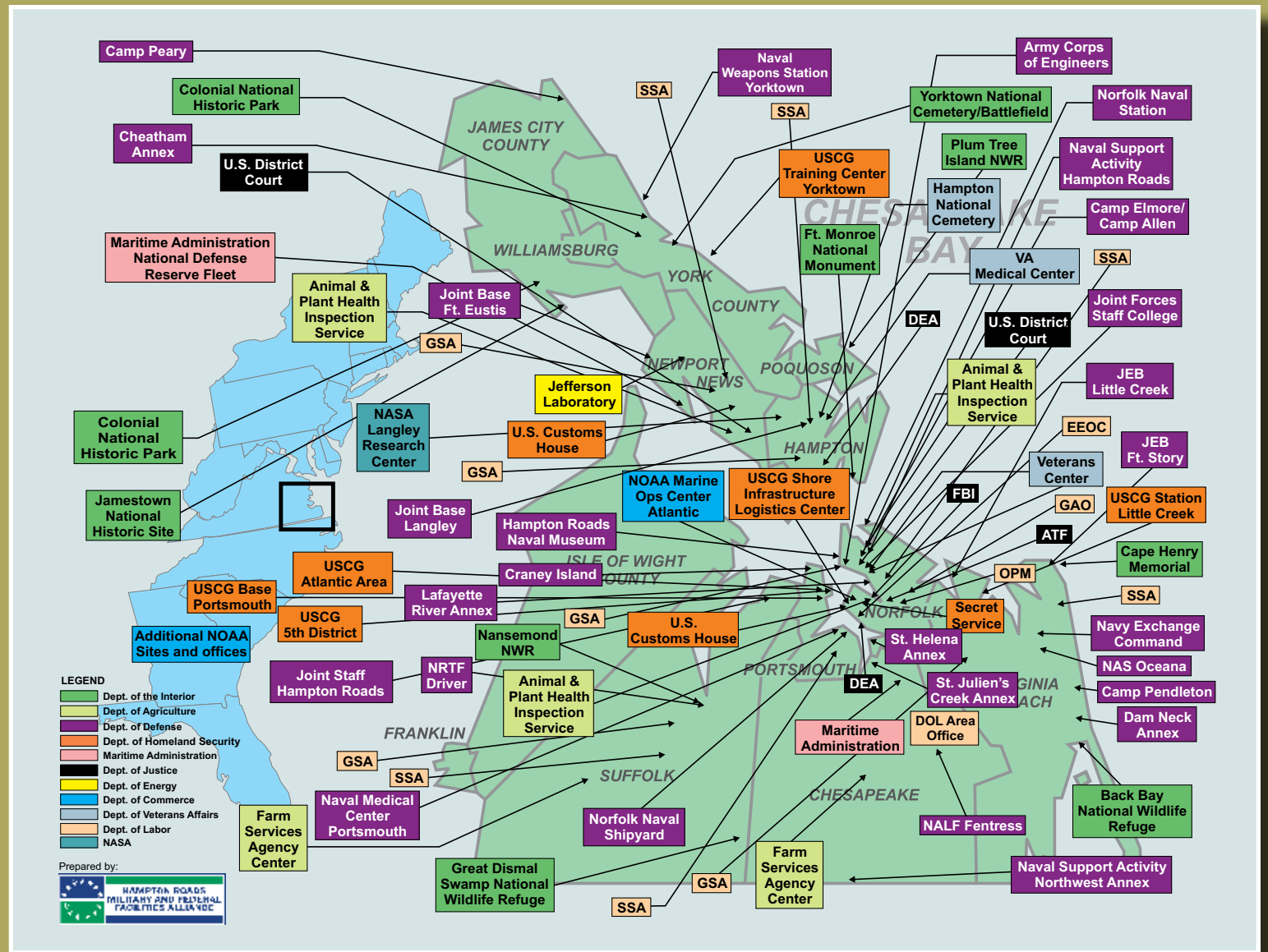




The State of the Region

HAMPTON ROADS 2012

REGIONAL STUDIES INSTITUTE | OLD DOMINION UNIVERSITY



Dear Reader:

This is Old Dominion University's 13th annual State of the Region report. While it represents the work of many people connected in various ways to the university, the report does not constitute an official viewpoint of Old Dominion, or its president, John R. Broderick. The State of the Region reports maintain the goal of stimulating thought and discussion that ultimately will make Hampton Roads an even better place to live. We are proud of our region's many successes, but realize it is possible to improve our performance. In order to do so, we must have accurate information about "where we are" and a sound understanding of the policy options available to us.

The 2012 report is divided into nine parts:

Gathering Steam: The Regional Economy Recovers (Slowly): We continue to do better than the nation, but our regional economic recovery has been slow. The port, regional tourism and residential housing have yet to regain the ground they lost during the recession and the outlook for defense spending is hazardous.

How Much Is Too Much? Comparing Income Inequality and the Cost of Living in Hampton Roads to New York City: Incomes are distributed more equally in Hampton Roads than nationally and certainly more so than in New York City. At least 80 percent of households in Hampton Roads are better off in economic terms than the comparable 80 percent in New York City.

Attorneys and Law Firms in Hampton Roads: The national market for attorneys is glutted and this has resulted in stagnant salaries, unemployed attorneys, falling law school enrollments, and rising dissatisfaction of attorneys with their lot in life. The situation in Hampton Roads does not differ substantially.

Do We Have Enough Physicians in Hampton Roads? Hampton Roads will require approximately 1,000 additional physicians in 2025. If one-quarter of Eastern Virginia Medical School graduates remain in the region, then by 2025, EVMS will supply 504 of the needed physicians. The resulting shortage will affect physician availability, quality and pricing.

Does the Commonwealth Balance Its Budget on the Backs of Local Governments? We examine the Commonwealth's fiscal practices and conclude that the answer to this question often is yes.

A Powerful Economic Engine: The Impact of Eastern Virginia Medical School: The economic impact of EVMS approximates \$800 million annually and at a time when other economic engines are sputtering, the medical school has become an increasingly important economic force in our region.

K-12 Private Education: Southside Hampton Roads: Eighty-six private (independent) K-12 schools exist in Southside Hampton Roads. Commonwealth regulation of their activities is minimal (often virtually zero) and hence there is great variation in their goals, operations and transparency.

Homeschooling: Our Fastest-Growing Alternative in K-12 Education: 1.6 percent of all K-12 students in Hampton Roads are homeschooled. While homeschooling families ordinarily must satisfy a stated set of standards, they can claim a religious exemption and this essentially obviates those standards. Hence, there is great variation in the nature and substance of homeschooling in our region.

Modeling and Simulation in Hampton Roads: The demise of JFCOM has reduced the size of, but hardly eliminated, modeling and simulation in our region. Old Dominion University's VMASC continues to show the way and now is heavily involved in medical simulation work.

Old Dominion University continues to provide support for this report. However, it would not appear without the vital backing of the private donors whose names appear below. They believe in Hampton Roads and in the power of rational discussion to improve our circumstances, but are not responsible for the views expressed in the report.

The Aimee and Frank Batten Jr. Foundation	Hampton Roads Chamber of Commerce
R. Bruce Bradley	Kaufman and Canoles
Ramon W. Breeden Jr.	Thomas Lyons
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The following individuals were instrumental in the research, writing, editing, design and dissemination of the report:

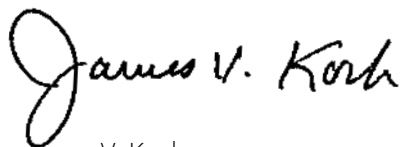
Vinod Agarwal	Susan Hughes	Janet Molinaro	Gary Wagner
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Vicky Curtis	Feng Lian	John Sokolowski	Gilbert Yochum
Steve Daniel	Sharon Lomax	Ayush Toolsidass	Michael Zugelder

Special recognition is due Vinod Agarwal and Gilbert Yochum of the Old Dominion University Economic Forecasting Project, which Professor Agarwal now directs. Their penetrating analyses of the regional and Commonwealth economies are by consensus the baseline by which numerous economic activities are measured.

My hope is that you, the reader, will be stimulated by the report and will use it as a vehicle to promote productive discussions about our future. Please contact me at jkoch@odu.edu or 757-683-3458 should you have questions.

All 13 of the State of the Region reports may be found at www.odu.edu/forecasting and www.jamesvkoch.com. Single paper copies may be purchased for \$25.

Sincerely,



James V. Koch

Board of Visitors Professor of Economics
and President Emeritus

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Gathering Steam: The Regional Economy Recovers (Slowly)



GATHERING STEAM: THE REGIONAL ECONOMY RECOVERS (SLOWLY)

Ah, can you remember the good old days – the first half of the last decade when our real (inflation-adjusted) regional economic growth averaged slightly more than 3.8 percent annually? The years 2000 to 2006 were among the best in our modern economic history. Since then, however, it has been a different story. As Table 1 reveals, after 2006, the Hampton Roads economy began to grow much more slowly and, including our anticipated 2012 growth, has averaged only .9 percent annually since 2007.

TABLE 1

ESTIMATED HAMPTON ROADS GROSS REGIONAL PRODUCT (GRP), NOMINAL AND REAL (PRICE ADJUSTED), 2000-2012

Year	Nominal GRP Billions\$	Real GRP (2005=100) Billions\$	Real GRP Growth Rate Percent
2000	50.33	56.81	4.80
2001	52.49	57.94	1.99
2002	55.73	60.44	4.32
2003	59.27	62.99	4.21
2004	63.80	65.91	4.64
2005	67.59	67.59	2.55
2006	72.71	70.45	4.23
2007	76.32	71.78	1.88
2008	78.00	71.82	0.07
2009	78.10	71.20	-0.87
2010	79.84	71.93	1.03
2011	82.36	72.88	1.32
2012	84.72	74.32	1.97

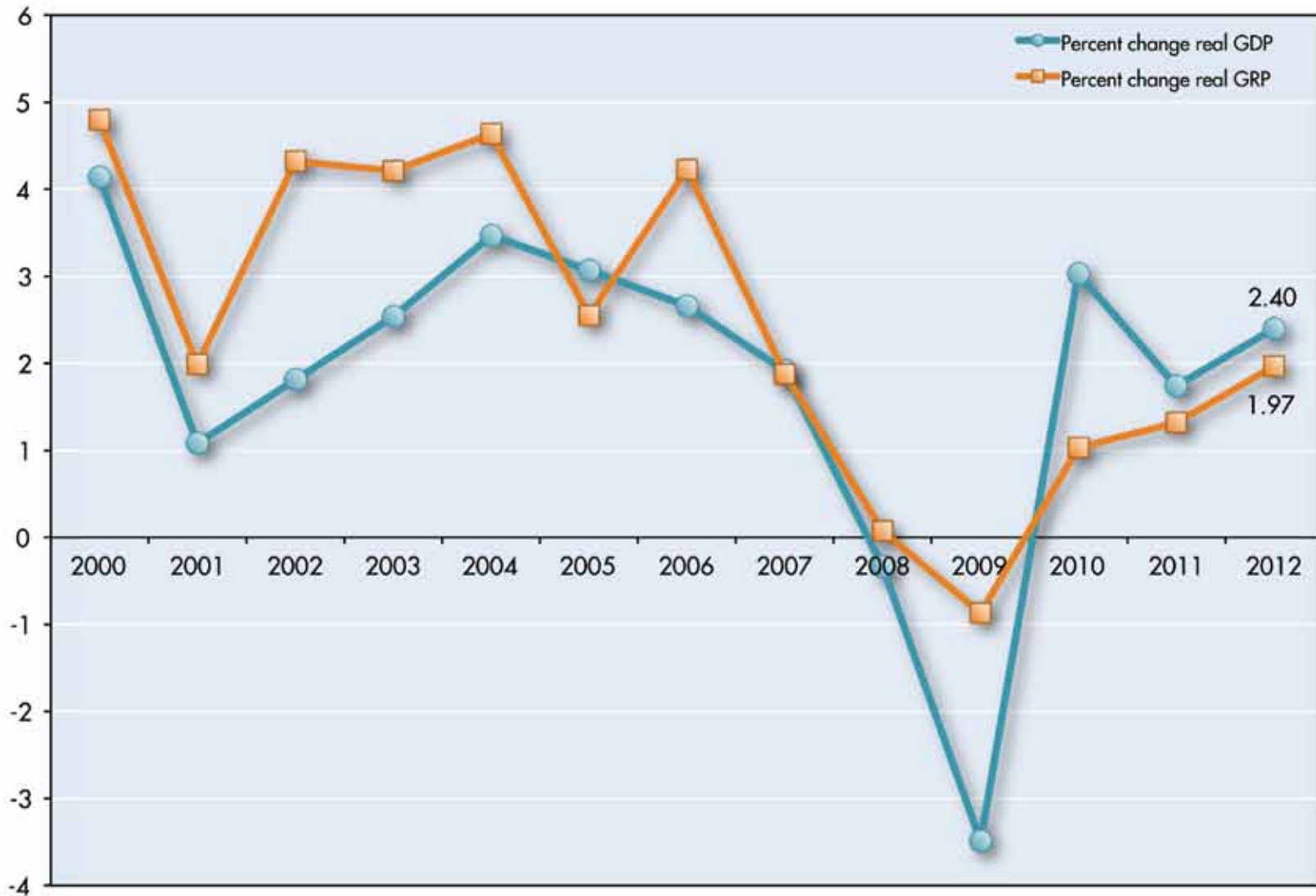
Source: Old Dominion University Economic Forecasting Project. Data incorporate U.S. Department of Commerce personal income revisions through May 2012.

The good news is that our anticipated 2012 real economic growth rate of 1.97 percent is the highest we will have experienced since 2006, and we are seeing a modest acceleration in our economic activity. Despite having to overcome several major economic setbacks, such as the closing of the Joint Forces Command and actual or planned cuts in defense spending, the economy shows signs of emerging from its economic funk. Per capita income is growing, there are indications that the regional housing market finally has bottomed out, and national economic recovery is providing the impetus for increased consumer spending and business investment in Hampton Roads.

To be sure, several ominous storm clouds remain on the horizon and, as Graph 1 illustrates, our anticipated 2012 real economic growth rate of 1.97 percent still will trail the U.S. growth rate (2.4 percent) by .43 percent. Reality is that most of the previously scheduled cuts in defense spending in our region have yet to be implemented and they will hit us primarily throughout the rest of this decade. Unless Congress is able reach agreement on major budget deficit issues, across-the-board budget cuts ("sequestration") will be invoked automatically and defense spending nationally will decline more than \$500 billion in addition to the \$487 billion in cuts already scheduled for this decade. This is a potentially disastrous scenario for the Hampton Roads economy, but a possible solution is on the horizon. Timely action by Congress after the November 2012 election to deal meaningfully with the nation's chronic budget deficits will avert as much as three-quarters or more of the sequestration reduction and dramatically reduce the negative impact of declining defense spending on Hampton Roads. We will have more to say about the size of this potential problem in a section below.

GRAPH 1

RATE OF GROWTH OF GDP (U.S.) AND GRP (HAMPTON ROADS)



Source: Old Dominion University Economic Forecasting Project

Perhaps the greatest uncertainty facing us immediately, however, is the slowdown of the world economy, heavily influenced by economic and financial problems in Europe. There are those who believe that what happens in countries such as Greece and Spain has little impact on us in Hampton Roads, but they are misguided. In 2011, the United States exported \$2.66 trillion of goods and services to other countries. Approximately one of every six dollars of economic activity in the American economy is directly tied to our international trade activities.

Here in Hampton Roads, the Port of Virginia reports that the dollar value of its exports in 2011 was \$23.98 billion. While much of this traffic was simply being handled in our port and “passing through,” the moral to the story is obvious – if the economies of other countries contract, then those countries will stop buying as much from us and we will feel the impact immediately in the way of reduced export sales and diminished activity at the Port of Virginia.

Further, faced with uncertain economic prospects and possible bank failures, many people around the globe have decided that the United States is the equivalent of the least sick person in the world economic hospital and therefore have been transferring large sums of money into our country, often to purchase U.S. government securities. The United States has become a safe haven for many world savers and investors. This sounds good, but is one of the reasons why the value of the U.S. dollar has climbed relative to other currencies, such as the euro. The net effect of a rising dollar has been to make the prices of our exported goods and services more expensive to any foreigners who might become our customers. If world economic problems continue, then it is likely that the value of the dollar will resume its upward climb and this will make it more difficult for U.S. businesses to export goods and services. (On the other hand, the strengthening dollar will make their exports to us less expensive, and that is a good thing.)

One more possible adverse impact of European economic problems is worthy of mention. If our financial institutions have loaned European entities money that will not be paid back, then we could feel serious ripples from these overseas problems in our own financial system. The balance sheets of our financial institutions will deteriorate and they will have to scramble to meet their own obligations; they will be less likely to have loanable funds available for

businesses and consumers. The specter of another “too big to fail” bankruptcy similar to that of Lehman Brothers in 2008 cannot be ruled out in such a scenario.

A Closer Look At Our Regional Economic Situation

In this section, we will look at what’s been happening to income and jobs in Hampton Roads and what the future portends. We’ll then focus our attention on the “Big Three” in our regional economy: defense, the Port of Virginia and tourism/hotels. We’ll finish by examining the regional housing market.

INCOMES AND JOBS

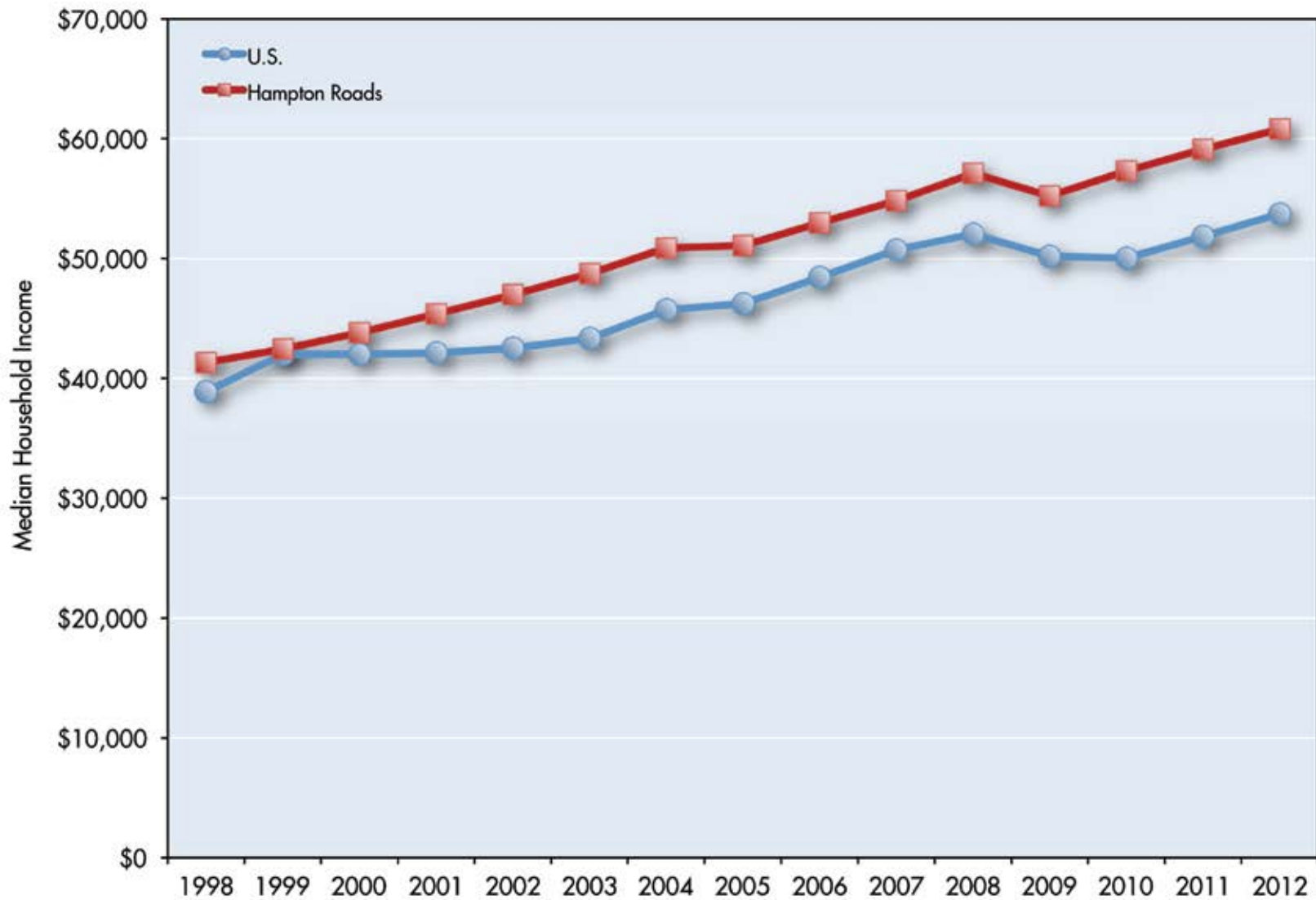
Graph 2 reveals that median (50th percentile) household income in Hampton Roads continues to be higher than that of the nation as a whole. Interestingly, the Great Recession widened the gap between Hampton Roads and the United States because we did not experience as deep an economic slowdown as the rest of the country. We have defense spending to thank for this.

