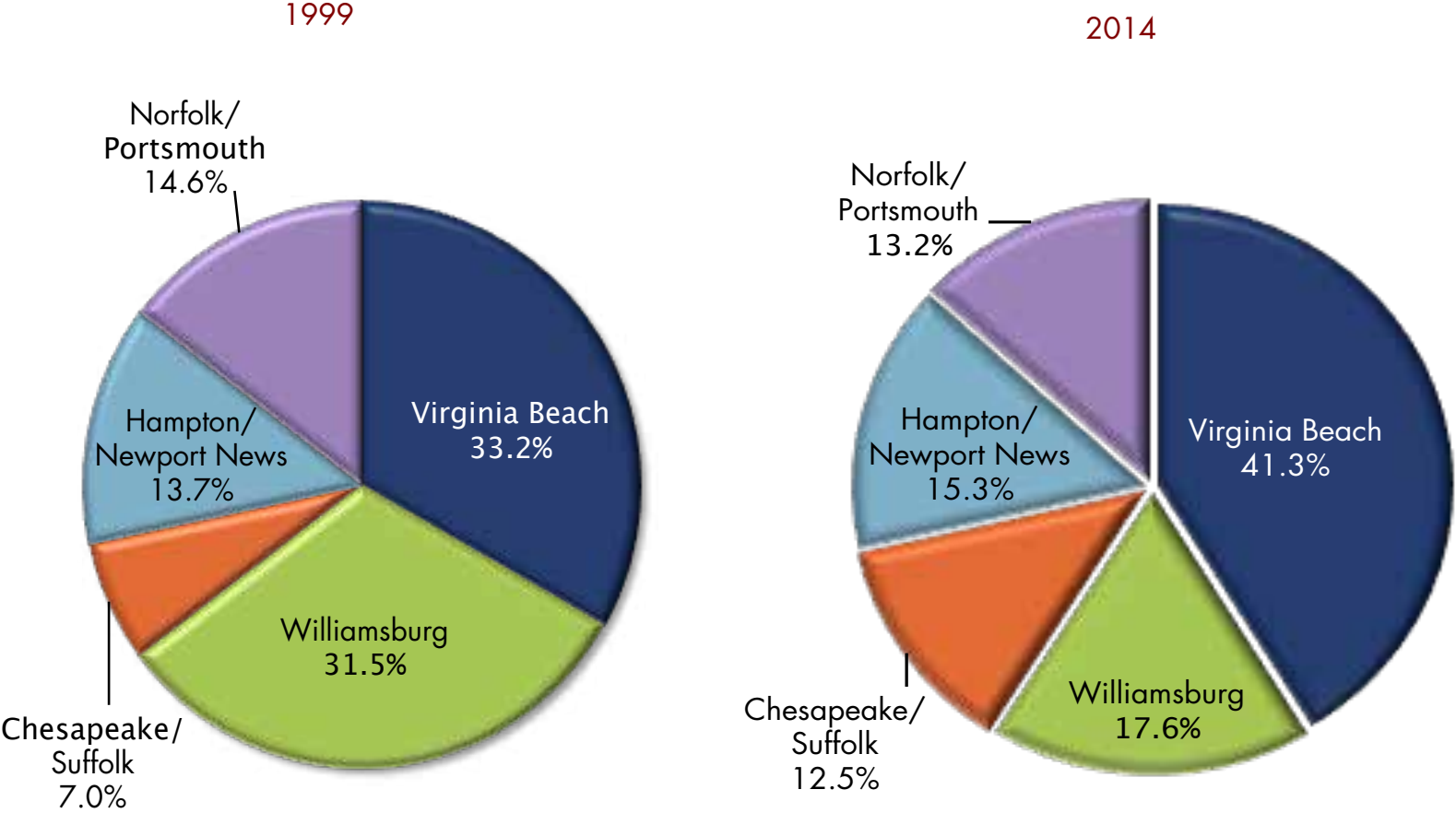
**HOTEL REVENUE IN HAMPTON ROADS, 1996-2015**



Sources: Smith Travel Research Trend Report, Jan. 21, 2015, and the Old Dominion University Economic Forecasting Project