Nevertheless, as Graph 3 demonstrates, increased household income has not always translated into increased jobs. In 2007, 775,300 people in our region were employed; even with economic recovery, we anticipate that this number will be only 743,400 in 2012. Thus, we still will be short approximately 32,000 jobs. This is a sobering reflection of our “jobless recovery” in Hampton Roads.

There is disagreement among economic analysts as to the reason why this economic recovery has not created as many new jobs as hoped. Some argue that “aggregate demand” is too small; that is, households and businesses simply don’t have enough spending power. Their solution is to introduce additional economic stimulus in the form of increased federal spending and more tax cuts.

GRAPH 2

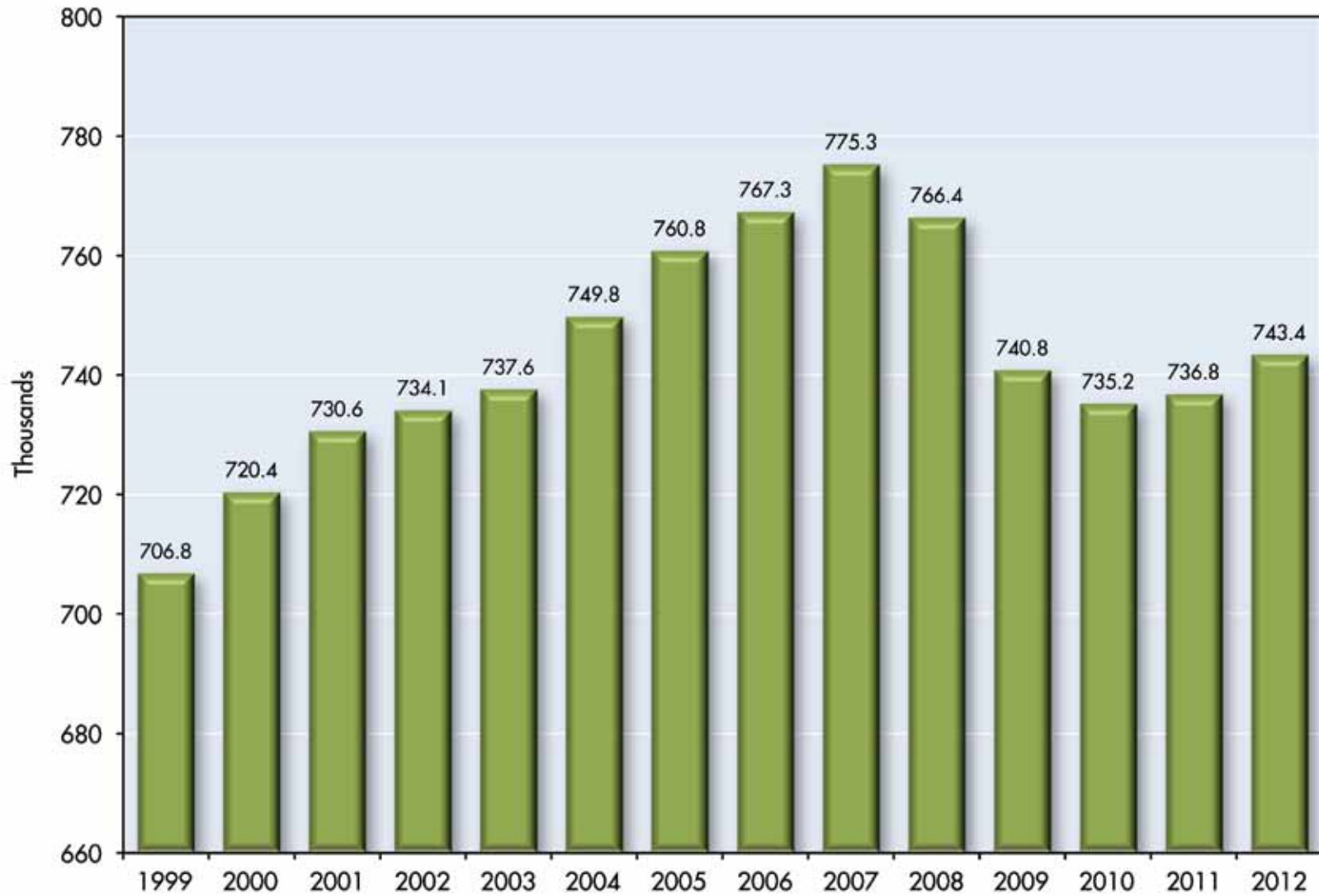
COMPARISON OF MEDIAN HOUSEHOLD INCOME: HAMPTON ROADS AND THE U.S., 1998-2012



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

GRAPH 3

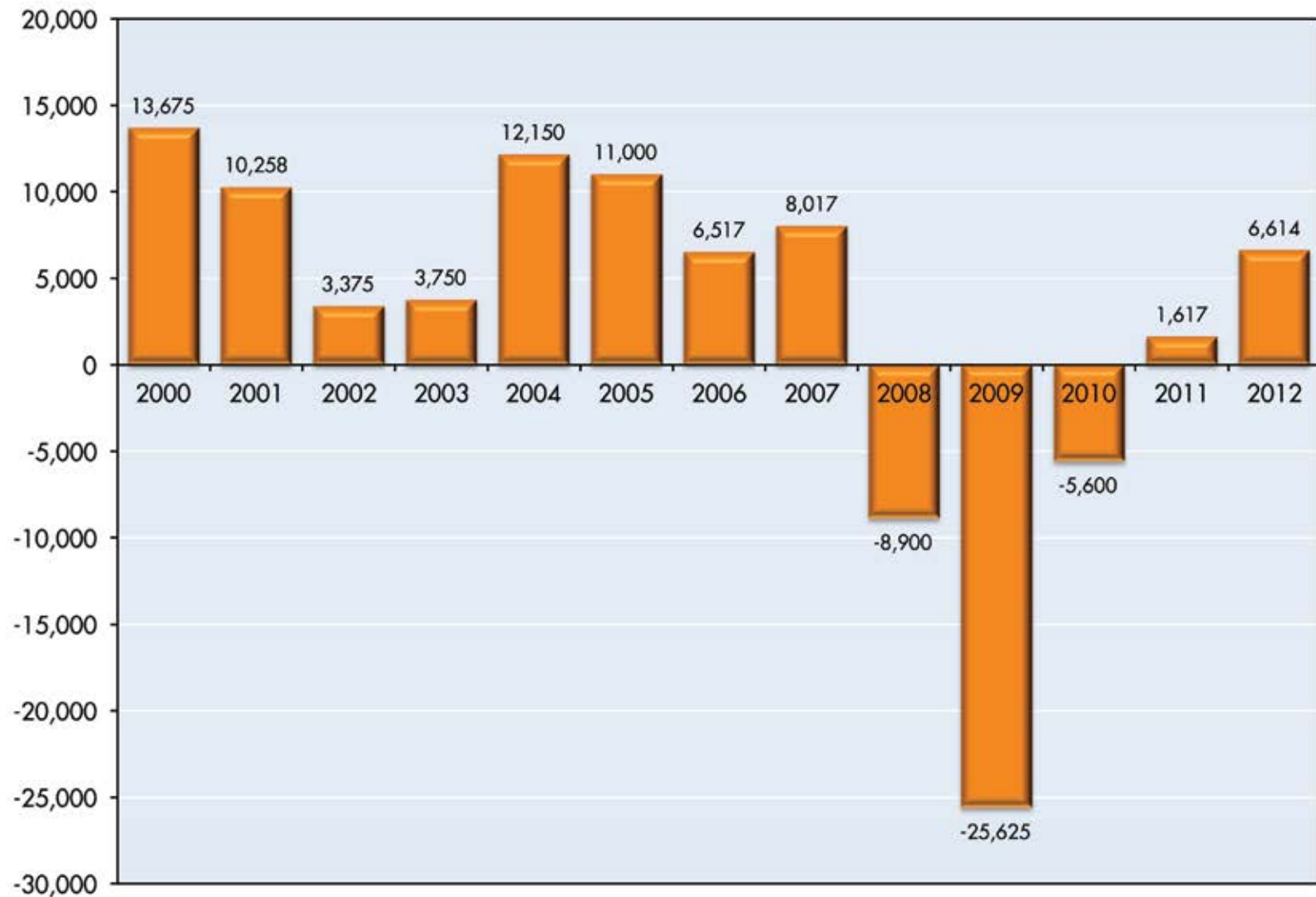
CIVILIAN EMPLOYMENT (JOBS) IN HAMPTON ROADS: 1999-2012



Sources: U.S. Department of Labor CES data and the Old Dominion University Economic Forecasting Project

GRAPH 4

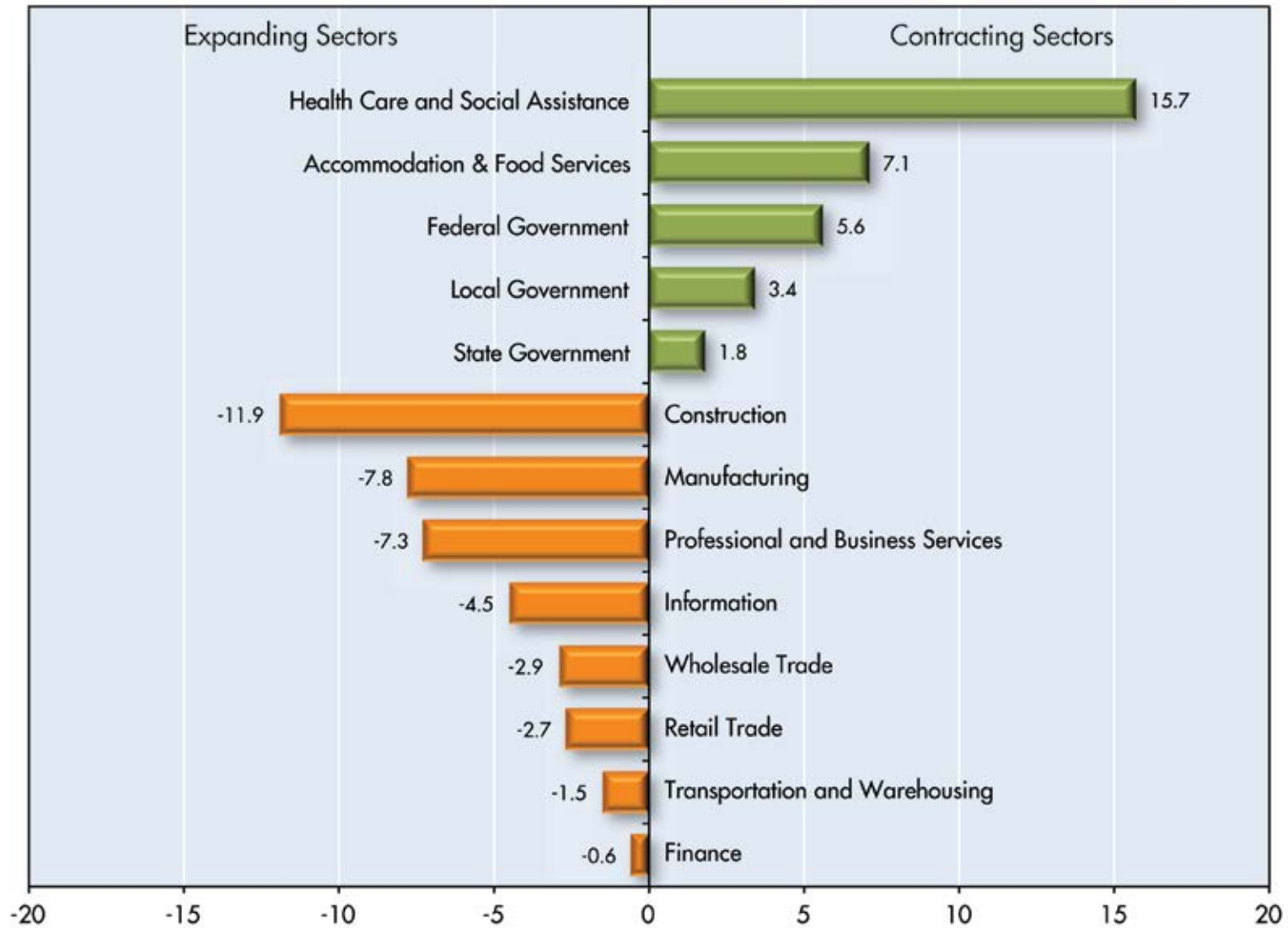
NET NEW CIVILIAN WAGE AND SALARY JOBS CREATED IN HAMPTON ROADS (2000-2012)



Sources: U.S. Department of Labor and the Old Dominion University Economic Forecasting Project

GRAPH 5

JOB GAINS AND LOSSES (THOUSANDS) IN HAMPTON ROADS, 2003-2011



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

Other analysts assert that the economic impact of the federal stimulus thus far has been disappointingly small and that the huge U.S. government deficits that have accompanied the stimulus and anti-business rhetoric have created damaging uncertainty in the minds of businesses. Hence, they are reluctant to hire new employees. The Wall Street Journal reported that S&P 500 firms' cash holdings in mid-2012 exceeded \$1 trillion, up from \$600 billion in 2006 ("Blame Fear, Not Greed, as Firms Hoard Cash," July 29, 2012). This, the WSJ reporter argued, was due to the great uncertainty they have about future economic developments.

Another explanation of the jobless nature of our recovery focuses on "structural unemployment" – the notion that there are jobs available, but either the unemployed aren't qualified to fill those positions, or they aren't located where the jobs are. Exponents of this view cite complaints by manufacturers that they cannot find skilled workers capable of operating complex equipment. Structural unemployment advocates also note that the rate of unemployment in energy-booming North Dakota was only 3 percent in May 2012, while it was 11.6 percent in Nevada and 8.2 percent in the United States. They believe that some state and federal policies, in addition to the difficulties in housing markets, have served to anchor prospective workers in locations where there are few jobs, and that a way to change this is to produce financial incentives for prospective workers to move where the jobs actually are.

It's beyond the scope of the State of the Region report to decide this issue. What we can point out is that job creation in Hampton Roads has been slow (see Graph 4) and that between 2003 and 2011, many different sectors of our regional economy lost jobs (see Graph 5). In general, health care and government added jobs, while construction, manufacturing, and wholesale and retail trade lost jobs.

How has Hampton Roads performed in job creation compared to other metropolitan regions? Our record is mixed, as Table 2 indicates. **Between 2003 and 2010, we lost jobs, even though Charlotte, N.C., Jacksonville, Fla., Raleigh-Durham, N.C., Richmond and the Commonwealth of Virginia all gained jobs. Over this time period, we performed slightly worse than the United States**

TABLE 2
COMPARING JOB GAINS AND LOSSES IN HAMPTON ROADS
TO OTHER REGIONS AND THE U.S., 2003-2010

AREA	2003-07	2007-10	2003-2010
Hampton Roads	37.7 (+5.11%)	-40.1 (-5.17%)	-2.4 (-0.33%)
Charlotte	96.0 (+12.55%)	-53.7 (-6.24%)	42.3 (+5.53%)
Jacksonville	70.7 (+12.55%)	-50.8 (-8.01%)	19.9 (+3.53%)
Raleigh-Durham	116.1 (+16.68%)	-43.0 (-5.29%)	73.1 (+10.50%)
Richmond	45.4 (+7.72%)	-30.9 (-4.88%)	14.5 (+2.47%)
U.S.	7,599.0 (+5.85%)	-7,724.0 (-5.61%)	-125.0 (-0.10%)
Virginia	263.9 (+7.55%)	-123.3 (-3.28%)	140.6 (+4.02%)

Sources: U.S. Department of Labor CES seasonally unadjusted data and the Old Dominion University Economic Forecasting Project

as a whole. We lost .33 percent of our total jobs, while the country lost .10 percent of its total jobs.

On the other hand, if we focus on 2007 to 2010, although we did not perform as well as Virginia in job retention, we did better than most of the other metropolitan regions. Thus, our employment expanded more modestly in the first part of the previous decade than most of the other metropolitan regions, but then in the latter part of the decade we also contracted more modestly than they did after the Great Recession.

Despite the loss of jobs in our region over the past decade, as Table 3 discloses, average weekly wages in Hampton Roads rose in every occupational segment between 2003 and 2011. This was true even in occupations that lost many jobs. To wit, one of the heaviest job-losing occupations was construction,



TABLE 3

AVERAGE PRIVATE-SECTOR WEEKLY WAGES IN SELECTED INDUSTRIES IN HAMPTON ROADS: 2003 AND 2011

INDUSTRY	4th Quarter 2003	4th Quarter 2011	Change
Construction	\$709	\$930	\$221 (+31.2%)
Manufacturing	\$908	\$1,093	\$185 (+20.4%)
Wholesale Trade	\$947	\$1,129	\$182 (+19.2%)
Retail Trade	\$405	\$452	\$47 (+11.6%)
Transportation and Warehousing	\$790*	\$1,012	\$222 (+28.1%)
Information	\$795*	\$1,001	\$206 (+25.9%)
Finance and Insurance	\$867	\$1,210	\$343 (+39.6%)
Professional and Business Services	\$1,075	\$1,374	\$299 (+27.8%)
Health Care and Social Assistance	\$696*	\$841	\$145 +(20.8%)
Accommodation and Food Services	\$242	\$294	\$52 (+21.4%)

Sources: U.S. Department of Labor Quarterly Census of Employment and Wages in Private Sector and the Old Dominion University Economic Forecasting Project. Wage data for the Transportation and Warehousing and Information industries are second quarter 2005. Data for Health Care and Social Assistance are first quarter 2007.

but average weekly wages climbed 31.2 percent during this time period and this was 9 percent faster than the consumer price index, or about 1 percent per year. While the major influence on construction employment clearly is overall economic prosperity, this generous increase in wage rates could not have helped the employment of construction workers.

One of the keys to the economic prosperity of Hampton Roads is defense spending, which generates attractive jobs both for active-duty military and civilians. **Table 4 reports that between 2001 and 2010, the**

TABLE 4

**ESTIMATED AVERAGE TOTAL COMPENSATION
(WAGES, SALARIES AND FRINGE BENEFITS)
SELECTED CATEGORIES (2001 TO 2010)**

	Earnings in 2001	Earnings in 2010	Percent Increase
Hampton Roads Military	\$56,811	\$109,766	93.2%
Hampton Roads Federal Civilian Govt. Employees	\$70,742	\$101,018	42.8%
Hampton Roads State and Local Govt. Employees	\$38,730	\$52,924	36.7%
Hampton Roads Private Sector	\$32,988	\$41,917	27.1%
U.S. Private Sector	\$41,103	\$49,626	20.7%
Sources: U.S. Bureau of Economic Analysis (BEA) and the Old Dominion University Economic Forecasting Project. * BEA refers to compensation as earnings.			

average total compensation (including fringe benefits) of military personnel in Hampton Roads rose 93.2 percent – well above the 42.8 percent growth in the compensation of federal government civilian employees, the 36.7 percent growth for state and local government employees, and the 27.1 percent growth for private-sector employees.

The United States does not have a military draft and therefore the Department of Defense (DOD) must offer compensation packages sufficient to attract and retain the personnel it requires, both military and civilian. Increased compensation levels over the past decade have made the DOD and military service much more attractive economic options than previously, though there are strong signs now that large annual increases in DOD-related compensation are over. In

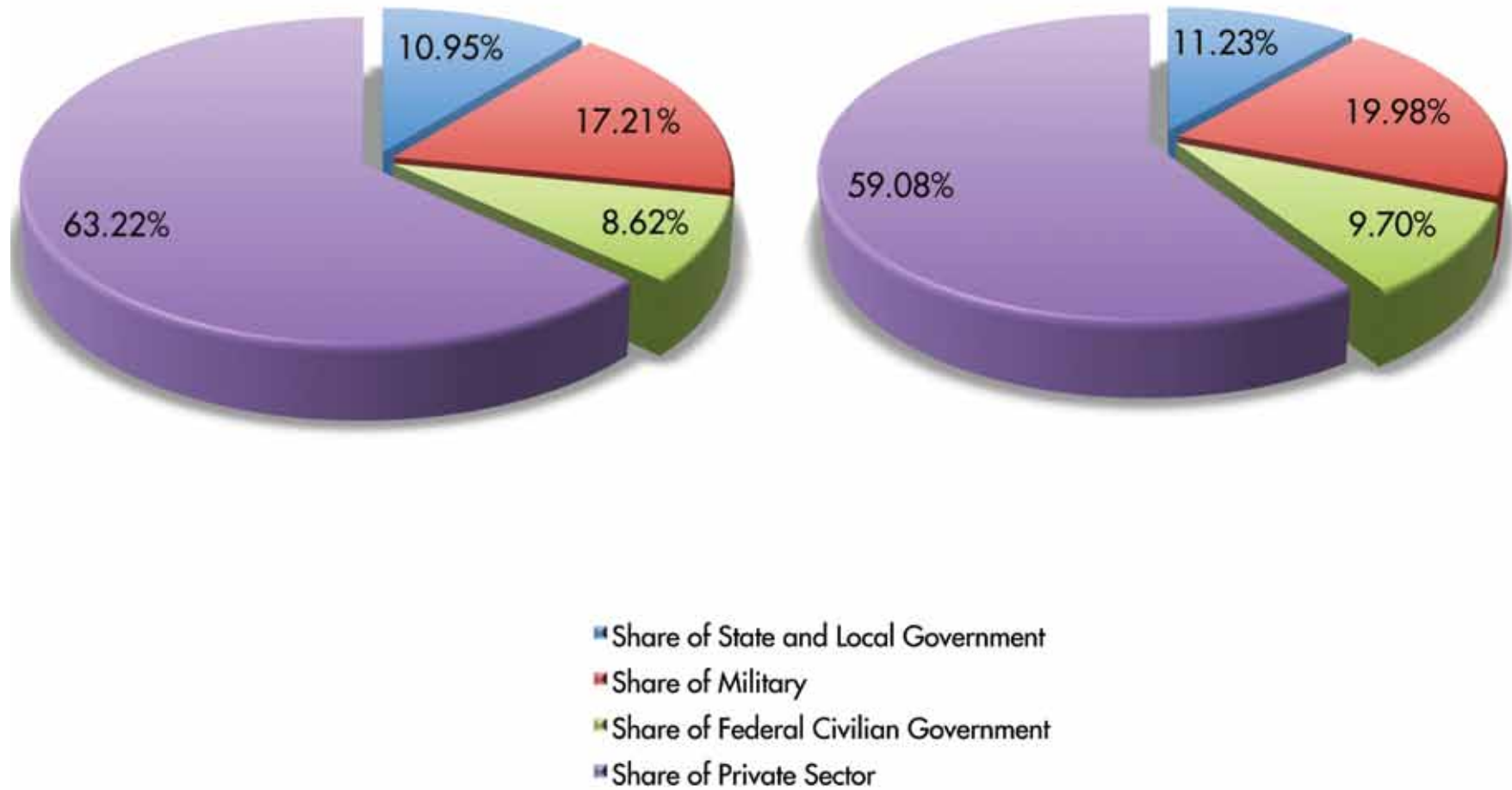
fact, the DOD will be shedding personnel in coming years and thus its need for additional compensation incentives likely will decline.

It is important to note that even while military compensation rose more than 93 percent over the past decade, the actual number of active-duty military personnel in the region fell by about 10 percent. Thus, we have witnessed a smaller number of people being compensated at much higher levels. The net effect has been to provide a powerful economic stimulus to our region, so much so that the share of compensation paid to private-sector employees in Hampton Roads fell from 63.22 percent to 59.08 percent over the decade (see Graph 6). There is no way to sugarcoat this finding – the private sector became proportionately less important, economically speaking, in Hampton Roads over the past decade. That is, our economy became less diversified between 2001 and 2010.

One of the ironies connected to the relatively slow job creation in the region has been that almost paradoxically, our rate of unemployment has been below that of the entire country for many years. Graph 7 illustrates this for 2000 to 2012. On occasion, we've also enjoyed an unemployment rate below that of Virginia. Currently, however, our regional unemployment rate is 6.7 percent versus 6.0 percent for the Commonwealth (June 2012 data). Regardless, as Graph 8 reveals, our regional employment trend is positive. The number of monthly initial unemployment claims has been falling steadily since topping out in May 2010.

GRAPH 6

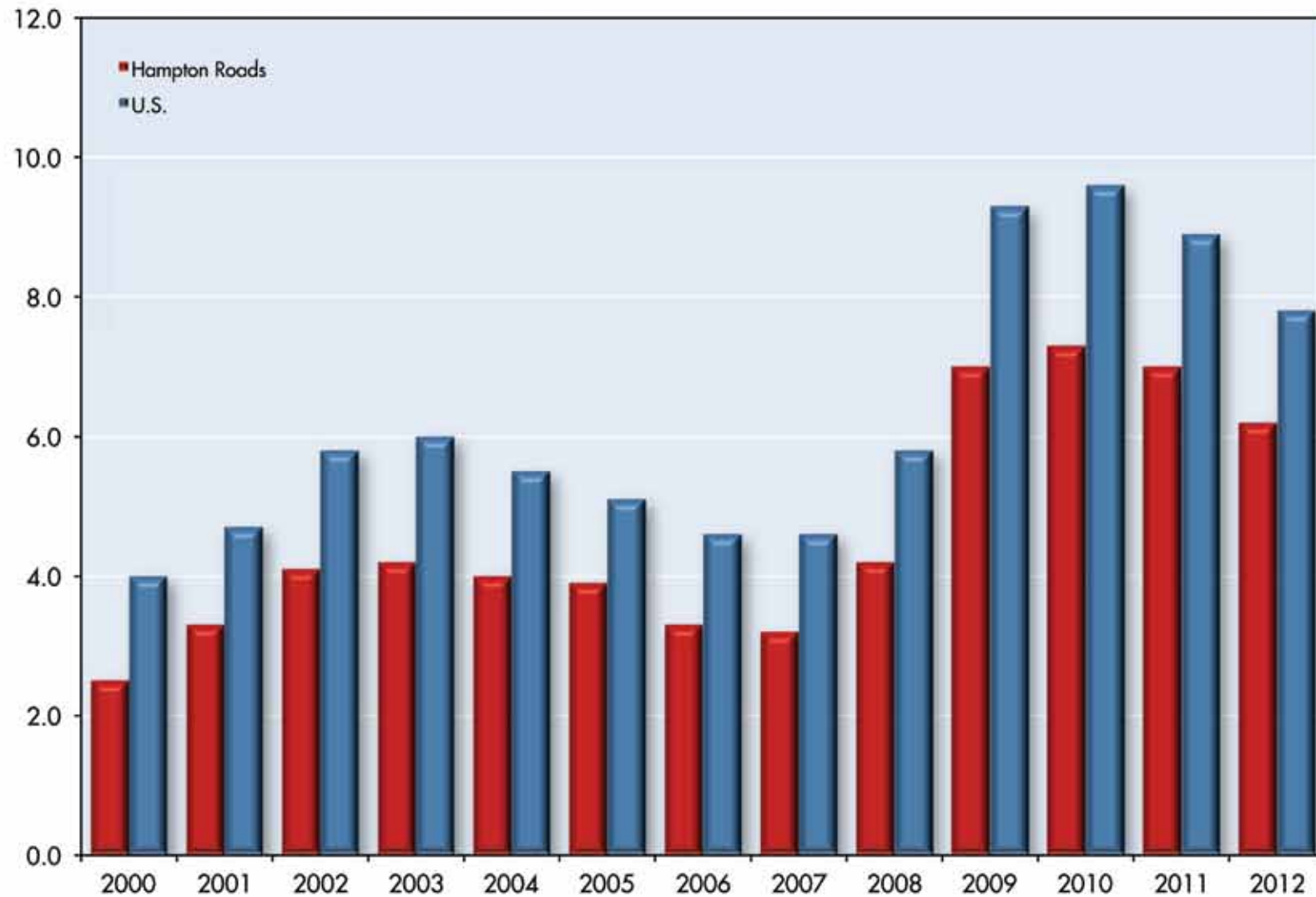
SHARES OF SELECTED SECTORS MEASURED BY TOTAL COMPENSATION IN HAMPTON ROADS: 2001 AND 2010



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

GRAPH 7

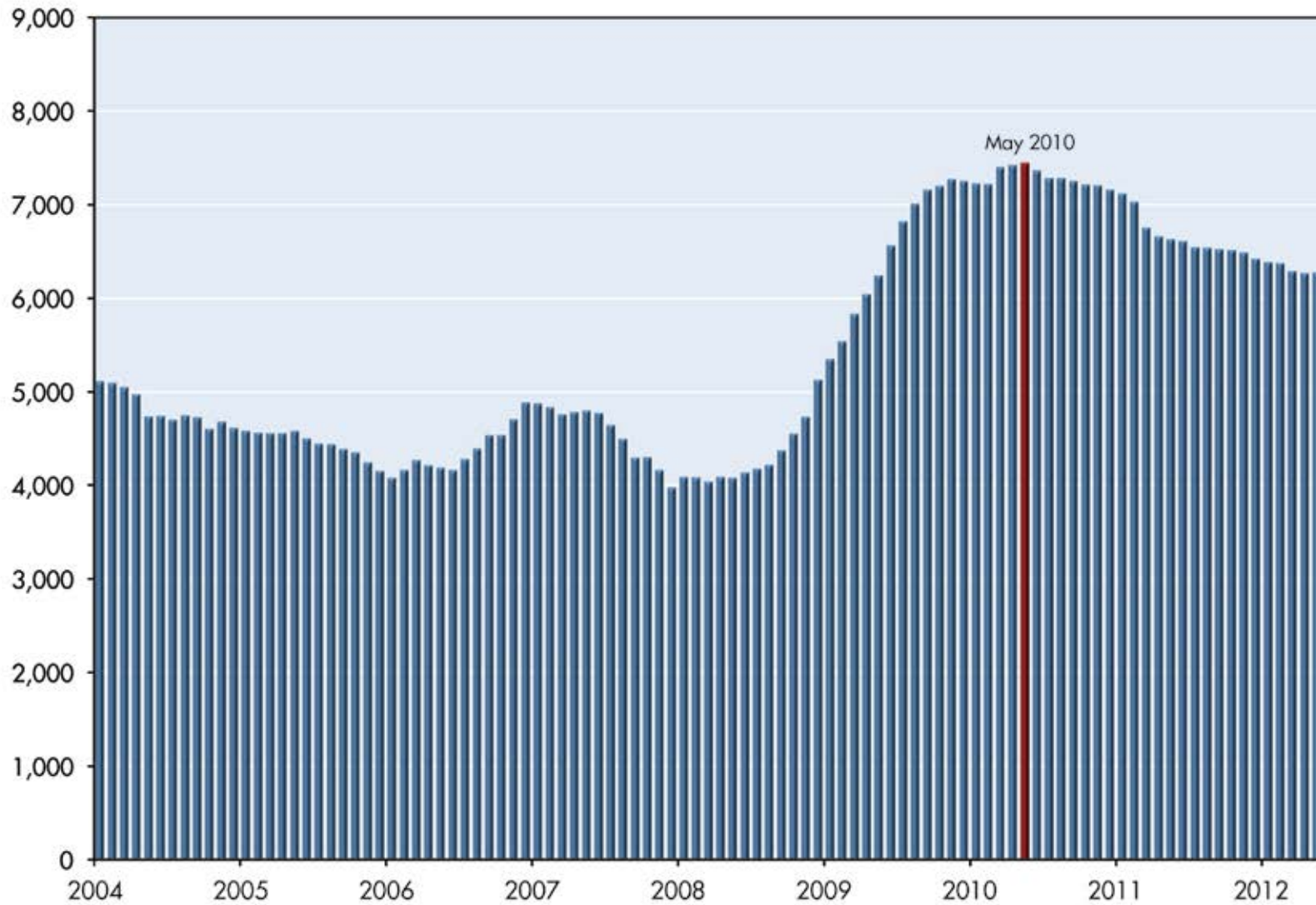
HAMPTON ROADS AND U.S. ANNUAL UNEMPLOYMENT RATE: 2000-2012



Sources: U.S. Department of Labor and the Old Dominion University Economic Forecasting Project (not seasonally adjusted)

GRAPH 8

**MONTHLY INITIAL UNEMPLOYMENT CLAIMS FOR HAMPTON ROADS: JANUARY 2004 THROUGH JUNE 2012
(12-MONTH MOVING AVERAGE)**



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

DEFENSE SPENDING

For many years, our primary regional economic engine has been defense spending, which as Graph 9 illustrates, will total about \$20.75 billion in 2012. Note that this is a “universal” estimate for Hampton Roads that includes DOD civilian employees and all defense procurement activities; and further note that defense spending has stagnated in recent years.

As mentioned above, our regional economy has become increasingly dependent upon defense spending over the past decade and DOD spending now accounts for 45.6 percent of all regional economic activity, a number not seen since the early 1990s (see Graph 10). Despite auspicious attempts to diversify the regional economic base, reality is that we have not succeeded in doing so.

Since DOD spending is so critical to our regional economic well-being, what are our prospects in this regard? First, Congress already has agreed to \$487 billion of DOD spending cuts over the next 10 years. While the precise character of these cuts has yet to be determined, one would be astonished if they did not result in a smaller number of active-duty military stationed in our region, a reduction in the number of ships ported here, and a slowdown in ship construction, repair and maintenance.

We should anticipate as a part of these reductions that the significant increases in military compensation that propelled this region during the last decade will come to an end. Rather than the 93 percent increase we benefited from during the 2001 to 2010 time period, the 27 percent increase experienced by the private sector during the same period seems more likely.

Second, as noted above, because the “Super Committee” in Congress was unable to agree upon a long-term solution to persistent federal budget deficits, automatic, across-the-board budget cuts will be imposed in January 2013 and they will extract more than \$500 billion from defense

spending. From a political standpoint, it seems unlikely that Congress will allow such to occur. Yet, the solution (increased tax revenues accompanied by reduced spending that includes controlling the growth of entitlements) thus far has been elusive, even though it appeared as if the bipartisan Simpson-Bowles Commission report had provided political cover for both Congress and the president.

What does this translate to in terms of income and jobs in Hampton Roads? Table 5 reports the estimates of the Old Dominion University Economic Forecasting Project in this regard. The first and least onerous outcome for our region is based on a Congressional Budget Office forecast of the size of any fund “sequestration” (the term used by Congress for the largely across-the-board cuts). Even this scenario would cost Hampton Roads an estimated 26,900 jobs and 3.19 percent loss in annual gross regional product. To place this in context, the Ford Motor Co. plant closing ultimately cost the region only about one-tenth of this number of jobs.

The “worst of all worlds” estimate of cuts in defense spending (No. 2 in Table 5) emanates from the Center for Strategic and Budgetary Assessment and would cost our region 39,694 jobs, plus \$3.89 billion of our annual gross regional product. This would constitute 4.70 percent of the value of our annual economic activity. While we do not expect this to happen, honesty requires us to predict

TABLE 5					
ESTIMATED EFFECT OF POTENTIAL ADDITIONAL REDUCTIONS IN DOD SPENDING IN HAMPTON ROADS, BEGINNING IN JANUARY 2013					
	Reduction in DOD Spending	GRP Loss	Job Loss	Jobs as a Percent of MSA Total	Percent GRP Loss
One: CBO Estimate (7 percent)	\$1.45 billion	\$2.64 billion	26,900	2.69%	3.19%
Two: Center for Strategic and Budgetary Assessment (10.3 percent)	\$2.14 billion	\$3.89 billion	39,694	3.97%	4.70%
Notes: Nominal GRP in 2011 is estimated to be \$82.36 billion and DOD spending is estimated to be \$20.75 billion. All of the regional reductions and losses are estimates of the Old Dominion University Economic Forecasting Project based upon the overall percentage cuts in national defense spending estimated by the CBO or CSBA.					

that by 2020, DOD spending probably will have declined more than the \$487 billion in cuts already agreed to and under way for this decade.

It's important to note that the reductions in spending outlined in Table 5 represent subtractions from a projected upward sloping trend line for future defense spending. Thus, the \$487 billion in cuts are reductions from a constant, never changing amount of defense spending because a variety of virtually automatic increases and enhanced weapon systems spending has been projected into the future for defense spending. Some increases in certain types of defense spending are, in the words of a U.S. Navy admiral, "already cooked into the stew." Excluding overseas contingency operations such as Afghanistan and emergency relief operations, base budget defense spending was projected to increase from approximately \$510 billion in FY 2011 to approximately \$610 billion in FY 2017. Hence, rather than absolute reductions in defense spending, what we are talking now are severe reductions in the accustomed rates of increase in many types of defense spending. (As a reminder, defense spending increased more than 7 percent per year in Hampton Roads during the past decade. Those days are over.)

Already agreed upon reductions in defense spending of \$487 billion in this decade will reduce the size of the U.S. Army from 547,000 to 490,000 and shave about 20,000 troops from the roster of the U.S. Marine Corps. Six U.S. Air Force squadrons of 18 to 24 aircraft will be eliminated. Seven U.S. Navy cruisers will be decommissioned and 10 new ships, such as the highly regarded littoral combat ships, will not be constructed. Another Base Realignment and Closure Commission (BRAC) process involving base closures will ensue.

Our regional vulnerability to alterations in defense spending actually goes well beyond potential declines in the absolute size of the DOD budget. Hampton Roads also could be jolted by the movement of an aircraft carrier group to the Pacific. Secretary of Defense Leon Panetta has placed himself on the record by

expressing his intention to change the distribution of naval assets from 50/50 (Atlantic vs. Pacific) to 40/60 (Jane Perlez, "Panetta Outlines New Weaponry for Pacific," The New York Times, June 1, 2012). This increases the probability that an additional aircraft carrier group will be moved to the Pacific.

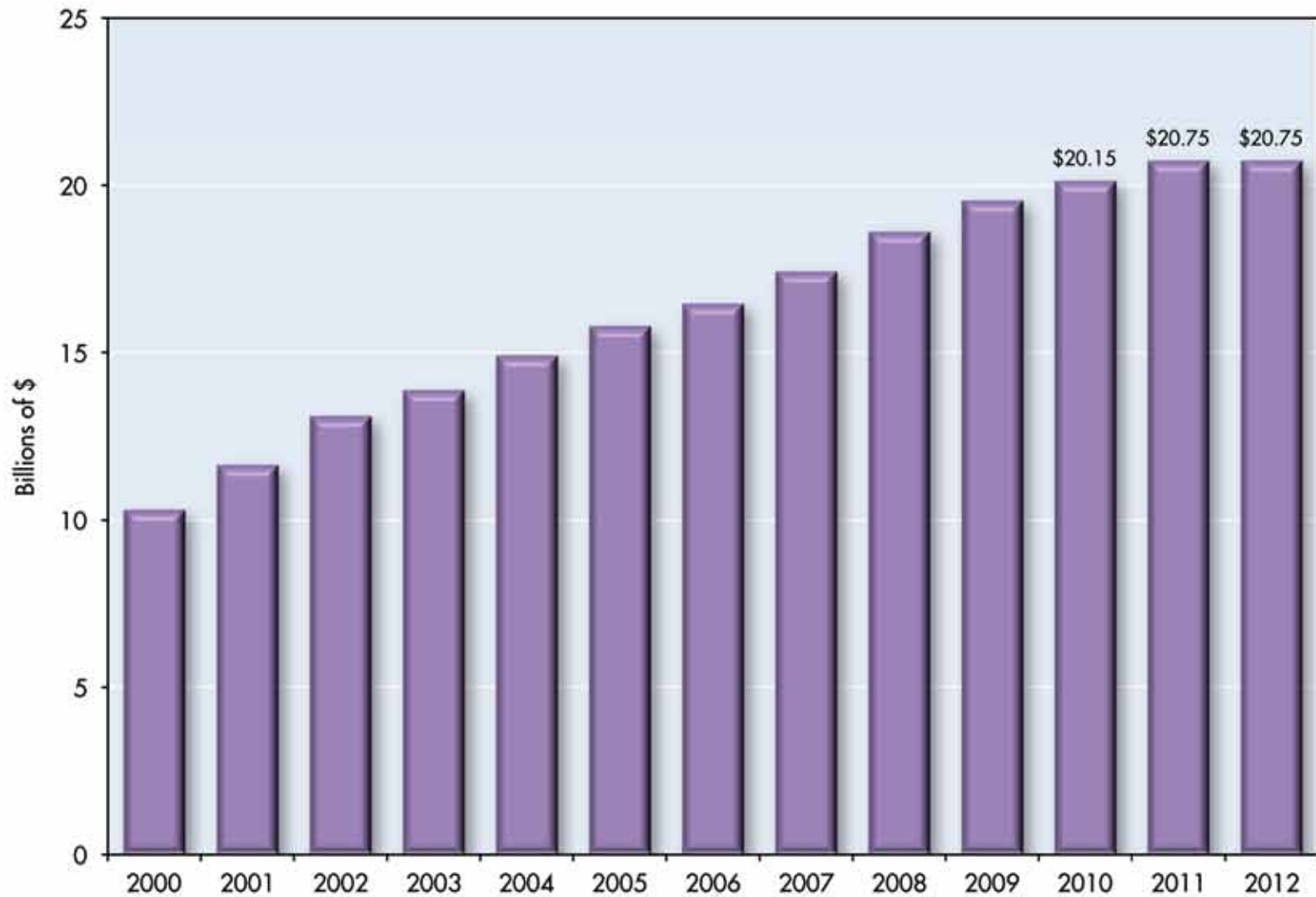
It also seems likely in the future that Oceana Naval Air Station will not host as many aircraft as it does currently. Two factors might move the U.S. Navy in this direction. First, the cost of building and maintaining individual aircraft has risen so dramatically that the Navy simply will not be able to afford as many aircraft, and Oceana could well feel some of this reduction. Second, the inability of Oceana to pin down an alternate, auxiliary airfield somewhere within our region continues to disappoint the Navy. Classic NIMBY behavior by potentially affected citizens has frustrated the Navy's ability to move ahead in this sphere.