**GRAPH 16**

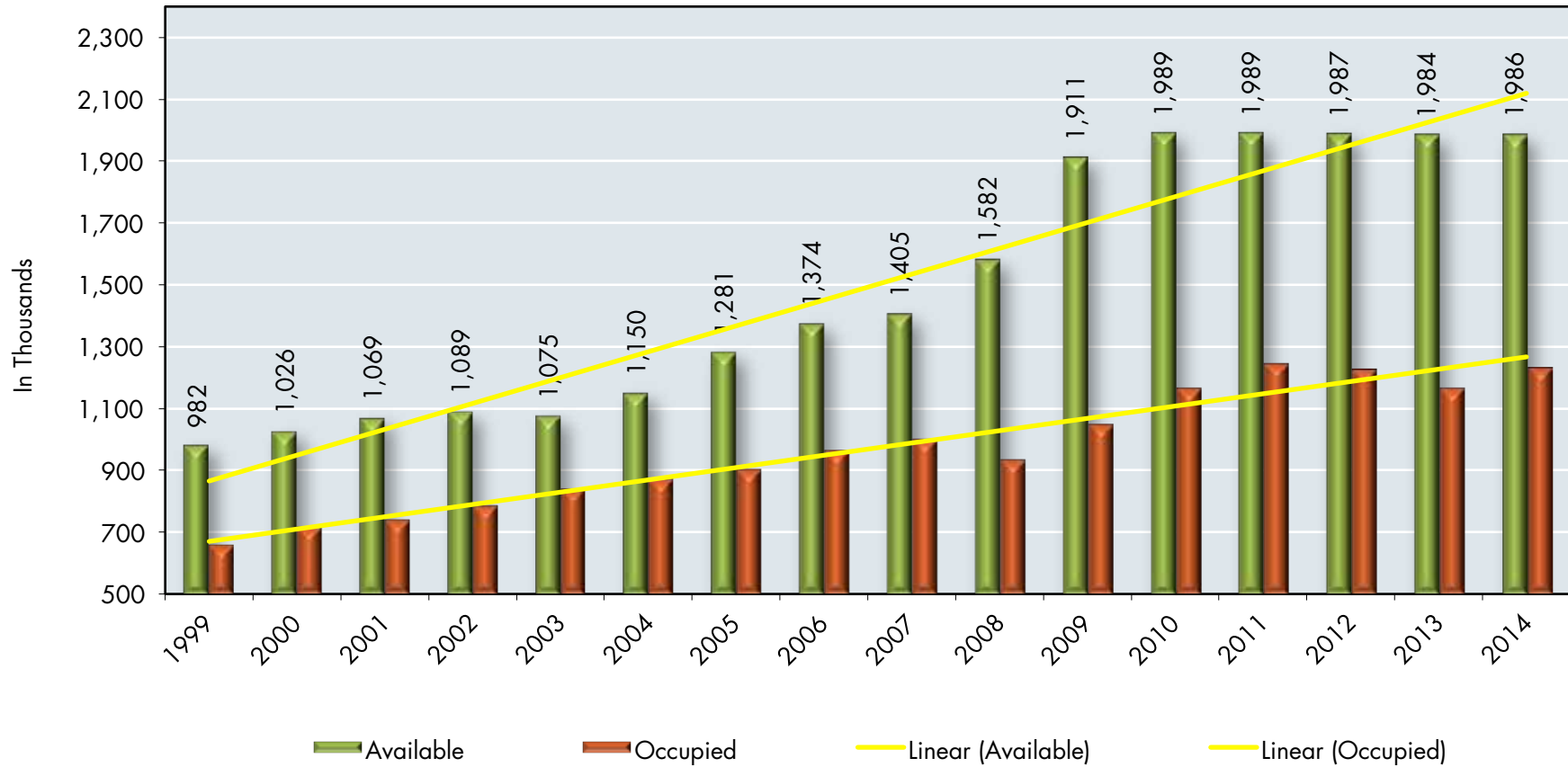
**ESTIMATED CITY HOTEL MARKET SHARES IN HAMPTON ROADS AS INDICATED BY INDUSTRY REVENUES, 1999 AND 2014**



Sources: Smith Travel Research Trend Report, Jan. 21, 2015, and the Old Dominion University Economic Forecasting Project

**GRAPH 17**

**HOTEL ROOM NIGHTS IN CHESAPEAKE/SUFFOLK MARKET, 1999-2014**



Sources: Smith Travel Research Trend Report, Jan. 21, 2015, and the Old Dominion University Economic Forecasting Project

# Residential Housing

After a 90 percent increase in the median sales price of existing residential homes between 2002 and 2007, house prices declined by 19 percent between 2007 and 2011. Since then, there has been modest recovery, **but the 2015 median sales price still is likely to be more than \$20,000 below the \$223,000 peak attained in 2007.** Table 6 supplies these data.

Pricewise, the nadir of the local residential housing market occurred in 2011. Since then, there have been improvements. Graph 18 shows both a declining average number of days an existing home was on the market before selling and an increasing total number of sales in Hampton Roads since 2011. Additionally, one can see in Graph 19 that residential housing foreclosures continue to wane and in Graph 20 that active listings of distressed homes – those that either are REO (bank owned) or short sales, continue to decline. **However, REO sales and short sales together still accounted for 21.9 percent of all existing home sales in Hampton Roads in 2014.**

**The impact of REO and short sales on housing prices is almost uniformly negative. The median prices of REO existing home sales was only 49.5 percent of the median price of non-distressed sales in 2014, while the median price of short sale homes was 71.3 percent of the median price of non-distressed sales (see Table 7).**

These changes noted, the improvements that have occurred in the Hampton Roads housing market have not been vast. **This is a market that continues to limp toward recovery and, if anything, that recovery slowed a bit in 2014.**

The good news on the housing front is that homes in our region certainly are more affordable now than during the middle of the previous decade. In Table 8 we compute the average mortgage payment that an individual would have to make if he or she purchased a median-priced existing home, paid 1 percent in real estate taxes and had a prevailing 30-year mortgage

on the entire value of their home for each year. Note that the average mortgage rate for 2014 was 4.17 percent as opposed to 6.34 percent in 2007.

Meanwhile, the median monthly rent for a three-bedroom apartment in Hampton Roads has increased significantly since 2007, reflecting a tightening supply-and-demand situation for rental housing in our region. Table 8 reveals that the median monthly rent for a three-bedroom apartment in 2014 was \$1,562, which was \$438 per month more than the representative mortgage payment per month. A home purchase, then, was a superior choice versus renting for those whose credit and financial means enabled them to purchase a home.

Graph 21 expresses housing affordability in terms of the percentage of the median household income in our region that would be required if one were to purchase a home. **Viewed historically, buying a home in Hampton Roads now is almost as affordable as it has been for nearly 40 years.**

**TABLE 6**

**MEDIAN SALES PRICE OF EXISTING RESIDENTIAL HOMES IN HAMPTON ROADS, 2000-2015\***

Year	Median Price	Percentage Change Year to Year
2002	\$116,900	+7.3%
2003	\$130,000	<b>+11.2%</b>
2004	\$156,500	<b>+20.4%</b>
2005	\$192,000	<b>+22.7%</b>
2006	\$214,900	<b>+11.9%</b>
2007	<b>\$223,000</b>	<b>3.8%</b>
2008	\$219,000	<b>-1.8%</b>
2009	\$207,000	<b>-5.5%</b>
2010	\$203,900	<b>-1.5%</b>
2011	\$180,000	<b>-11.7%</b>
2012	<b>\$185,000</b>	<b>+2.78%</b>
2013	<b>\$190,000</b>	<b>+2.70%</b>
2014	<b>\$193,205</b>	<b>+1.70%</b>
2015*	<b>\$203,000</b>	<b>+6.84%*</b>

90% Increase from 2002-07

19% Decrease from 2007-11

Sources: Real Estate Information Network Inc. and the Old Dominion University Economic Forecasting Project. \*Data for 2015 are through July 2015 and are compared to median price (\$190,000) through July 2014.





**TABLE 7**

**MEDIAN PRICE OF EXISTING SHORT SALES, REOS AND NON-DISTRESSED RESIDENTIAL HOMES SOLD IN HAMPTON ROADS, 2006-2015\***

<b>Year</b>	<b>Non-Distressed Sales</b>	<b>Short Sales</b>	<b>Short Sales Price % Non-Distressed Price</b>	<b>REO Sales</b>	<b>REO Price % Non-Distressed Sales</b>
2006	\$214,900	\$230,000	107.0	\$ 82,500	38.4
2007	\$224,000	\$239,950	107.1	\$140,000	62.5
2008	\$220,000	\$215,000	97.7	\$160,500	73.0
2009	\$215,000	\$215,000	100.0	\$150,000	69.8
2010	\$220,000	\$208,000	94.6	\$133,000	60.5
2011	\$205,000	\$190,000	92.7	\$115,000	56.1
2012	\$208,000	\$167,250	80.4	\$110,000	52.9
2013	\$213,000	\$160,000	75.1	\$109,625	51.5
2014	\$214,000	\$152,580	71.3	\$106,000	49.5
2015*	\$221,450	\$152,950	69.1	\$110,000	51.9