Threats to DOD Spending in Hampton Roads

- General Defense Spending: Cuts already are in place that total \$487 billion over the next 10 years (\$259 billion over the first five years).
- Sequestration: In addition, because the Super Committee failed to act, \$1.2 trillion in automatic cuts will be imposed — apparently including a \$500+ billion reduction in DOD spending, effective January 2013. These automatic cuts are labeled "sequestration" by the Congress.
- Base Realignment and Closure Commission (BRAC): We could be headed for an additional round of BRAC reductions as a means to deal with the cuts described above.
- Movement of Assets: Our region currently hosts five aircraft carrier groups. It's possible that we will have only three by the end of this decade because one will be moved to the Pacific and another will have been eliminated by U.S. Navy downsizing. When in port, each aircraft carrier generates about \$300 million in annual income for the region. It's also not clear that Oceana Naval Air Station (with about 10,000 employees) will continue to host as many fighter aircraft in future years.

GRAPH 9

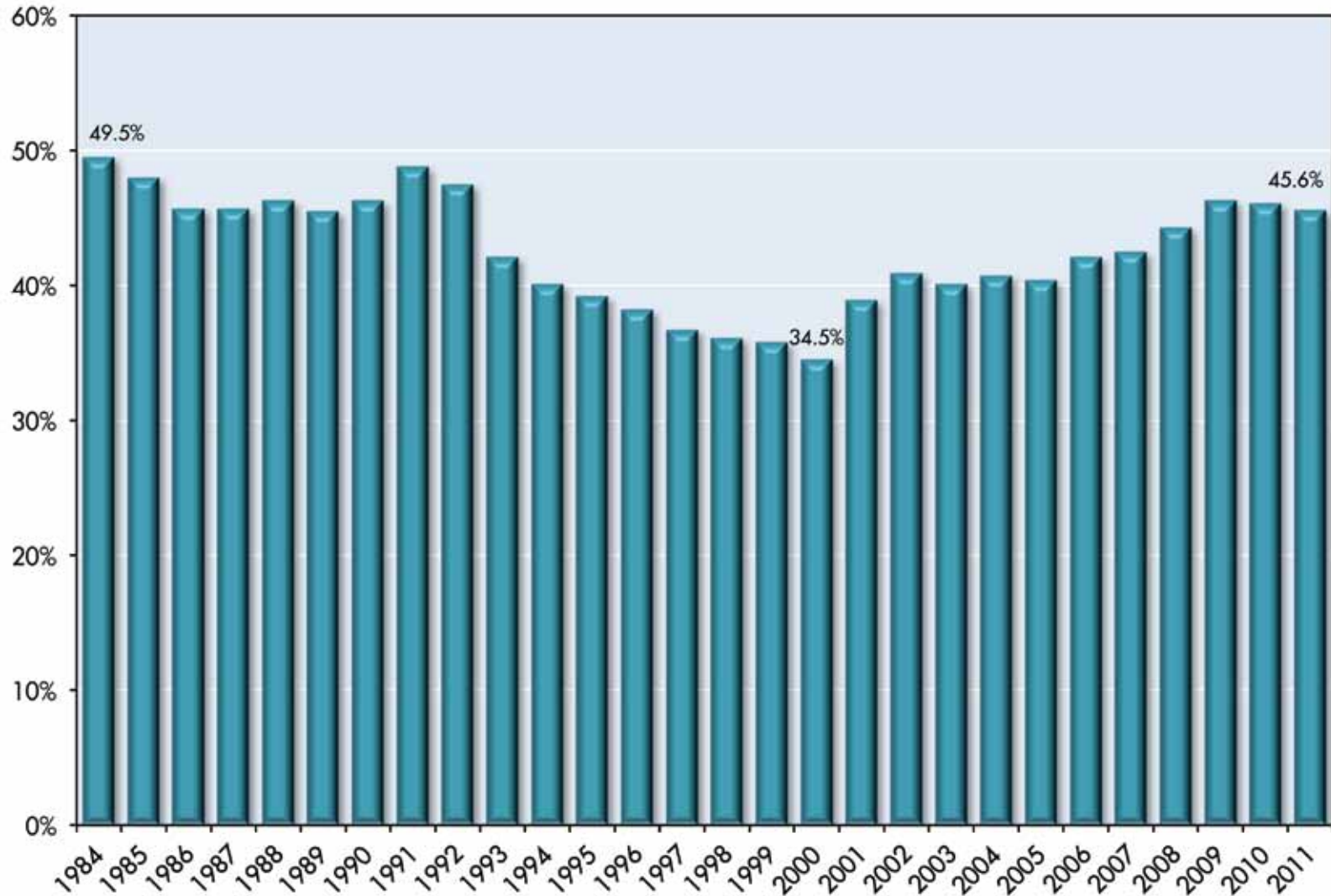
ESTIMATED DIRECT DOD SPENDING IN HAMPTON ROADS* (2000-2012)



Source: Old Dominion University Economic Forecasting Project
*Includes federal civilian and military personnel and procurement

GRAPH 10

HAMPTON ROADS GROSS REGIONAL PRODUCT ATTRIBUTABLE TO DOD SPENDING IN HAMPTON ROADS (1984-2011)



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

THE PORT OF VIRGINIA

The prosperity of the Port of Virginia and the prosperity of Hampton Roads are intertwined, even though many do not believe this to be true. For example, many citizens view U.S. trade with the People's Republic of China (PRC) as an unprofitable one-way street. Hence, Table 6 may come as a surprise to them. The PRC actually is the most lucrative trade partner of the Port of Virginia in terms of the value of exports going from our port to China.

Note that four of the top 10 countries in Table 6 are European. The lesson is this – if European economies tumble, then we in Hampton Roads will get hurt. For that matter, if economic growth in countries such as the PRC, Brazil and India decelerates, then we also will feel this locally.

TABLE 6

**VALUE OF PORT OF VIRGINIA EXPORT CARGO
BY DESTINATION, 2011**

1. China	\$2,460 million
2. Germany	\$2,090 million
3. Brazil	\$1,592 million
4. Netherlands	\$1,363 million
5. United Kingdom	\$1,225 million
6. Belgium	\$1,090 million
7. Japan	\$ 893 million
8. Saudi Arabia	\$ 764 million
9. India	\$ 737 million
10. Egypt	\$ 609 million
Source: Port of Virginia, http://www.portofvirginia.com/media/38503/2011_vpa_kpi.pdf	

In 2011, Gov. Bob McDonnell replaced nearly the entire membership of the board of the Virginia Port Authority, and it was widely speculated that among the reasons was his dissatisfaction with the port's performance (Robert McCabe, "McDonnell Guts Board of Virginia Port Authority," *The Virginian-Pilot*, July 23, 2011). Total cargo tonnage handled by the Port of Virginia in 2011 was still

13.5 percent below the 17.83 million tons it handled in its record year of 2008 (see Graph 11). While our port moves bulk cargo (such as grain and coal), break-bulk cargo that is individually handled, and roll-on, roll-off cargo (such as automobiles), its forte is the 20-foot equivalent (TEU) containers that are ubiquitous on some Hampton Roads expressways and streets. Graph 12 records TEU traffic at the port between 1991 and 2012. One can see that the port's TEU traffic reached an all-time high in 2007. However, the port has yet to recover from the impact of the Great Recession. Through last year, TEU traffic remained more than 13.7 percent below the record volume in 2007.

In 2011, the Port of Virginia exported 15,615,938 tons of cargo, down 13.5 percent from its all-time high of 17,726,251 tons in 2007. In May 2012, the Port of Virginia exported 833,781 tons of 20-foot equivalent units (TEUs), but only 4,607 tons of break-bulk (individually loaded) cargo. Improving its break-bulk performance is one of several challenges the port faces. Counting the activity of Norfolk Southern Corp., our region's best performance has been in the area of bulk cargo (such as coal), where Hampton Roads has surged forward and become the largest coal-exporting site in the United States.

Graph 13 shows that in recent years, it is the ports of New York/New Jersey and Savannah that have maintained or increased their market shares of fully loaded TEUs at the expense of the Port of Virginia. Savannah in particular, driven by economic expansion in the Southeast, superbly targeted state of Georgia investments in incentives and critical infrastructure, and its marketing emphasis on large distributors such as Wal-Mart rather than shipping lines, has steadily increased its share of East Coast port activity in recent years. Savannah's dynamic cargo growth is especially evident when one eliminates New York/New Jersey from the equation. Graph 14 does so and it is apparent that Savannah's growing TEU market share has been accompanied by a decline in the TEU share of the Port of Virginia.

Nevertheless, our port is not without advantages and its future potentially is bright. The Heartland Corridor rail connection to the Midwest, which opened in September 2010, enables Norfolk Southern to send double-stacked TEUs to Chicago on a route that is one day and 250 miles shorter than previous routings. Additionally, the Port of Virginia is the only legitimate 50-foot deep-draft port on the East Coast, and in March 2012 notably loaded a huge, new-generation, 48.5-foot draft ship that no other East Coast port could handle. Our major competitors (New York/New Jersey and Savannah) do not have this capability, though both have plans to improve their situations.

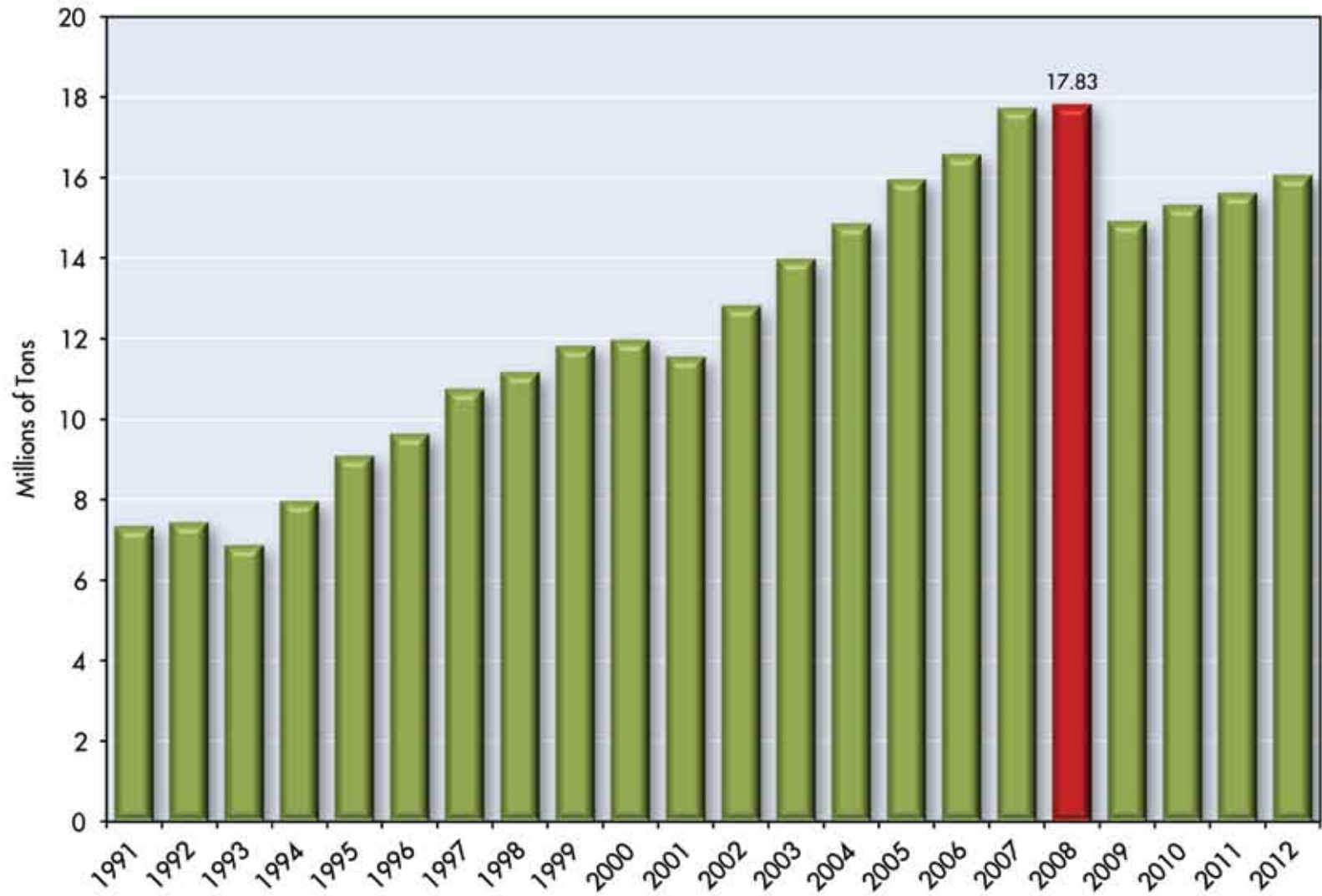
The depth of our shipping channels is critically important because the Panama Canal is being widened and deepened. In 2014, the canal will be able to handle the new generations of much larger, deep-draft ships that are increasingly attractive because of the significant economies of scale they provide shippers. The vision of our port is that many ships coming to the United States no longer will stop on the West Coast in locations such as Long Beach and Los Angeles and unload for railroad transit across the continent to the East Coast, but instead will come through the canal and proceed directly to the Port of Virginia. Of course, Savannah and Charleston are closer to the canal than we are, and if Savannah in particular is able to dredge its shipping channels and obtain greater draft, then it will be a very tough competitor for many large, deep-draft ships coming through the canal. Nevertheless, it is unlikely that this could occur before 2018 at the earliest. New York/New Jersey, in turn, is disadvantaged by the low-clearance Bayonne Bridge, under which most of the large ships serving this port must transit. New York/New Jersey plans to spend more than \$1 billion to raise the bridge 65 feet, but again, this will take several years to complete.

All things considered, there is a window of opportunity for the Port of Virginia to excel during this decade. If it is able to do so, then this will help counteract other less favorable economic developments, such those relating to defense spending that now loom on our regional horizon.



GRAPH 11

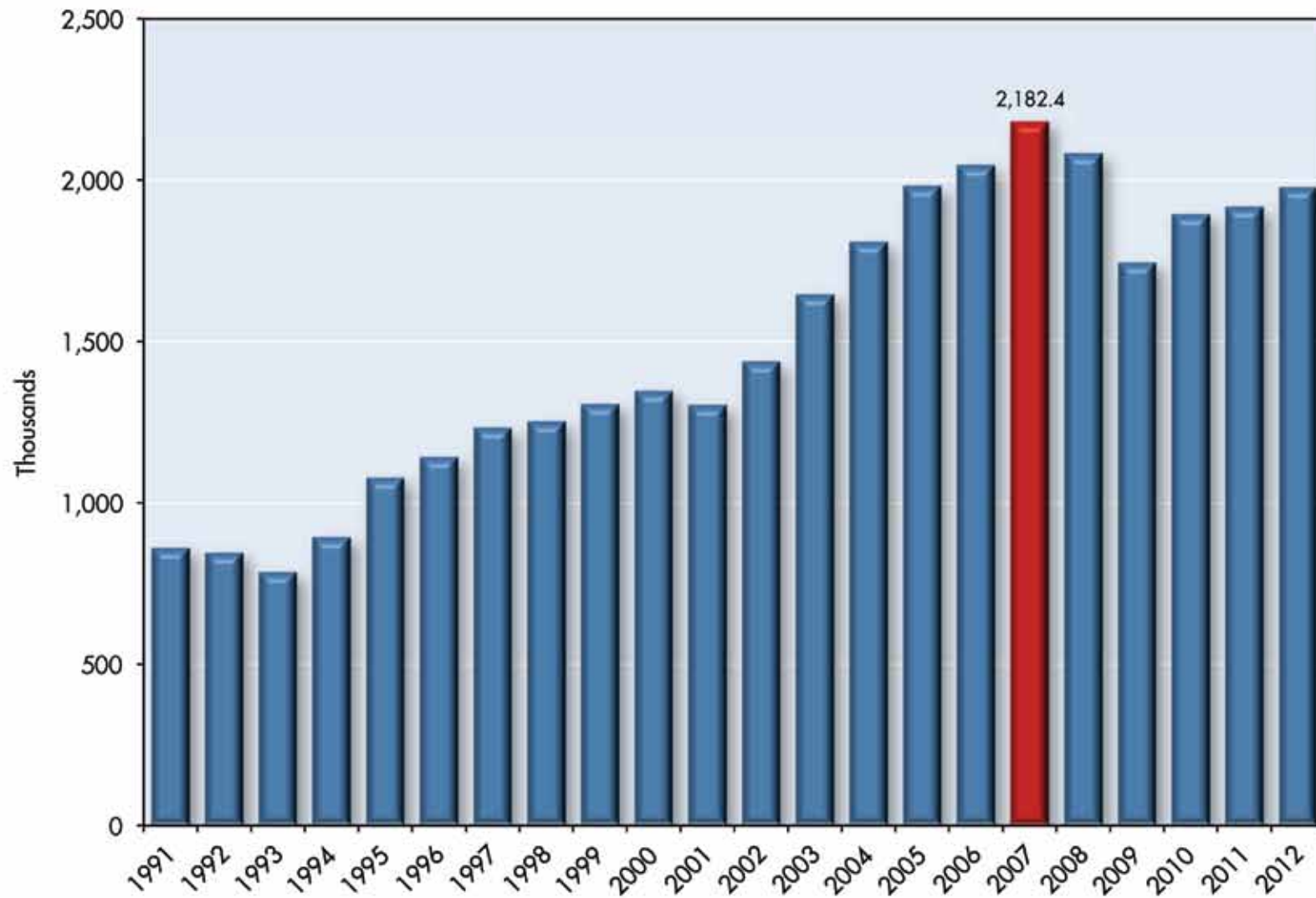
CARGO TONNAGE AT THE PORT OF HAMPTON ROADS: 1991-2012



Sources: Virginia Port Authority and the Old Dominion University Economic Forecasting Project

GRAPH 12

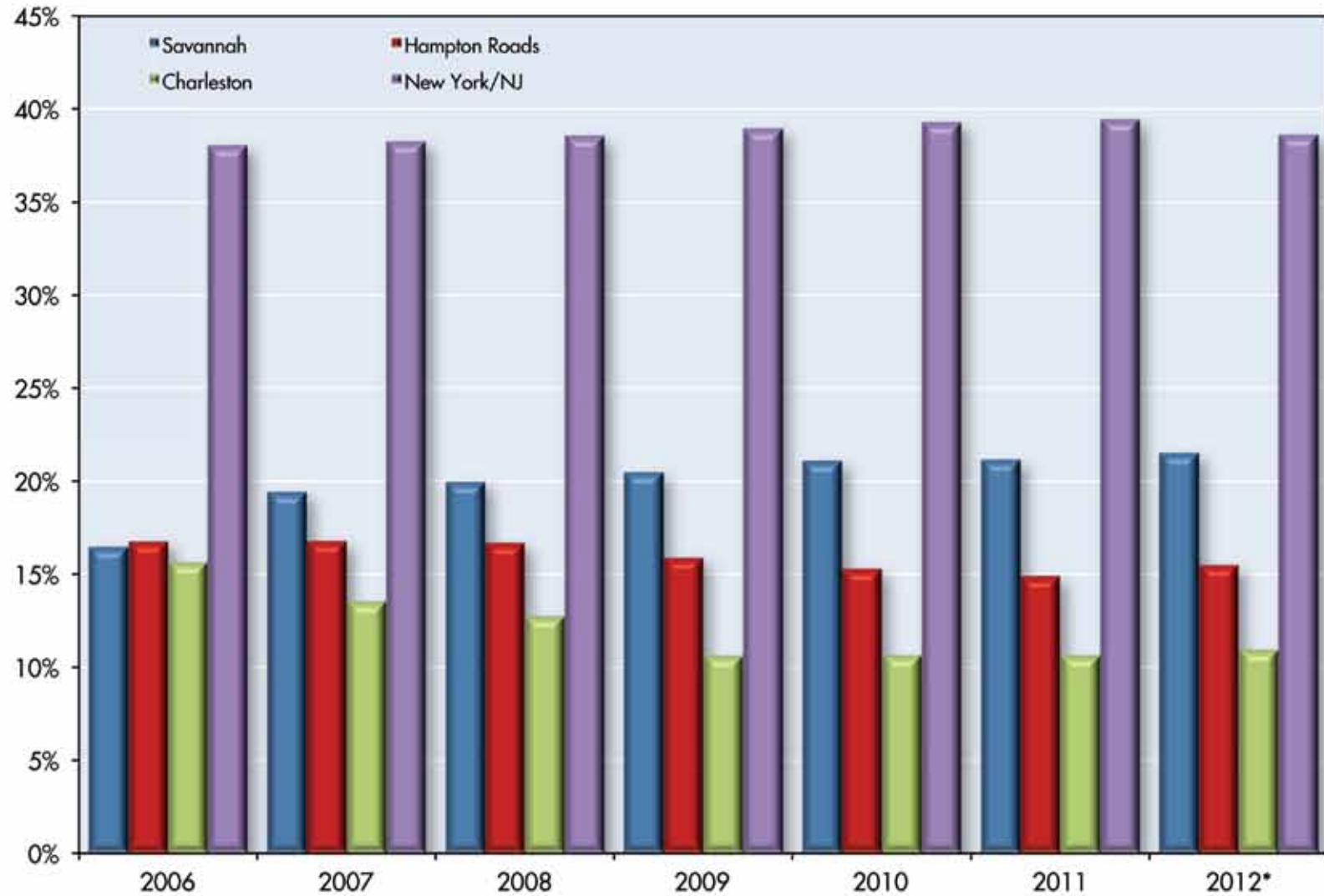
TWENTY-FOOT EQUIVALENT CONTAINER UNITS, PORT OF HAMPTON ROADS: 1991 TO 2012



Sources: Virginia Port Authority and the Old Dominion University Economic Forecasting Project

GRAPH 13

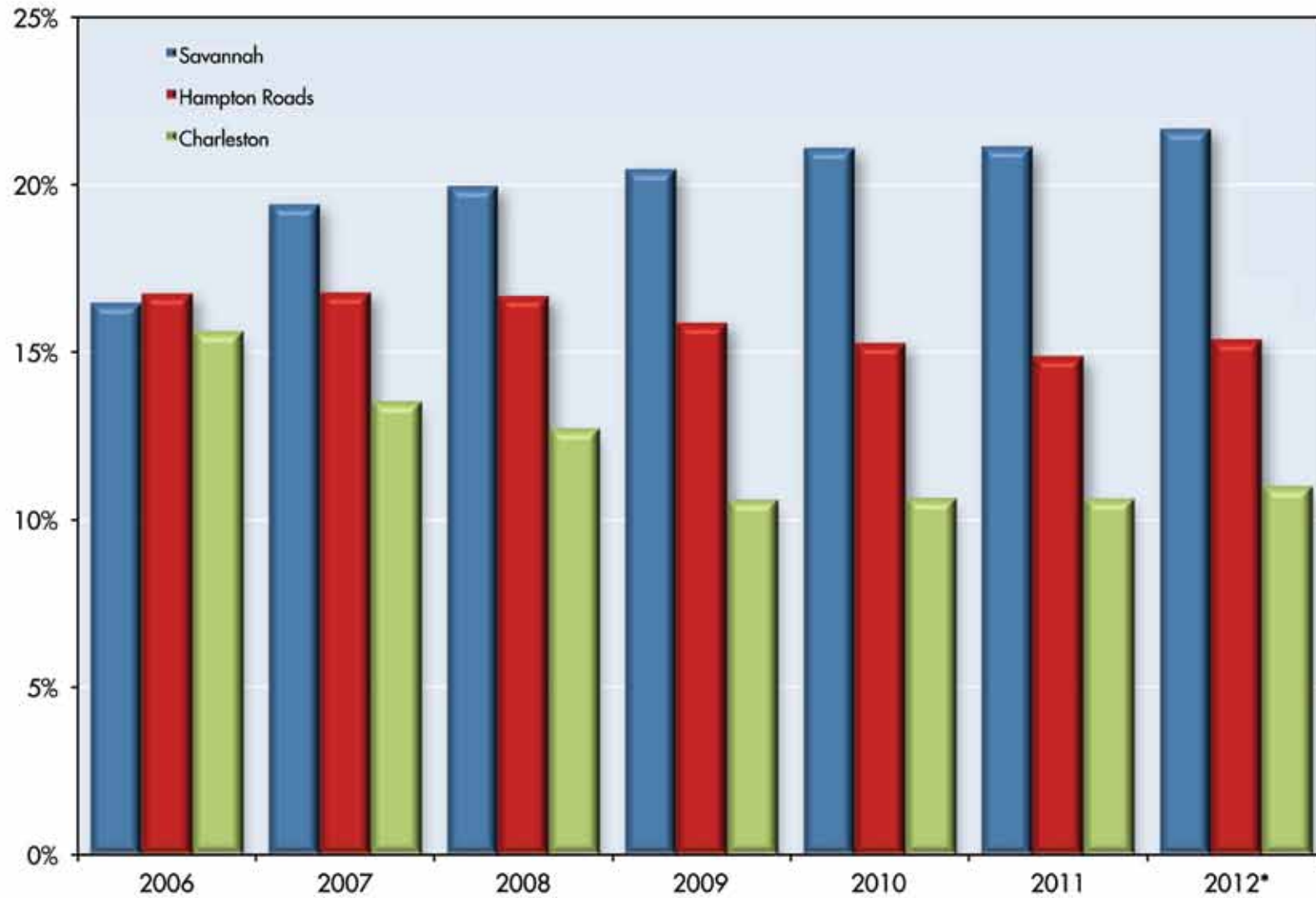
SHARES OF TOTAL LOADED TEU CONTAINERS FOR SELECTED PORTS ON THE EAST COAST, 2006-2012*



Sources: American Association of Port Authorities and the Old Dominion University Economic Forecasting Project. * Data for 2012 are through June 2012.

GRAPH 14

SHARES OF TOTAL LOADED TEU CONTAINERS FOR SELECTED PORTS ON THE EAST COAST, 2006-2012*



Sources: American Association of Port Authorities and the Old Dominion University Economic Forecasting Project. * Data for 2012 are through June 2012.

TOURISM AND HOTELS

In recent State of the Region reports, we have noted a major trend in the nature and location of tourism and hotel traffic in Hampton Roads, namely, that Virginia's Historic Triangle (Williamsburg, Jamestown, Yorktown) has experienced a significant decline in its share of regional tourism and hotel traffic. Graph 15 illustrates the import of this trend, which has seen the Historic Triangle's share of regional hotel revenues decline from 30.6 percent in 1999 to only 17.9 percent in 2011.

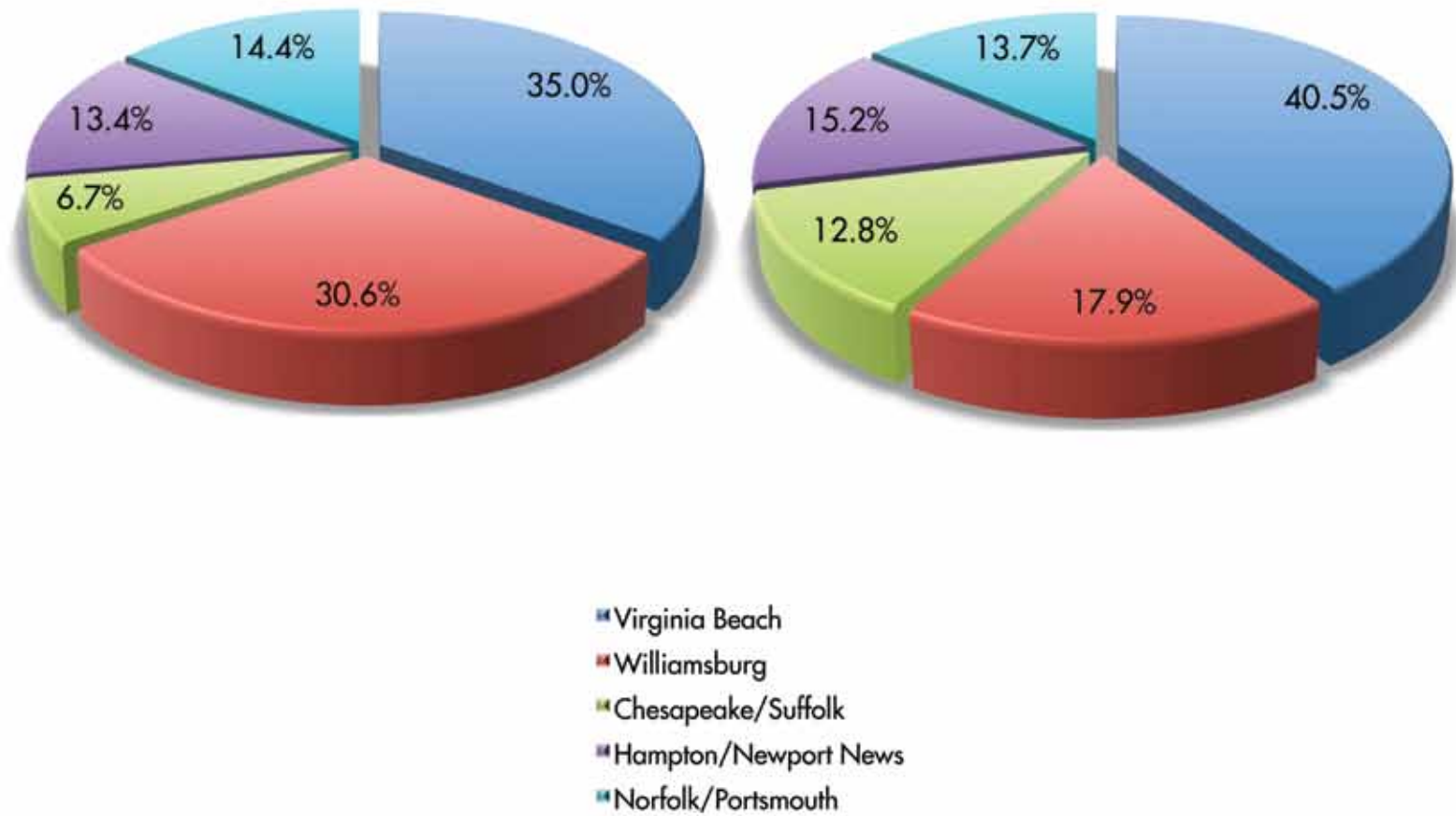
The coin of the realm, economically speaking, in hotel economics is REVPAR – revenue per available room. One can see in Table 7 that REVPAR in the Historic Triangle fell 26.3 percent between 2007 and 2011; this is despite the fact that there was very little growth in the number of hotel rooms available in the Williamsburg area (see Graph 16). The problem was inadequate demand for those hotel rooms. Contrast this with the Chesapeake/Suffolk market, where REVPAR declined 20.3 percent. This, however, was primarily a function of the over-building of hotel rooms there (see Graph 17). The region's star performer in terms of REVPAR is Virginia Beach, which was the only regional hotel market to enjoy an increase between 2007 and 2011.

If one takes a more Olympian view of the hotel market in our region (which is highly attuned to tourism), then it is fair to conclude that some hotel operators are struggling. One can see in Graph 18 that hotel revenue in Hampton Roads in 2011 was still \$31 million below what it was at its apogee in 2007. Like the Port of Virginia, the regional hotel industry has yet to recover from the Great Recession.

TABLE 7			
REVPAR IN SELECTED MARKETS: 2007 AND 2011			
	2007	2011	Percentage Change
U.S.	\$65.52	\$61.06	- 6.8%
Virginia	\$61.95	\$55.67	- 10.2%
Hampton Roads	\$52.90	\$46.10	- 12.8%
Myrtle Beach	\$53.92	\$49.24	- 8.7%
Ocean City	\$71.12	\$65.68	- 7.7%
Coastal Carolina	\$55.84	\$54.73	- 2.0%
Virginia Beach	\$64.75	\$65.33	+0.9%
Norfolk/ Portsmouth	\$54.05	\$45.66	- 15.5%
Newport News/ Hampton	\$41.49	\$34.84	- 16.0%
Chesapeake/ Suffolk	\$52.90	\$42.16	- 20.3%
Williamsburg	\$47.48	\$35.00	- 26.3%
Sources: Smith Travel Research Trend Report (Feb. 7, 2012) and the Old Dominion University Economic Forecasting Project			

GRAPH 15

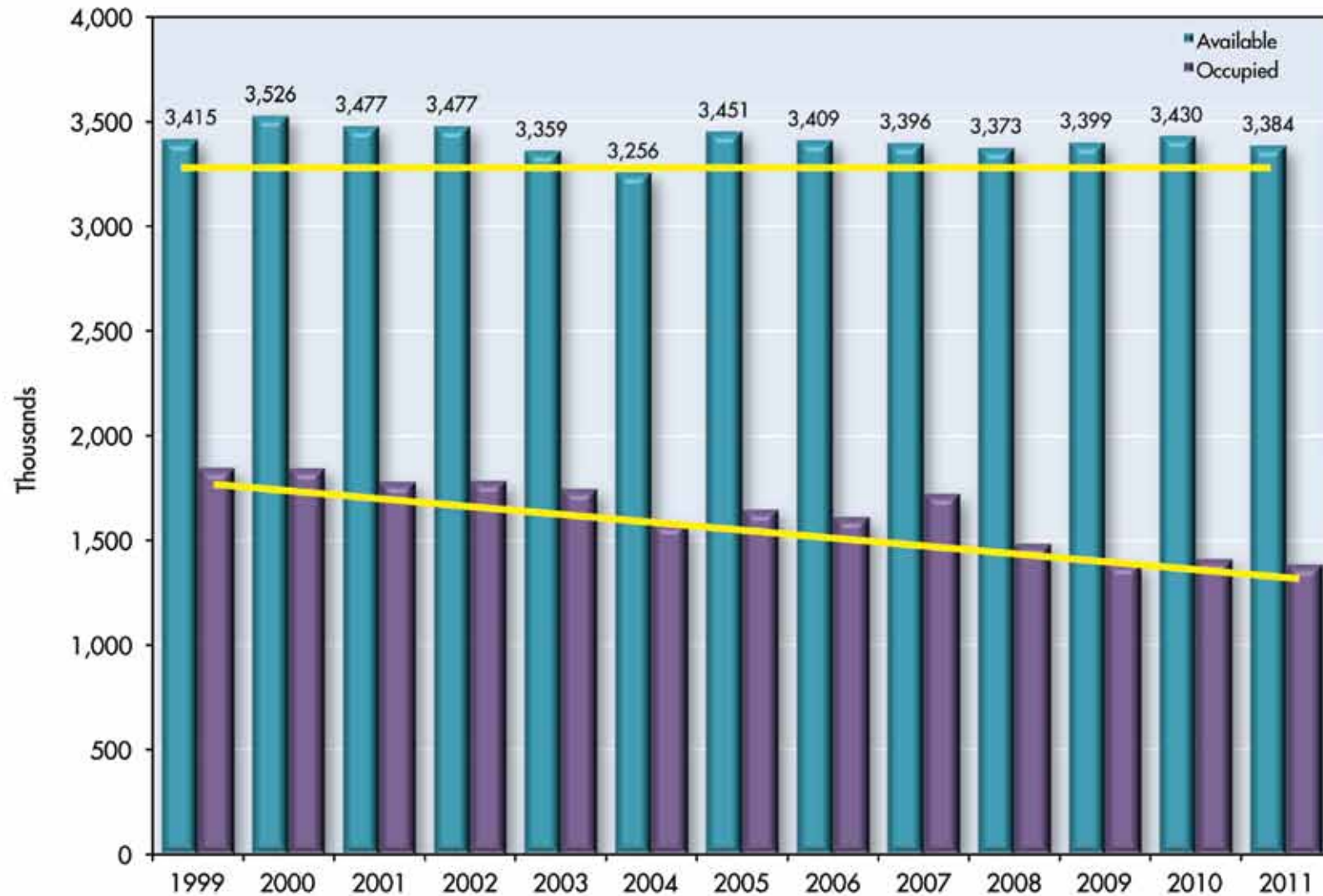
ESTIMATED MARKET SHARES OF THE HAMPTON ROADS HOTEL INDUSTRY BASED UPON HOTEL REVENUES



Sources: Smith Travel Research Trend Reports (Dec. 27, 2007, Dec. 23, 2009, and Feb. 7, 2012) and the Old Dominion University Economic Forecasting Project

GRAPH 16

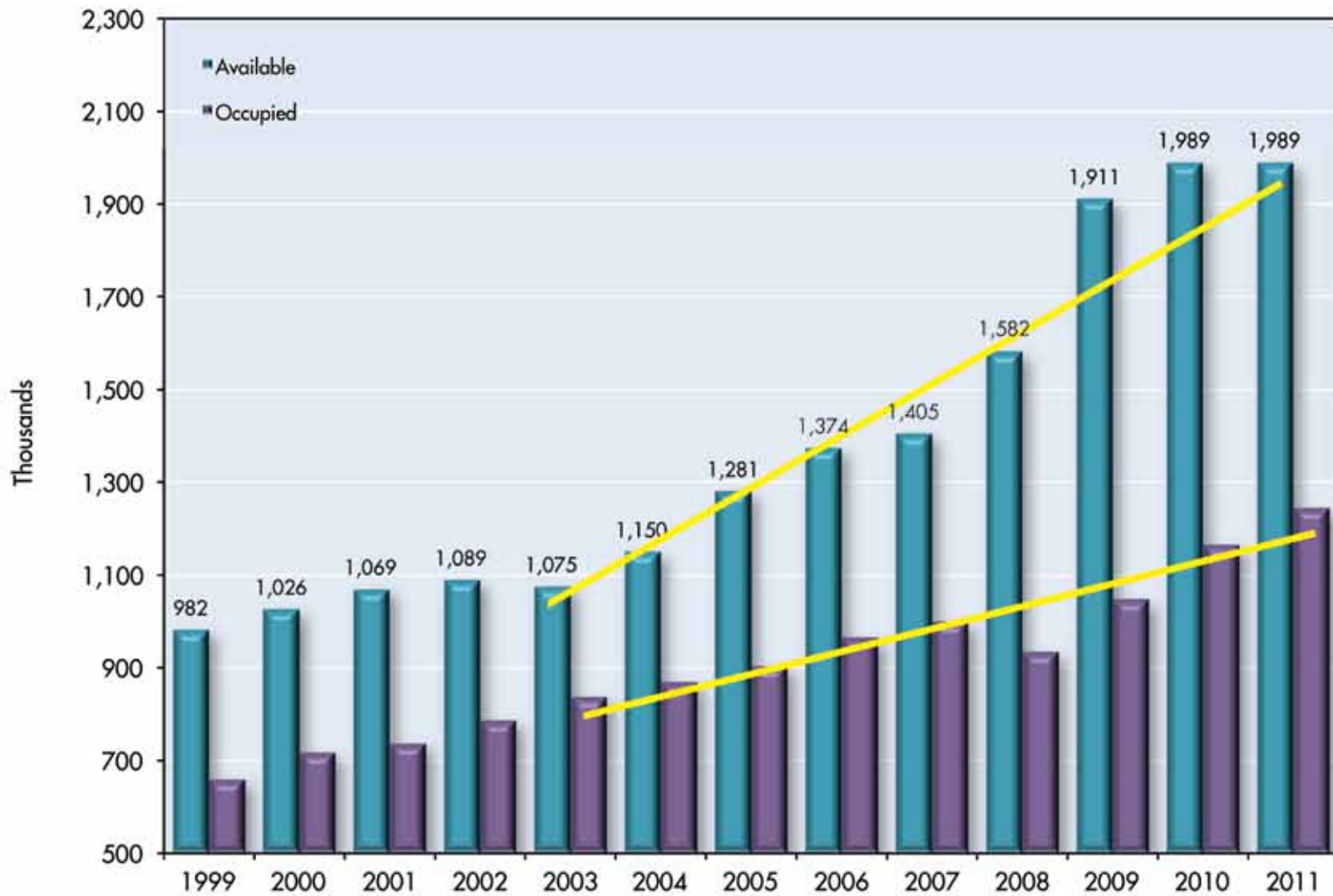
HOTEL ROOM NIGHTS IN WILLIAMSBURG MARKET: 1999-2011



Sources: Smith Travel Research Trend Reports (Dec. 27, 2007, Feb. 7, 2012) and the Old Dominion University Economic Forecasting Project

GRAPH 17

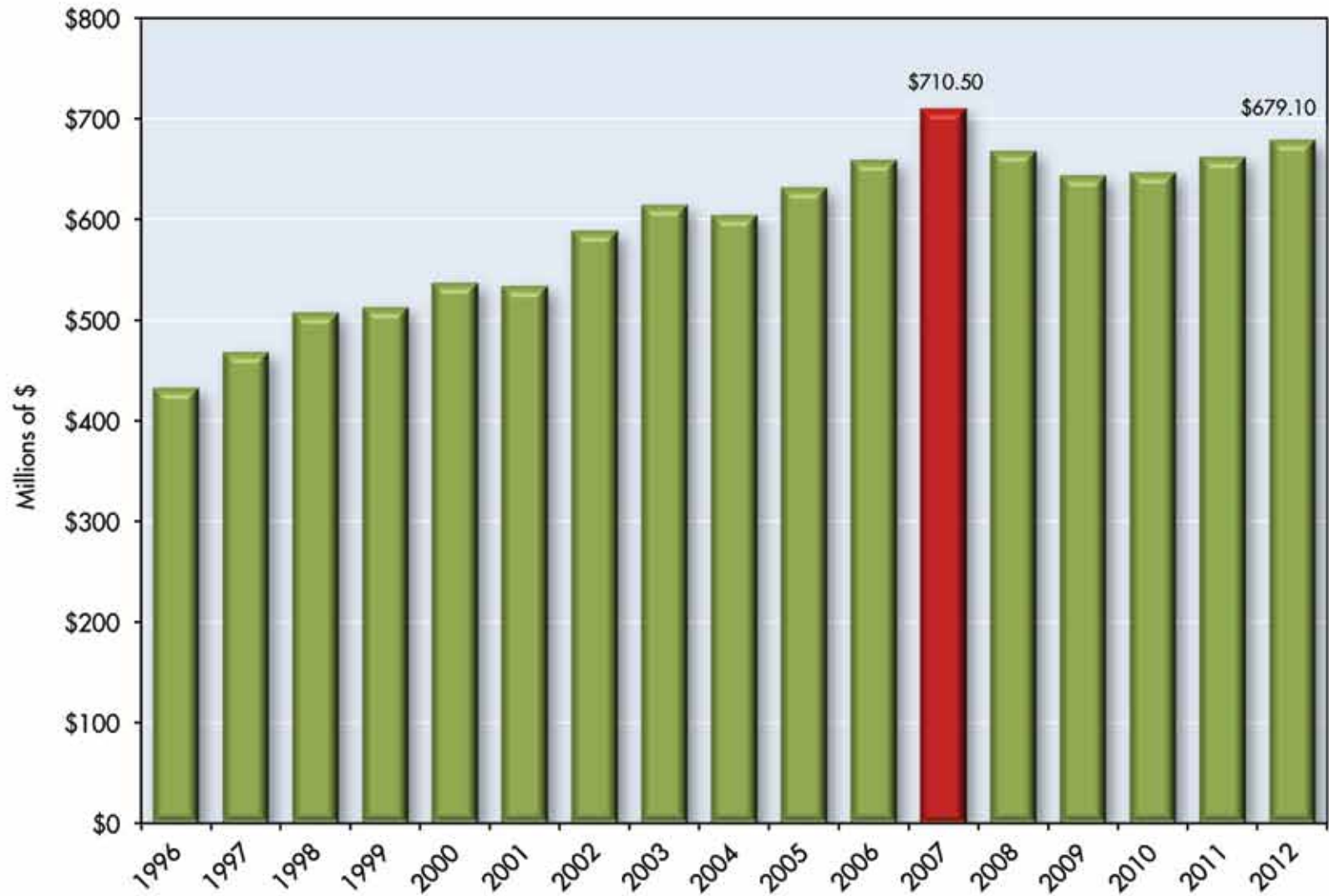
HOTEL ROOM NIGHTS IN CHESAPEAKE/SUFFOLK MARKET: 1999-2011



Sources: Smith Travel Research Trend Reports (Dec. 23, 2009, and Feb. 7, 2012) and the Old Dominion University Economic Forecasting Project

GRAPH 18

HOTEL REVENUE IN HAMPTON ROADS: 1996-2012



Sources: Smith Travel Research Trend Reports, (Dec. 27, 2007, and Feb. 7, 2012) and the Old Dominion University Economic Forecasting Project

RESIDENTIAL HOUSING

The Hampton Roads housing market – in fact our entire regional economy – historically has lagged national economic developments and usually has experienced less variability. Housing prices in Hampton Roads did not fall as quickly (or as far) as housing prices nationally after the housing market bust in 2008. Graph 19 demonstrates that relative to the peak average price in each market, housing prices have fallen 30.5 percent in the United States, but only 28 percent in Hampton Roads. Indeed, the Case-Shiller Composite Home Price Index for the 20 largest metropolitan areas in the U.S. fell almost 35 percent from its high, which occurred eight years ago in 2004 (<http://www.standardandpoors.com/indices/sp-case-shiller-home-price-indices>).