Sources: Real Estate Information Network Inc. and the Old Dominion University Economic Forecasting Project. Information deemed reliable but not guaranteed. REOs represent bank-owned homes. \*Data for 2015 are through July 2015.

TABLE 8

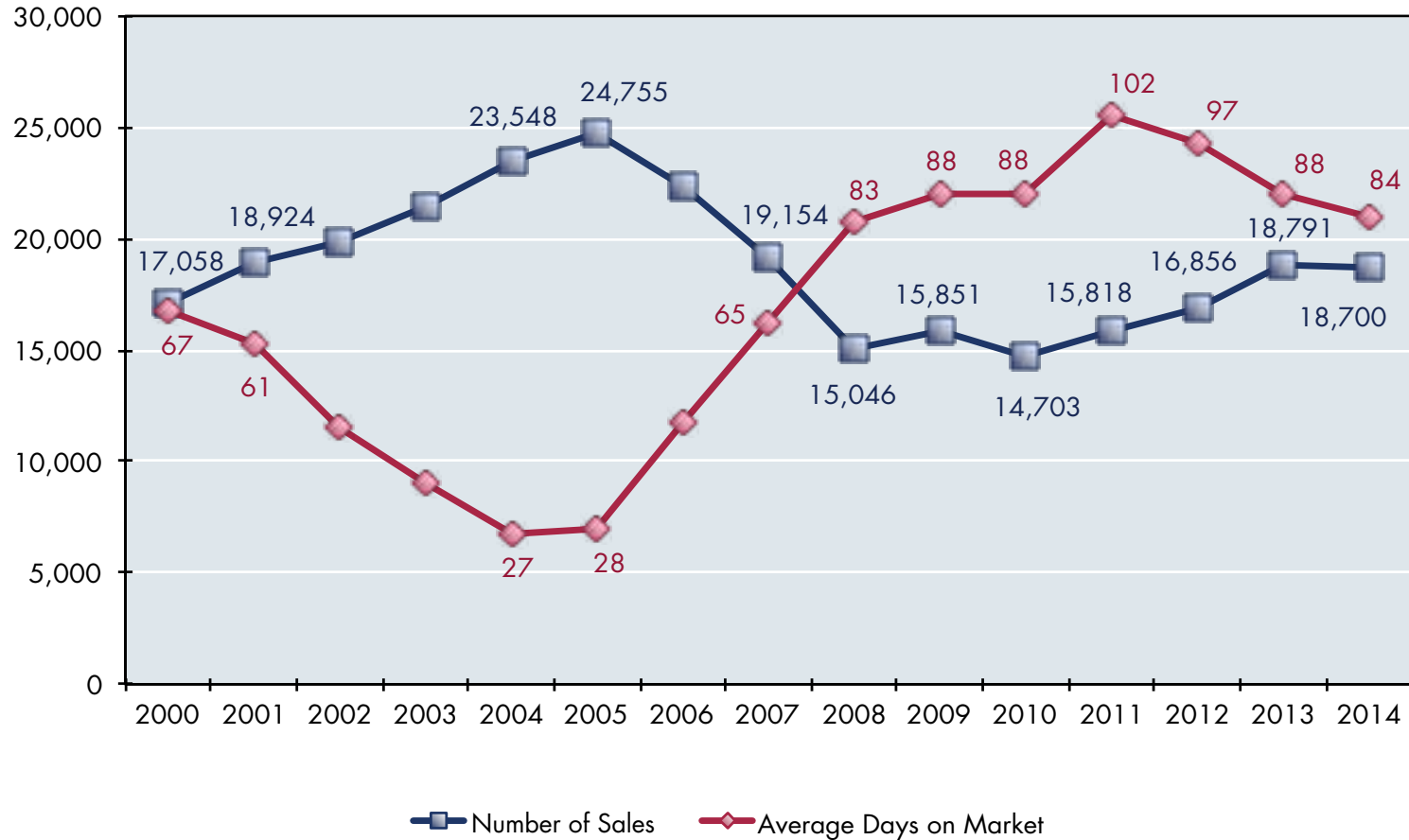
## ESTIMATED APARTMENT RENTAL AND PRINCIPAL, INTEREST AND TAXES FOR A HOUSE PAYMENT IN HAMPTON ROADS, 2001-2014