At long last, however, it appears that housing prices in Hampton Roads are bottoming out. Table 8 reports the median (50th percentile) sale price of existing residential homes between 2000 and 2012. We have experienced four straight years of declining prices and 2012 may add another, though of very modest size. Even so, there are indications that we are at, or near, the bottom of this pricing cycle. One indication is that there has been a gradual, though perceptible, decline in the percentage of “distressed” homes for sale in our region (see Graph 20). A distressed home is one that has been foreclosed upon, and/or is bank owned, or is subject to a financial institution doing a short sale (“Let’s get the best price we can and get rid of this property and this owner.”) that usually results in a sale price less than the value of the outstanding mortgage. Graph 21 reveals that distressed properties now account for a much smaller percentage of existing home sales than just a few years ago. At one of the worst points in the reeling housing market, 42.8 percent of all sales of existing residential homes in Hampton Roads involved distressed properties; however, this had fallen to 28.81 percent by mid-summer 2012. This is still a relatively high level, but the trend is positive.

Table 9, however, reveals that short sales and REOs (sales of houses that a financial institution has taken ownership of) have become increasingly important in the Hampton Roads residential housing market. Together, in 2012, we estimate that they will account for about one-third of all sales of existing homes. This may make it seem as if the housing market continues to have severe problems, but it actually is a sign of progress and an indication that the regional

TABLE 8
MEDIAN SALE PRICE OF EXISTING RESIDENTIAL HOMES IN
HAMPTON ROADS: 2000-2012*

Year	Median Price	Percent Change Year to Year
2000	\$99,900	
2001	\$109,000	9.1%
2002	\$116,900	7.2%
2003	\$130,000	11.2%
2004	\$156,500	20.4%
2005	\$192,000	22.7%
2006	\$214,900	11.9%
2007	\$223,000	3.8%
2008	\$219,000	-1.8%
2009	\$207,000	-5.5%
2010	\$203,900	-1.5%
2011	\$180,000	-11.7%
2012*	\$180,000	+0.06%
2002-06		83.8%

Sources: Real Estate Information Network (REIN) and the Old Dominion University Economic Forecasting Project
*Information provided here is for YTD June 2012.

housing market is beginning to clear. Though short sales and REO sales are painful to those doing the selling, they represent an important way to reduce the excess housing inventory that depresses housing prices.

Measured unsold housing inventory is declining and this is one of the reasons we believe the Hampton Roads housing market is approaching its bottom. Graph 22 presents estimates of the months of supply of short sale homes and REO homes in Hampton Roads, 2007 to 2012. It’s apparent that REO homes in particular are declining in number. A word of caution is merited – perhaps there still remains a good deal of “hidden inventory” held by homeowners and organizations that have not put up their properties for sale because they

TABLE 9

**NUMBER OF EXISTING SHORT SALES AND REOS FOR
RESIDENTIAL HOMES SOLD IN HAMPTON ROADS: 2006-2012***

Year	All Sales	Short Sales	REO Sales	Percent Short Sales	Percent REO Sales
2006	22,405	3	56	<1%	<1%
2007	19,152	40	223	<1%	1.2
2008	15,047	217	833	1.4	5.5
2009	15,849	598	2,271	3.8	14.3
2010	14,696	784	3,021	5.3	20.6
2011	15,817	1,127	4,213	7.1	26.6
2012*	8,147	791	1,773	9.7	21.8

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

*Information provided here is for YTD June 2012.

*REOs represent bank-owned homes.

have had little confidence they could sell these properties at attractive prices. This remains to be seen; however, the trend is clearly positive and is provided legitimacy by Graph 23, which estimates the inventory of all unsold residential homes in Hampton Roads (whether or not distressed) between 1996 and 2012. By our calculations, only seven-plus months of unsold residential housing inventory exists now in Hampton Roads and this is the smallest supply of unsold homes we have recorded since March 2008 (see Graph 24).

Yet another positive factor in regional housing markets is the increasing affordability of the typical home that is for sale. Table 10 presents estimates of the ratio of the monthly principal and interest on a median-priced home to the median monthly rent on a three-bedroom home. When this ratio is greater than 1.00, owning a house is relatively expensive and renting is more attractive; when it is less than 1.00, owning a house (instead of renting) is relatively inexpensive. We estimate that this "affordability ratio" has plunged to only 0.56 in 2012, suggesting that buying a home is, *ceteris paribus*, a better deal for most households than renting. In fact, owning a home is more affordable in Hampton Roads than it has been for many decades.

TABLE 10

**ESTIMATED HOUSE RENTAL AND PRINCIPAL AND INTEREST
FOR A HOUSE PAYMENT IN HAMPTON ROADS, 2000-2012**

	Median Monthly Rent for a Three-Bedroom House	P&I Monthly for a Median House	Ratio of Monthly P&I to Rent
2000	\$822	\$854	0.97
2001	911	809	0.89
2002	1,037	827	0.89
2003	1,044	799	0.75
2004	1,087	971	0.89
2005	1,118	1,202	1.08
2006	1,164	1,459	1.25
2007	1,247	1,495	1.19
2008	1,236	1,447	1.17
2009	1,277	1,190	0.93
2010	1,319	1,062	0.81
2011	1,454	922	0.63
2012	1,541	868	0.56

Sources: HUD and the Old Dominion University Economic Forecasting Project

Graph 25 illustrates the increased affordability of housing in a different way by examining the monthly payment required to service a mortgage on a median-price existing home as a percentage of median household income. In Hampton Roads, in 2012, we estimate that only 17.1 percent of the median household's income now is required to service a mortgage on our median-price existing home for sale. Hence, by this measure, housing is more affordable in our region than it has been for at least 30 years. Note that lower mortgage rates are an important factor in this analysis.

If there is a problem associated with the affordability numbers, then it is that ordinarily one must have a reliable job, good credit and the consequent ability to obtain a mortgage in order to take advantage of the affordability. Financial

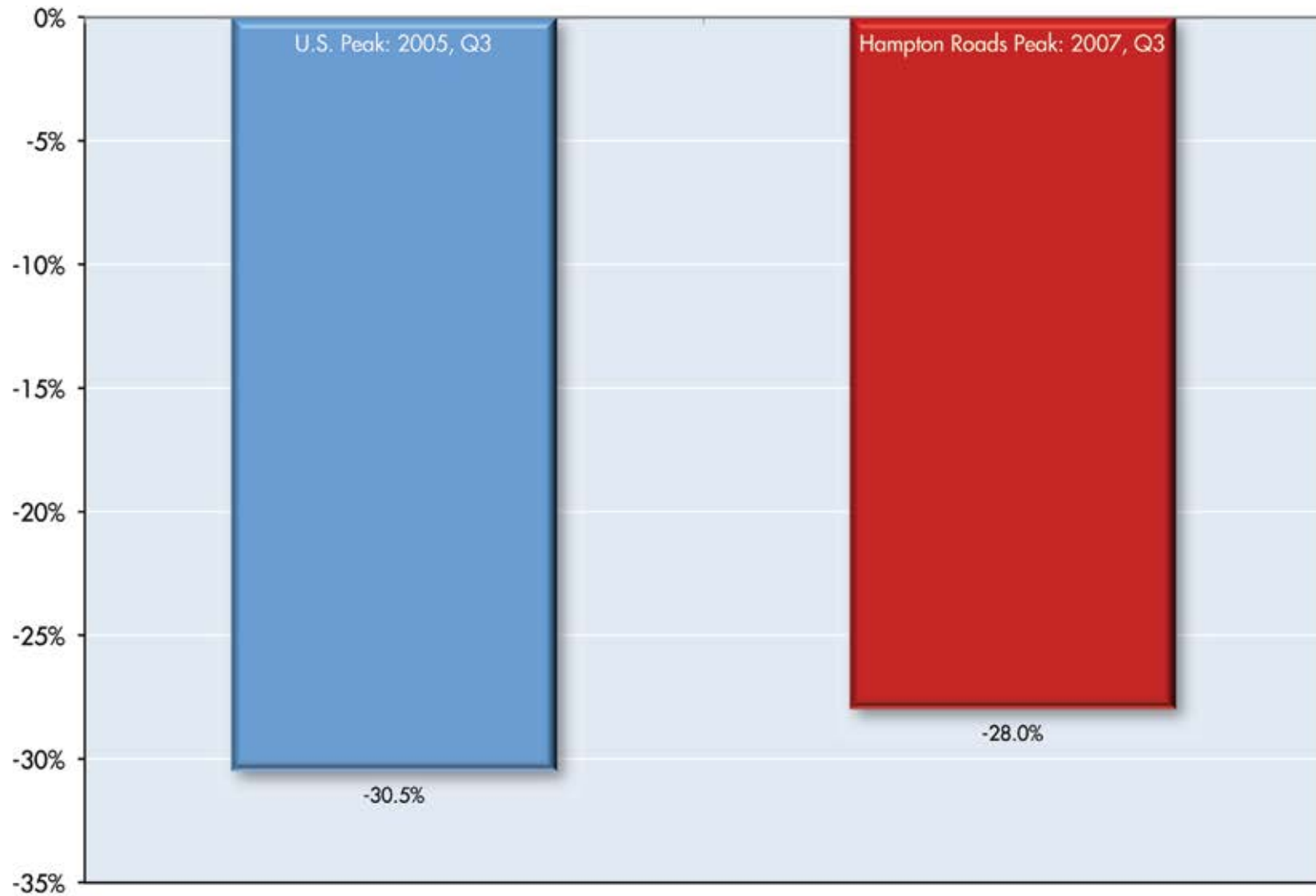
institutions have (for good reason) increased their standards with respect to granting mortgages, and the halcyon days (for borrowers, anyway), when lenders would require minimal or even zero down payments from borrowers and did not need to see firm evidence of steady employment, have disappeared. Taking a more detached view, we are prepared to say that this is a good thing because lax lending standards led to a variety of problems and abuses that generated a housing price bubble and predictable, self-inflicted grief for financial institutions.

As a consequence, there has been a decline in the rate of homeownership nationally (see Graph 26) and also in Hampton Roads, yet nearly all economists regard the upward surge in homeownership that occurred during the past decade as unsustainable for many households, based upon their income and employment status. Thus, it was only a matter of time before reality intruded. Perhaps we now are approaching the end of a long and bitter process of coming to terms with these economic facts.



GRAPH 19

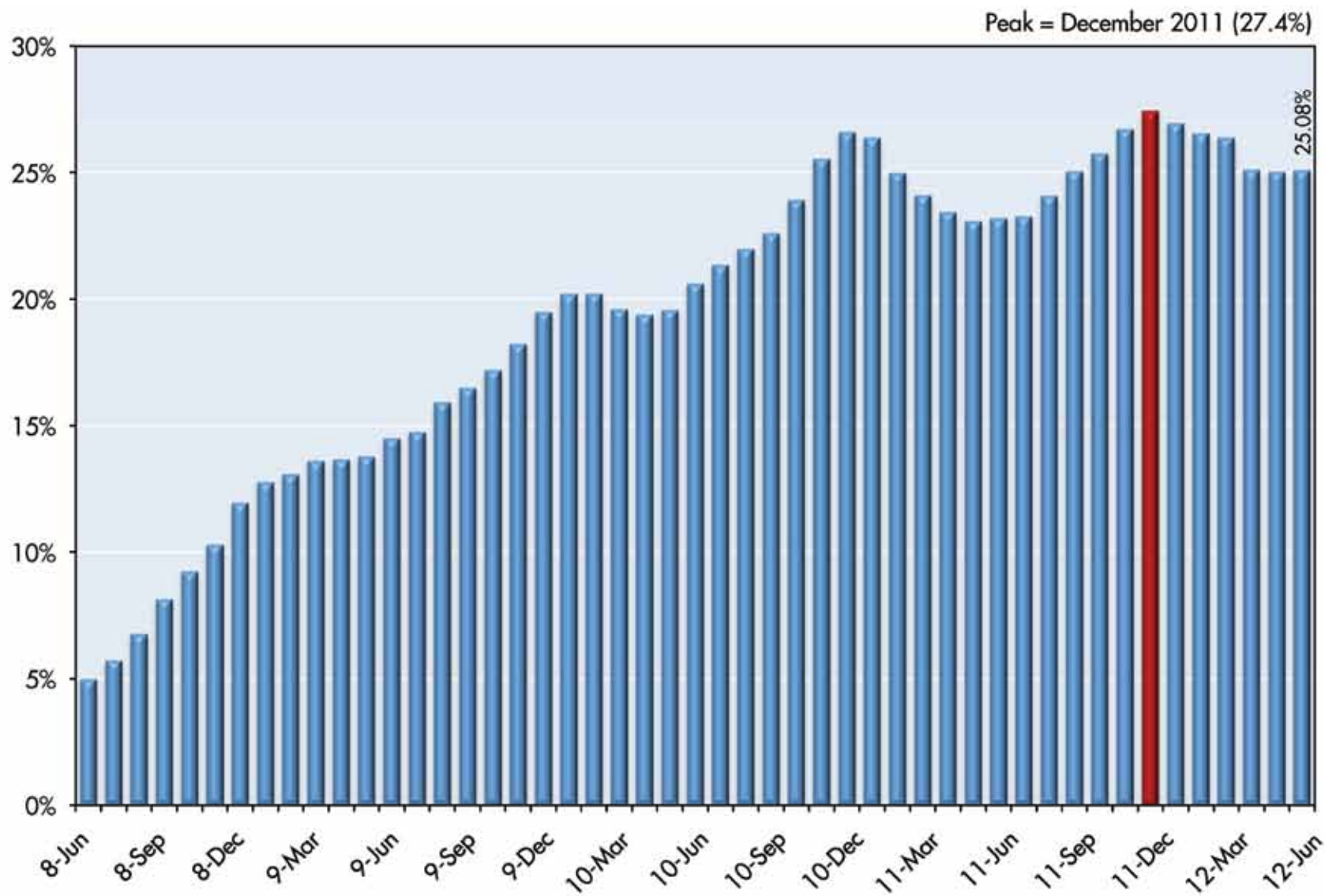
**CUMULATIVE DECLINE IN MEDIAN SINGLE-FAMILY HOUSE PRICES
QUARTER PEAK* TO 1ST QUARTER 2012 FOR EXISTING HOMES, EXCLUDING CONDOMINIUMS**



Sources: National Association of Realtors (NAR), REIN and the Old Dominion University Economic Forecasting Project
*U.S. house prices peaked in Q3 2005 (NAR); Hampton Roads in Q3 2007 (REIN).

GRAPH 20

**ACTIVE LISTING OF DISTRESSED HOMES (REO AND SHORT SALES)
AS A PERCENTAGE OF TOTAL EXISTING RESIDENTIAL HOMES LISTINGS IN HAMPTON ROADS**

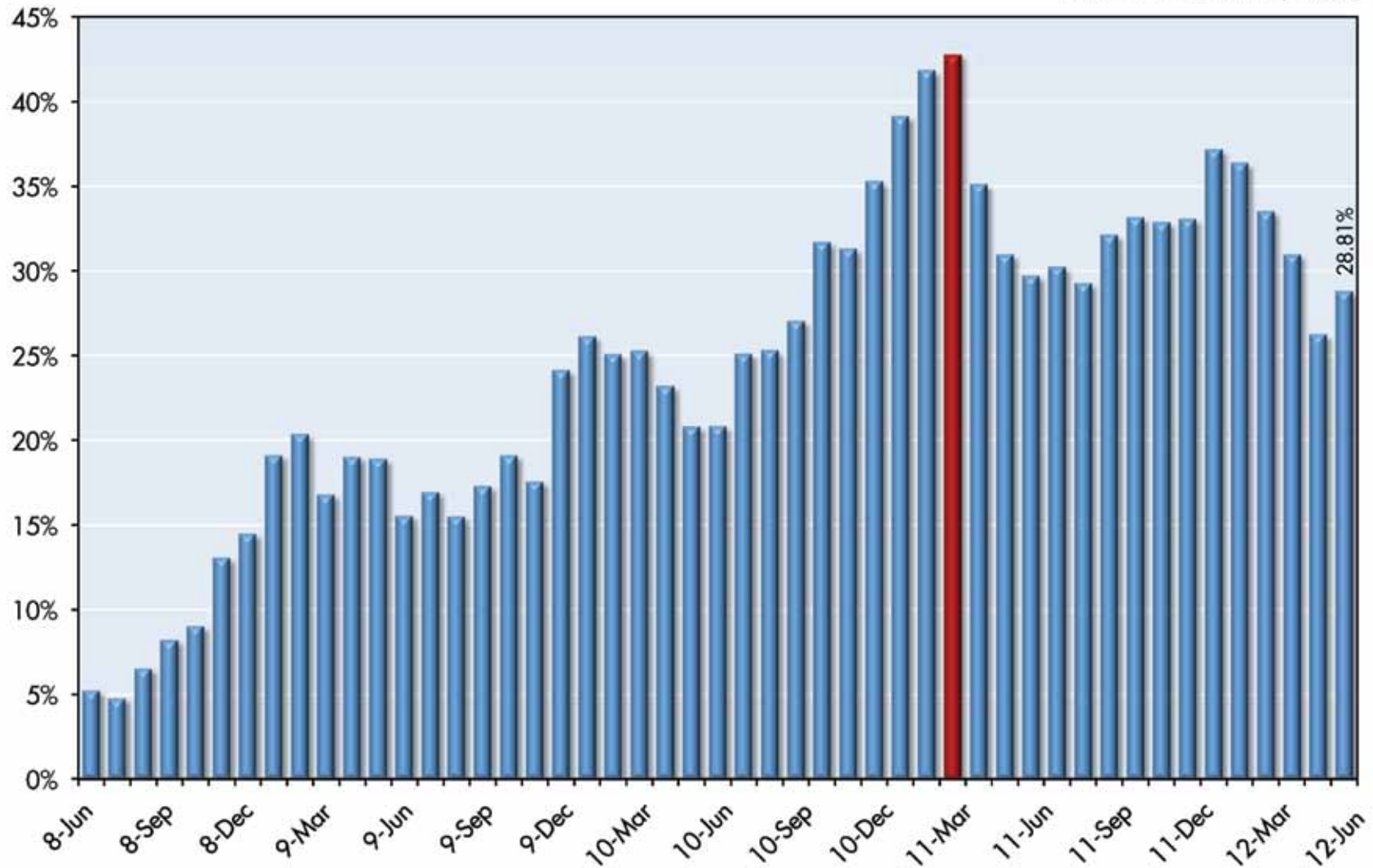


Sources: Real Estate Information Network (REIN) and the Old Dominion University Economic Forecasting Project

GRAPH 21

**SALE OF DISTRESSED HOMES (REO AND SHORT SALES)
AS A PERCENTAGE OF TOTAL EXISTING RESIDENTIAL HOMES SOLD IN HAMPTON ROADS**

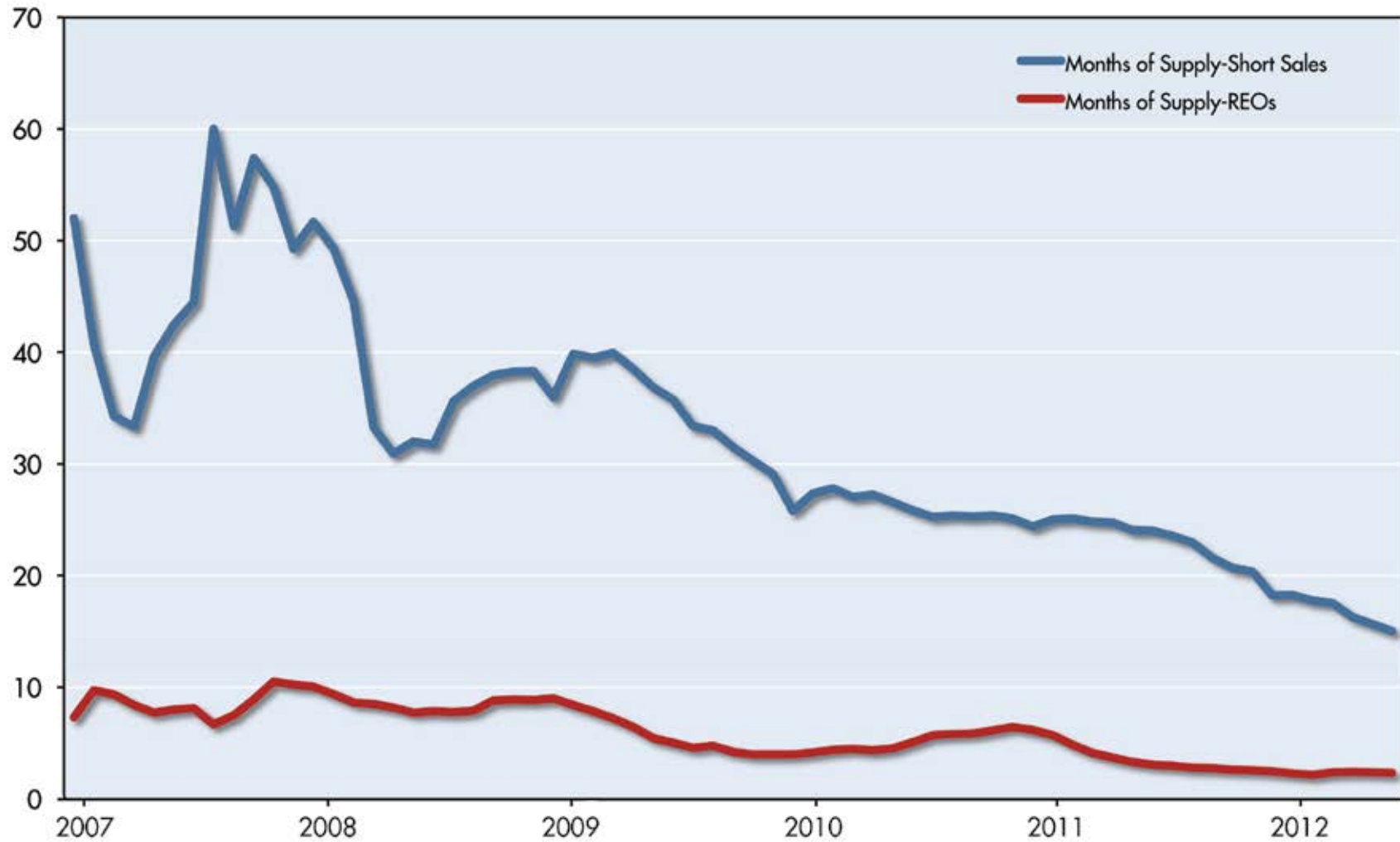
Peak = March 2011 (42.8%)



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

GRAPH 22

**ESTIMATED MONTHS OF SUPPLY OF SHORT SALES AND REOs FOR EXISTING HOMES IN HAMPTON ROADS
BASED ON AVERAGE SALES IN THE LAST 12 MONTHS: 2007-2012***

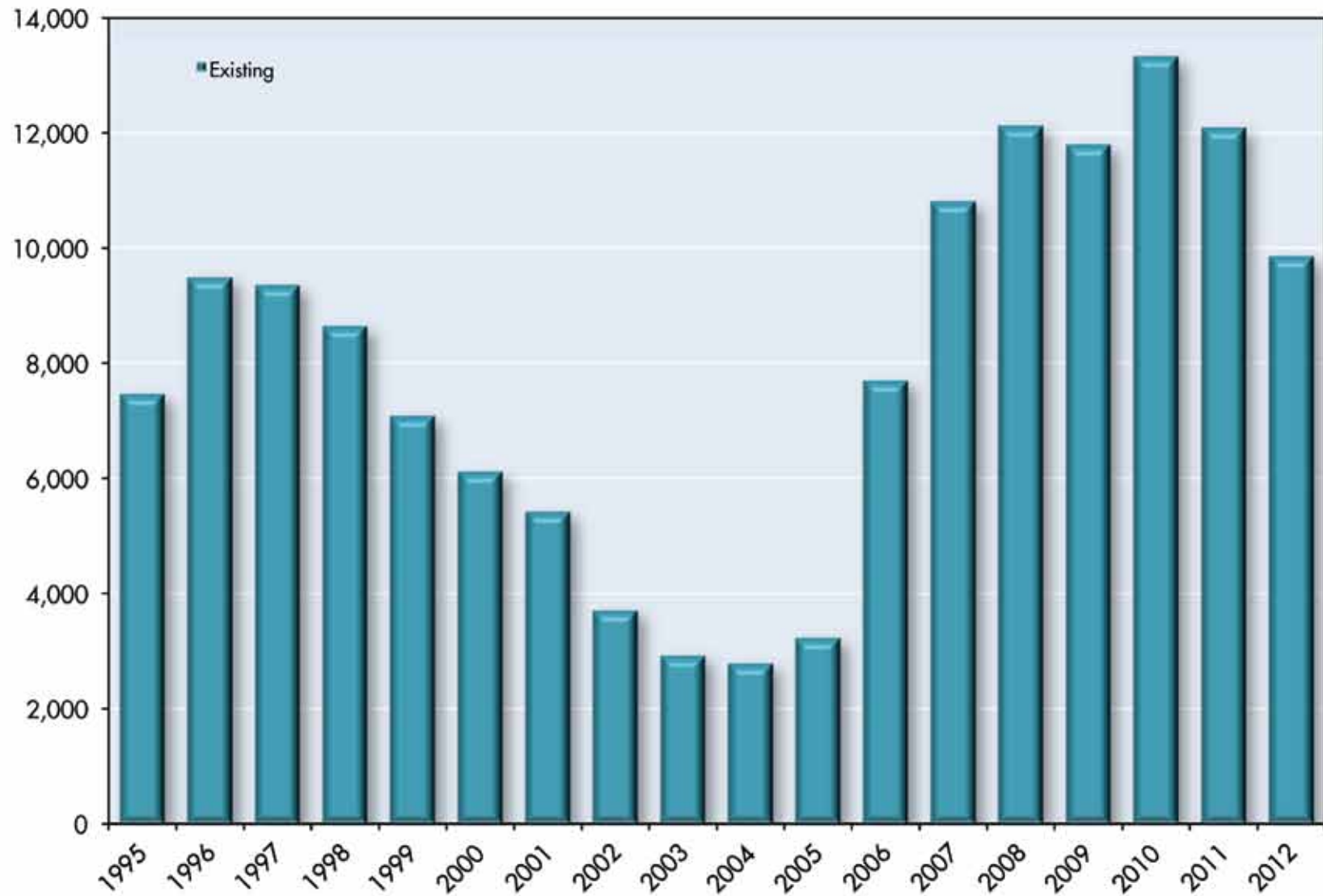


Sources: Real Estate Information Network (REIN) and the Old Dominion University Economic Forecasting Project.

*Data are through June 2012.

GRAPH 23

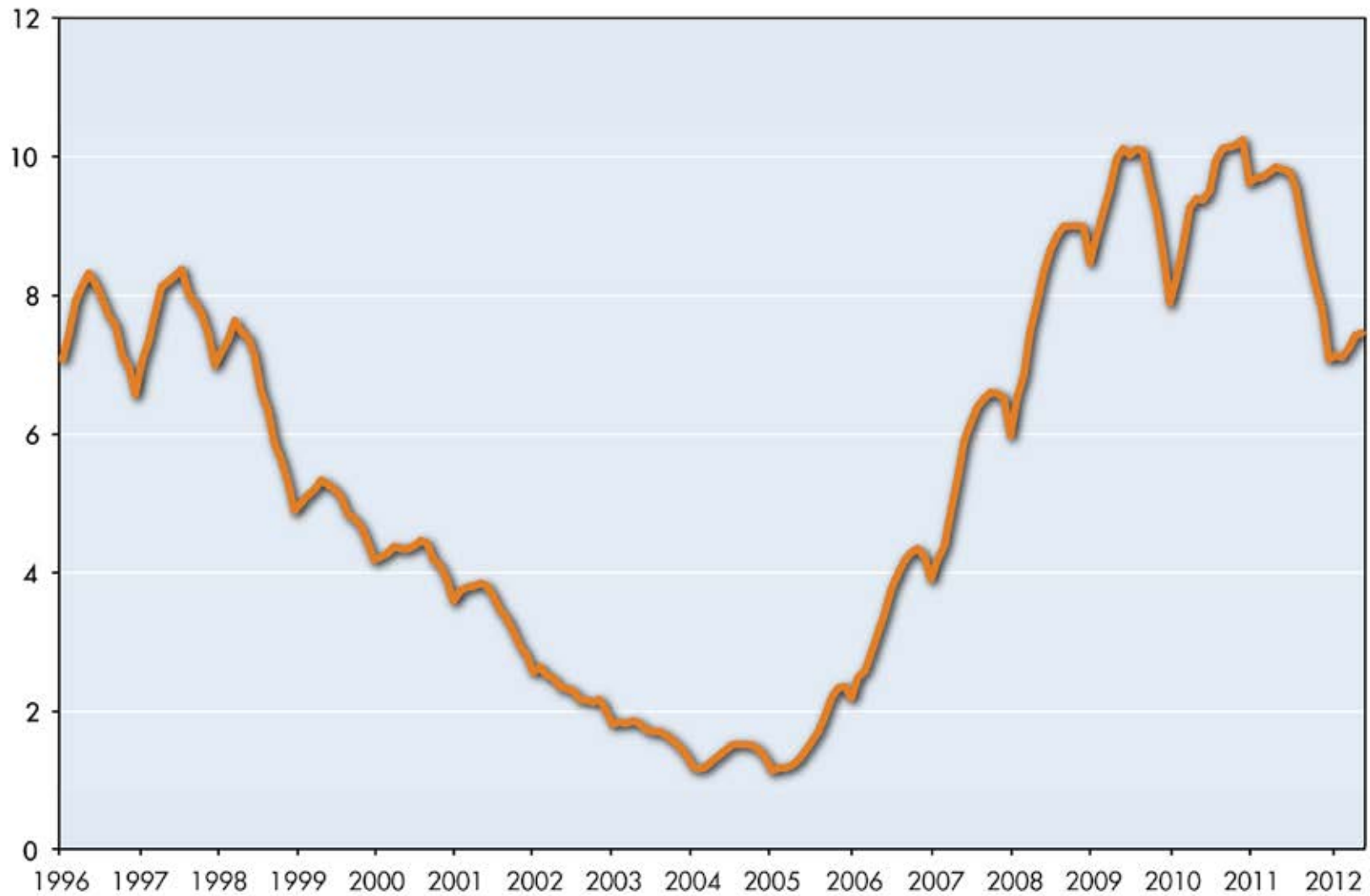
**ESTIMATED INVENTORY OF EXISTING RESIDENTIAL HOMES IN HAMPTON ROADS AS
MEASURED BY ACTIVE LISTINGS ON JUNE 30 OF EACH YEAR**



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

GRAPH 24

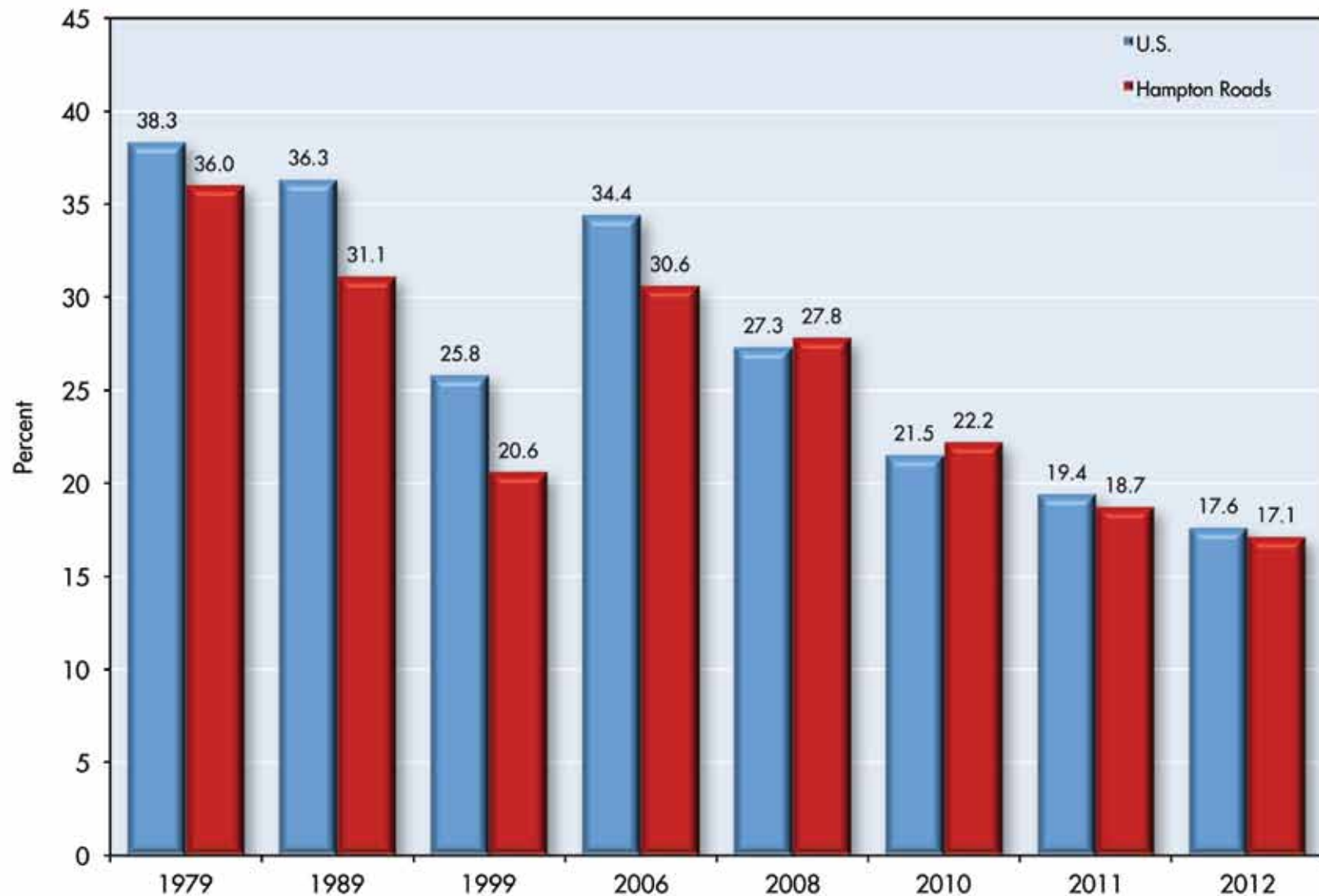
**ESTIMATED MONTHS OF SUPPLY OF ALL EXISTING HOMES IN HAMPTON ROADS
BASED ON AVERAGE SALES IN THE LAST 12 MONTHS: 1996-2012***



Sources: Real Estate Information Network (REIN) and the Old Dominion University Economic Forecasting Project
*Data are through June 2012.

GRAPH 25

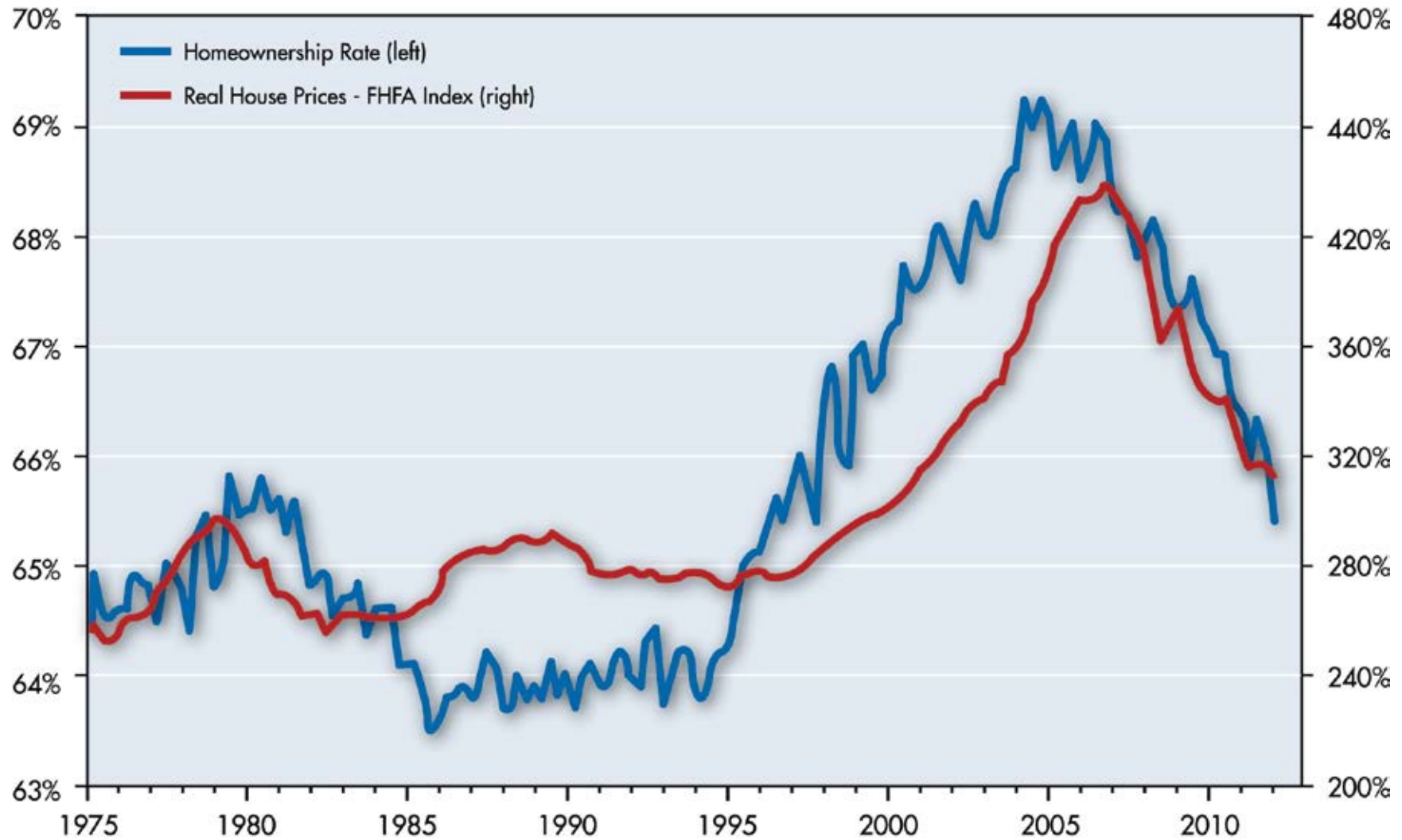
HOUSING AFFORDABILITY: MONTHLY PAYMENT FOR A MEDIAN-PRICE RESALE HOUSE AS A PERCENTAGE OF MEDIAN HOUSEHOLD MONTHLY INCOME IN HAMPTON ROADS AND THE U.S. (1979-2012)



Source: Old Dominion University Economic Forecasting Project
*Assumes 3.95 percent mean mortgage rate in 2012

GRAPH 26

HOMEOWNERSHIP RATE VS. FHFA HOUSE PRICE INDEX 1975:Q1 TO 2012:Q1



Sources: Census, FHFA, BLS
Mark Perry, Carpe Diem Blog, www.mjperry.blogspot.com, June 23, 2012

FINAL OBSERVATIONS

In 2009, 2010 and 2011, the economic analyses presented in the State of the Region report were largely pessimistic. While not all agreed with them, in retrospect, these judgments were accurate assessments of the Hampton Roads economic environment. In truth, our region has suffered visibly from the Great Recession and related developments.

Economic recovery now is visible in our region, though the conditions supporting that recovery are fragile. Stagnant or declining defense spending (a real possibility), or a European or world economic collapse, or renewed recession could derail our economic recovery.