Year	Median Monthly Rent for a Three-Bedroom Apartment	PI&T Monthly for a Median-Priced House	Ratio of Monthly Rent to PI&T
2001	\$ 882	836	1.05
2002	911	861	1.06
2003	1,037	890	1.16
2004	1,044	1,073	0.97
2005	1,087	1,315	0.83
2006	1,118	1,533	0.73
2007	1,164	1,598	0.73
2008	1,247	1,507	0.83
2009	1,236	1,307	0.95
2010	<b>1,277</b>	<b>1,233</b>	<b>1.04</b>
2011	<b>1,319</b>	<b>1,071</b>	<b>1.23</b>
2012	<b>1,454</b>	<b>1,015</b>	<b>1.43</b>
2013	<b>1,570</b>	<b>1,080</b>	<b>1.45</b>
2014	<b>1,562</b>	<b>1,124</b>	<b>1.39</b>

Sources: HUD and the Old Dominion University Economic Forecasting Project. It is assumed that the real estate tax rate is 1 percent and the tax reduction received by homeowners would compensate for homeowners' insurance and maintenance expenditures.

**GRAPH 18**

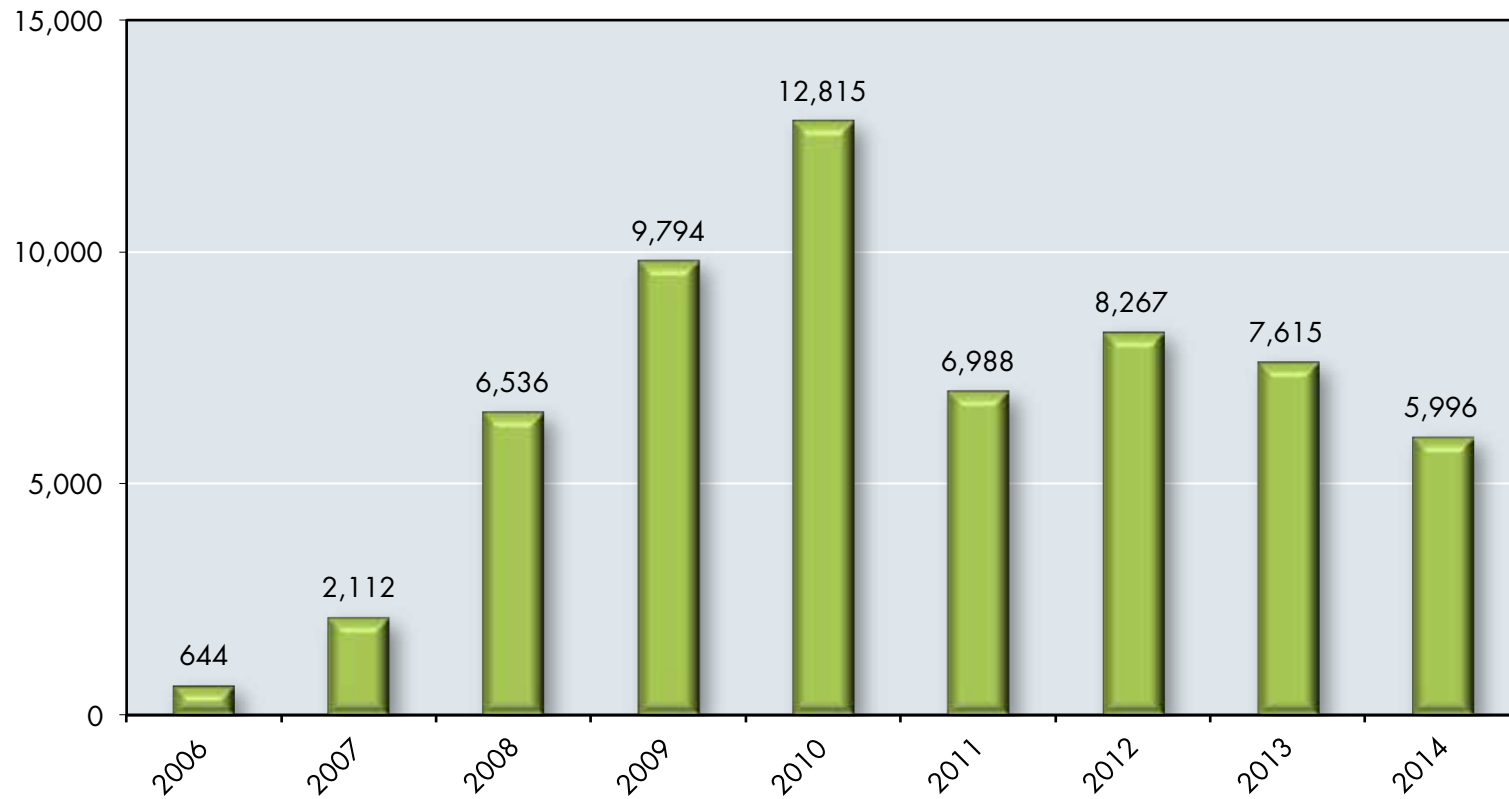
**EXISTING RESIDENTIAL HOMES SOLD AND AVERAGE DAYS ON THE MARKET IN HAMPTON ROADS, 2000-2014**



Sources: Real Estate Information Network Inc. and the Old Dominion University Economic Forecasting Project. Information deemed reliable but not guaranteed. Days on market is calculated from the date listed to the date under contract for existing homes sold.

**GRAPH 19**

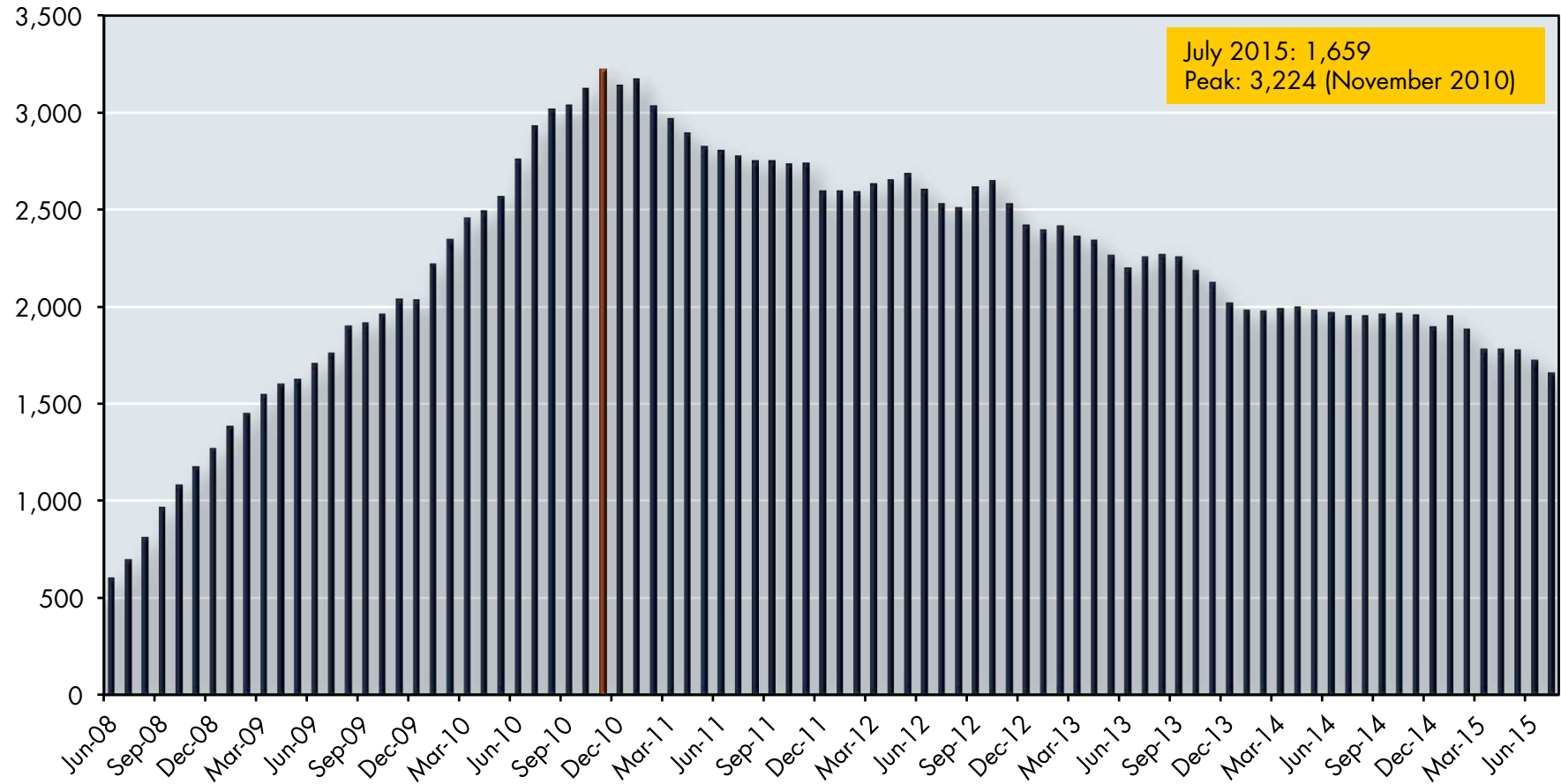
**HAMPTON ROADS RESIDENTIAL FORECLOSURE FILINGS, 2006-2014**



Sources: RealtyTrac and the Old Dominion University Economic Forecasting Project

**GRAPH 20**

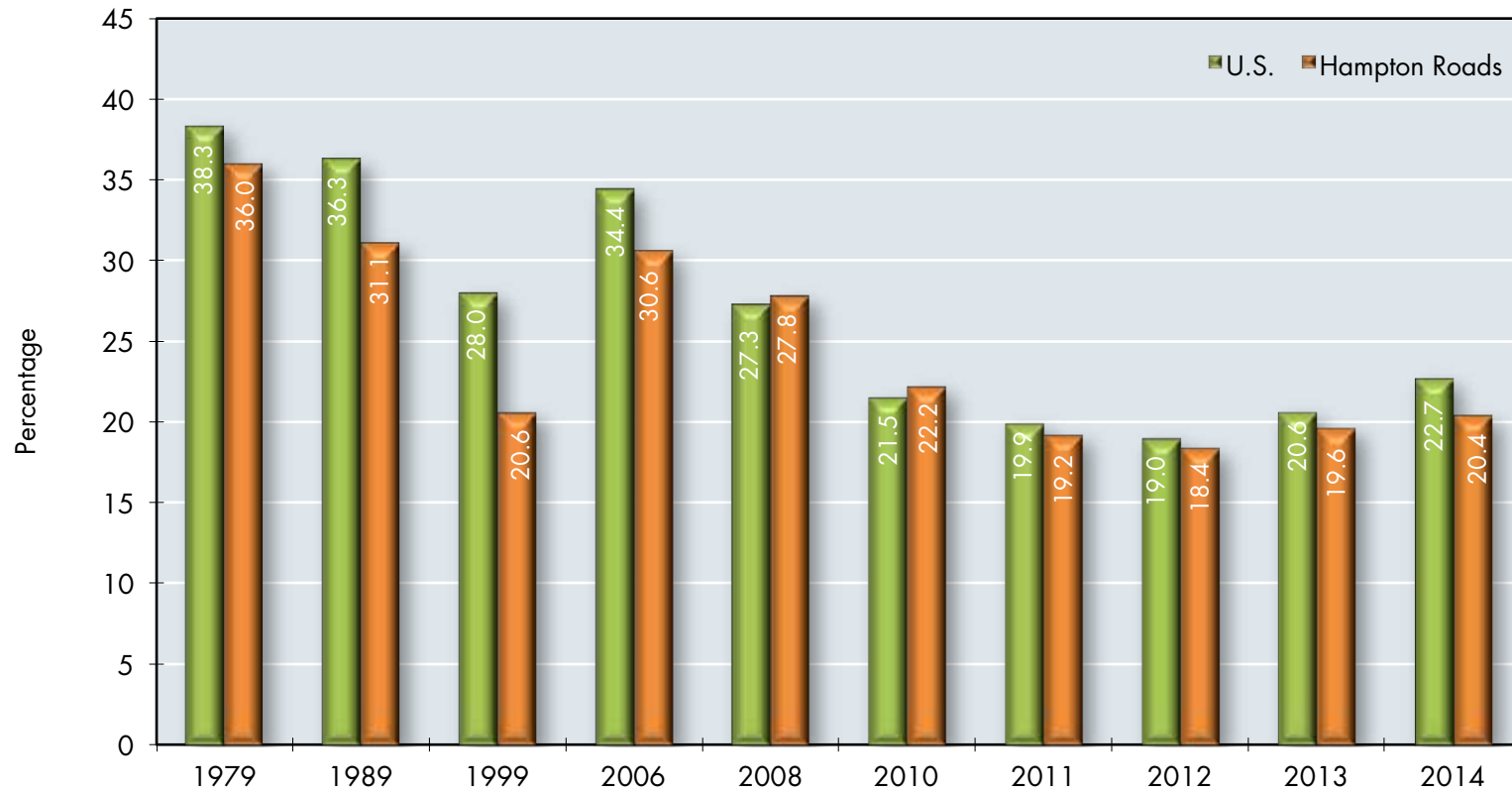
**NUMBER OF ACTIVE LISTINGS OF DISTRESSED HOMES (REO AND SHORT SALES) IN HAMPTON ROADS, JUNE 2008–JULY 2015**



Sources: Real Estate Information Network and the Old Dominion University Economic Forecasting Project

**GRAPH 21**

**HOUSING AFFORDABILITY: MONTHLY PAYMENT FOR A MEDIAN-PRICED RESALE HOUSE AS A PERCENTAGE OF MEDIAN HOUSEHOLD MONTHLY INCOME IN HAMPTON ROADS AND THE U.S., 1979-2014**



Source: Old Dominion University Economic Forecasting Project (assumes a 30-year mortgage rate of 4.17 percent for 2014)

## Summing It Up

Tables 9 and 10 summarize where we were in June 2014 compared to June 2015, economically speaking. Except for employment and the labor market, the percentage changes are notably positive. In general, we're better off now than we were last year at this time. For example, automobile registrations are up 7.43 percent over the previous year and the value of single-unit new housing permits is up 20.27 percent over 2014.

The problem child of the regional economy continues to be employment and job markets. The size of our labor force actually has declined marginally in recent months, as has total employment. Yes, our unemployment rate continues to decline, but we've noted that declining labor force participation seems to be an important cause.

The Port of Virginia continues to be a bright spot for our region and therefore we devote a complete chapter to it later in this report. We also zero in on the impact of changing defense spending on particular segments of our regional economy.





**TABLE 9****REGIONAL ECONOMIC PERFORMANCE THROUGH JUNE 2014 AND JUNE 2015: JOBS AND SALES**

	<b>YTD June 2014</b>	<b>YTD June 2015</b>	<b>% Change</b>
Civilian Labor Force	845,946	840,195	-0.68
Employment	796,498	794,700	-0.23
Unemployment	49,448	45,495	-7.99
Unemployment Rate	5.85%	5.41%	N/A
Civilian Nonfarm Jobs*	750,171	756,086	+0.79
Number of Jobs Added Since Previous December*	300	4,200	N/A
New Auto Registrations*	47,636	51,176	+7.43
Taxable Sales	\$10.06B	\$10.43B	+3.72

Source: Old Dominion University Economic Forecasting Project. \*Data shown here are for YTD July 2014 and YTD July 2015.

**TABLE 10****REGIONAL ECONOMIC PERFORMANCE THROUGH JUNE 2014 AND JUNE 2015: HOTELS, PORT AND HOUSING**

	<b>YTD June 2014</b>	<b>YTD June 2015</b>	<b>% Change</b>
Hotel Revenue*	\$414.88M	\$437.22M	+5.39
General Cargo Tonnage*	10.83M	11.99M	+10.71
TEU Containers*	1,344,425	1,479,704	+10.06
Number of 1-Unit Housing Permits	1,913	2,208	+15.42
Value of 1-Unit Housing Permits	\$393.31M	\$473.05M	+20.27
Number of Existing Homes Sold*	10,628	11,885	+11.83
Distressed Homes as a Percentage of All Existing Homes Sold*	23.35	19.76	N/A
Median Price of Existing Homes Sold*	\$190,000	\$203,000	+6.84

Source: Old Dominion University Economic Forecasting Project. \*Data shown here are for YTD July 2014 and YTD July 2015.