Traditionally, the three legs on our regional economic stool have been defense spending, the port and tourism. In a nutshell, defense spending is quite likely to decelerate and this is problematic because more than 46 percent of our regional economic activity now can be attributed to defense spending. We are less diversified today in an economic sense than we have been for almost 20 years and hence we are very dependent upon defense spending for our regional economic prosperity.

The Port of Virginia has not performed nearly as well as many observers (apparently, including the governor) have expected, and Savannah has emerged as a very strong competitor. Still, at least for several years, the port will reap the benefits of the Heartland Corridor and the advantage of its own deep-draft status, and these are among several reasons why it now has an opportunity to excel.

Tourism has rebounded from its recession lows, but still lags its previous highs. Some hotel markets within the region (for example, Chesapeake/Suffolk) suffer from over-capacity of

rooms, while others (the Historic Triangle) battle what appears to be a long-term decline in demand.

In the short run, most of the factors that influence our economic prosperity are beyond our own control. In the long run, the story is very different, and our region, by wisely investing in education, research and development, and transportation, can alter its economic fate. Whether we will choose to do so may be the question of this decade.



How Much Is Too Much? Comparing Income Inequality and the Cost of Living in Hampton Roads to New York City

HOW MUCH IS TOO MUCH?

COMPARING INCOME INEQUALITY AND THE COST OF LIVING IN HAMPTON ROADS TO NEW YORK CITY

A true revolution of values will soon look uneasily on the glaring contrast of poverty and wealth.

– Martin Luther King Jr.

The worst form of inequality is to try to make unequal things equal.

– Aristotle

The Occupy Wall Street movement, like a shooting star, grabbed our attention for a period of time, but now has all but disappeared. Some lament this development and might well subscribe to the view expressed by Martin Luther King Jr. (above) concerning income disparity, while others regard the movement as misguided sophistry and likely would consider Aristotle's comment to be more on target.

Whatever one's views with respect to the "Occupy" demonstrations that sprang up in cities across the United States (and briefly so in Hampton Roads) in 2011-12, several of the issues raised by them continue to resonate with many Americans. One in particular focuses on the distribution of income in the United States and is nearly always accompanied by the assertion that our distribution of income has become lopsided.

What is the distribution of income in Hampton Roads? How does it compare to the distribution of income in other metropolitan areas such as Richmond and Northern Virginia and, in particular, to New York City, the citadel of Wall Street capitalism? How much income does the median (50th percentile) household earn in Hampton Roads compared to other regions? If one adjusts for regional cost of living differences, then does this alter our conclusions in a meaningful way?



Some Useful Definitions

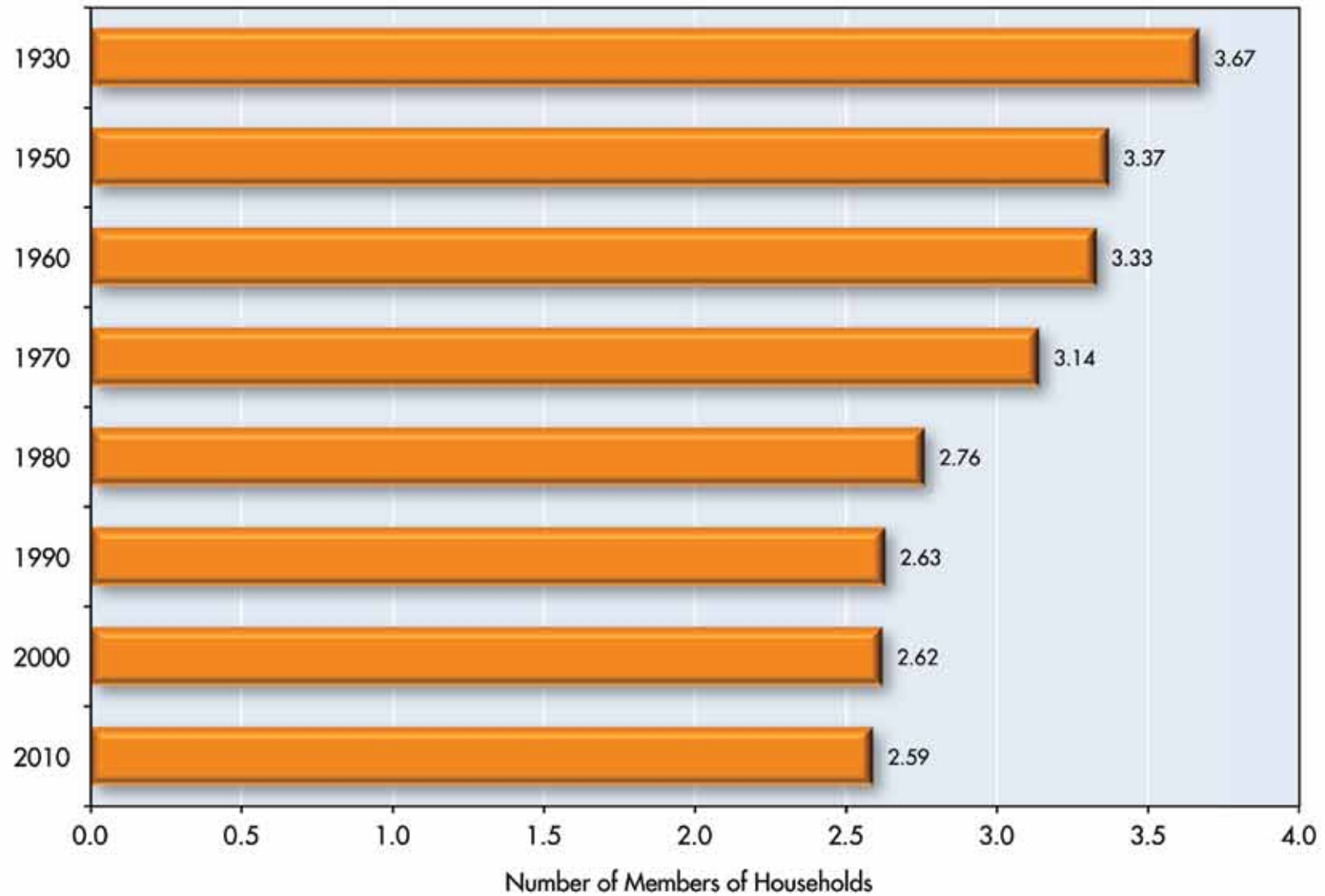
In this chapter we will examine the incomes earned by households. A *household*, in brief, is a domestic unit consisting of the members of a family who live together along with non-relatives such as friends or employees.¹ Since we are concentrating on households, it is important to note that the size of American households has been decreasing for some time. Graph 1 reveals that the average size of a U.S. household declined from 3.67 in 1930 to 2.59 in 2010 (a 29.4 percent decrease). Why is this relevant? The smaller the size of a household, the less ability it has to earn income (holding all other things constant). Thus, part of the declining ability of some households to earn income is due to the fact that now in many households there simply are fewer individuals who can earn money than was true in the past.

The income we will be measuring is pre-tax (not an insignificant point because tax rates in New York City are considerably higher than in Virginia) and includes wages and salaries, capital gains, dividends and money transfer payments such as Social Security, but does not include employer contributions to pension plans or the value of in-kind transfer payments such as food stamps. We measure this for all of the members of a household.

¹ The actual definition utilized by the U.S. Census Bureau (which we rely upon) is more complex because the ways we live are more complicated. The Census Bureau says a household consists of all the people who occupy a housing unit. A house, an apartment or other group of rooms, or a single room, is regarded as a housing unit when it is occupied or intended for occupancy as separate living quarters; that is, when the occupants do not live with any other persons in the structure and there is direct access from the outside or through a common hall (www.census.gov/cpa/about/cps/about/spstdef.html).



GRAPH 1
DECLINING SIZE OF U.S. HOUSEHOLDS, 1930-2010



Sources: U.S. Census and <http://mjperry.blogspot.com/>

Data And Analysis

Let's begin by examining the incomes earned by households in the United States, the New York City metropolitan area, Hampton Roads, the Richmond metropolitan area, Northern Virginia and the Commonwealth of Virginia. One can see in Table 1 that, while 23.6 percent of all households in the country earned less than \$25,000 in 2010, and 25.9 percent of all households in the New York City region fell into the same category, only 18.4 percent of Hampton Roads households reported that level of income and a much smaller 8.6 percent in Northern Virginia. At the other end of the distribution, only 4.2 percent of U.S. households reported incomes in excess of \$200,000, while 7.4 percent of New York City metropolitan area households did so. Northern Virginia, with 13.9 percent of all households reporting incomes in excess of \$200,000 dwarfed the 3.2 percent reported by households in Hampton Roads. In fact, two counties in Northern Virginia are among the top 10 wealthiest in the country and one (Loudoun County) boasts the highest reported incomes of any county in the United States.

LORENZ CURVES AND GINI COEFFICIENTS

The data summaries in Table 1 are useful, but it's a challenge to make sense of so many income numbers at once. Fortunately, there are easier ways available to help us understand how equal (or unequal) our distribution of income is. Graph 2 illustrates a Lorenz Curve for Hampton Roads. A Lorenz Curve reports the percentage of households that earn specific percentages of income. One can see in Graph 2 that in 2010 in Hampton Roads, the bottom 50 percent of households earned only about 22 percent of the household income reported in our region. The lowest 80 percent of the households in Hampton Roads earned only about 52 percent of the total household income reported in our region.

If all households here earned identical incomes, then the Lorenz Curve for Hampton Roads would be the 45-degree black line rising from left to right in Graph 2. Hence, to the extent that income is not distributed equally, the Lorenz Curve bows outward to the southeast. If only one household earned all of the income in Hampton Roads, then the Lorenz Curve would occupy all of the triangular area to the right of the 45-degree line.

Lorenz Curves help us "see" the distribution of income. Gini Coefficients, on the other hand, actually measure and apply a number to any inequality that exists. In terms of our Lorenz Curve, a Gini Coefficient is darkened area A in Graph 2 divided by areas A plus B. Gini Coefficients vary between zero (when all households earn the same income) and one (when one household earns all of the income). Therefore, the higher the Gini Coefficient, the more income inequality there is.

Table 2 reports Gini Coefficients for a variety of jurisdictions; one can see that the Gini Coefficient for Hampton Roads (.424) is less than that of the United States (.467). This tells us that household incomes are more equally distributed here than nationally. Similarly, our Gini Coefficient is below those for the Richmond region and the Commonwealth of Virginia. Interestingly, the Gini Coefficient for Northern Virginia is lower than ours in Hampton Roads, even though there are some very high incomes earned in "NOVA." NOVA's lower Gini Coefficient means that even though higher incomes actually are quite common there, many people earn those higher incomes and thus there is less disparity.

The New York City region, however, clearly stands out in terms of income inequality, and New York's Gini Coefficient (.515) is well above any other jurisdiction. This tells us that household incomes in the New York metropolitan region are distributed less equally than in the rest of the country, especially Hampton Roads. Graph 3 shows us this visually: the green Lorenz Curve (which is bowed out the most) represents New York; the blue, the United States, and the red, Hampton Roads.

Graph 4 compares the Lorenz Curves of Hampton Roads to those of Richmond, Northern Virginia and the Commonwealth. Once again, one can see that household incomes are more equally distributed in Hampton Roads than in any of these other jurisdictions. Graph 5 presents these Virginia income data in a different fashion. Hampton Roads and Northern Virginia provide the greatest contrasts. Compared to Hampton Roads (in red), Northern Virginia (in orange) has much smaller proportions of low-income households and much larger proportions of high-income households.

TABLE 1
HOUSEHOLD INCOME DISTRIBUTION 2010
(PERCENTAGE OF HOUSEHOLDS IN EACH INCOME RANGE)

Income range	U.S.	New York (Metro Area)	Hampton Roads	Richmond (Metro Area)	Northern Virginia	Virginia
Less than \$25,000	23.6%	25.9%	18.4%	19.1%	8.6%	18.8%
\$25,000 to \$100,000	55.6%	48.8%	59.8%	57.5%	43.0%	53.6%
\$100,000 to \$200,000	16.7%	17.9%	18.7%	19.0%	34.5%	21.3%
\$200,000 or more	4.2%	7.4%	3.2%	4.3%	13.9%	6.3%
Total number of households	114,235,996	3,525,508	620,833	471,958	919,237	2,974,481

Source: U.S. Census Bureau American Community Survey

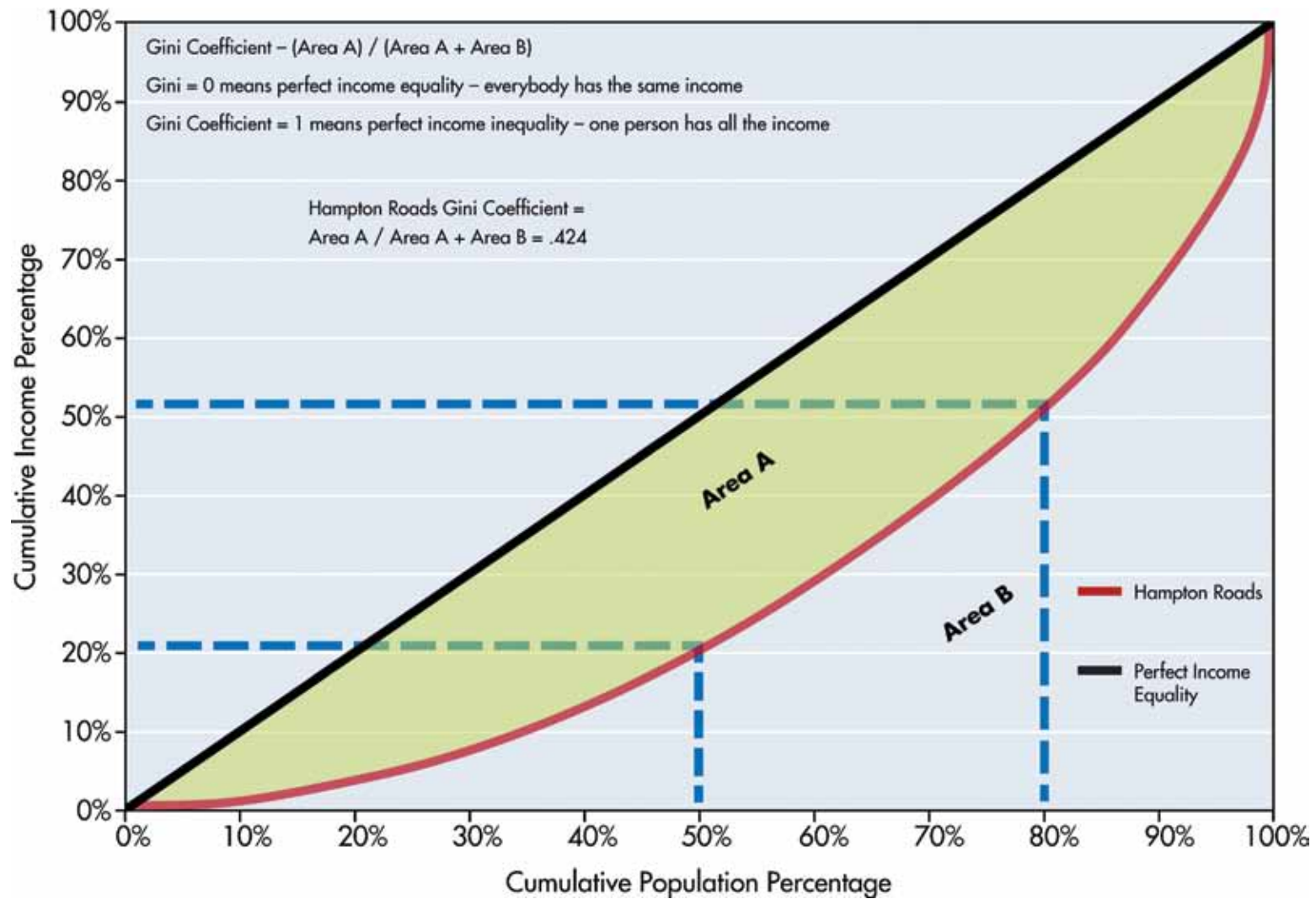
As we will see in a moment, income inequality in the New York City region is so large that the typical household in Hampton Roads is better off in terms of income than the typical household in New York. This is despite the high incomes that some earn in the Big Apple. This underlines an important point where income inequality is concerned. It is often a mistake to focus on average incomes when one is attempting to measure general economic welfare. They can be deceptive. A small number of high incomes can push up the average income and, unless we look at the entire distribution of income, distort judgments about which state or region actually has the largest proportion of prosperous citizens.

TABLE 2
CHANGE IN INCOME INEQUALITY, 2000 TO 2010

Location	Gini Coefficient, 2000	Gini Coefficient, 2010	% Change in Gini Coefficient
United States	0.450	0.467	+0.017 (3.8%)
Virginia	0.441	0.464	+0.023 (5.2%)
Hampton Roads	0.412	0.424	+0.012 (3.0%)
Richmond (Metro Area)	0.426	0.443	+0.017 (4.1%)
Northern Virginia	0.398	0.416	+0.018 (4.5%)
New York (Metro Area)	0.511	0.515	+0.004 (0.8%)

Sources: U.S. Census Bureau Decennial Census (2000), American Community Survey, and the Old Dominion University Economic Forecasting Project

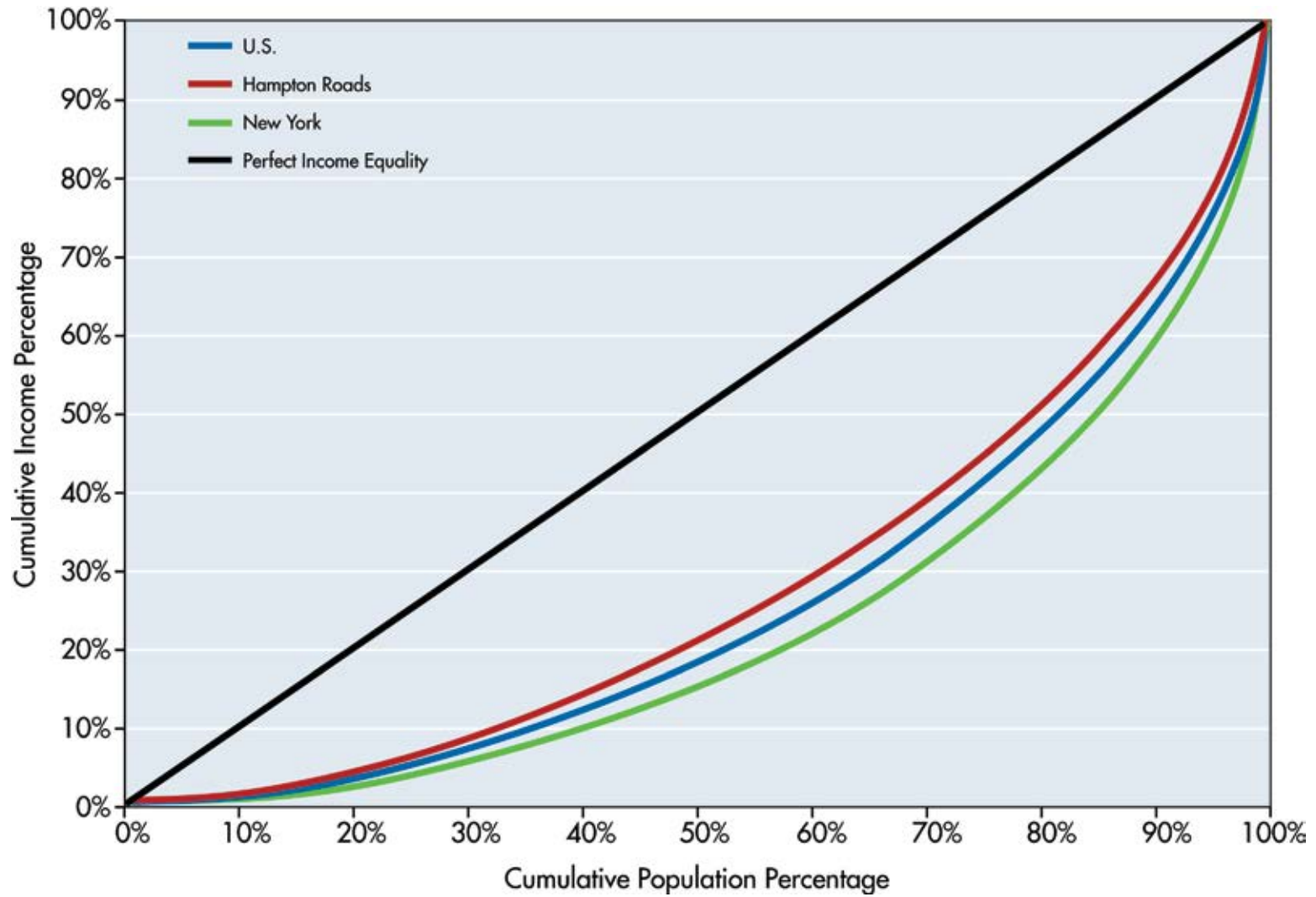
GRAPH 2
DERIVING LORENZ CURVES AND GINI COEFFICIENTS



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

GRAPH 3

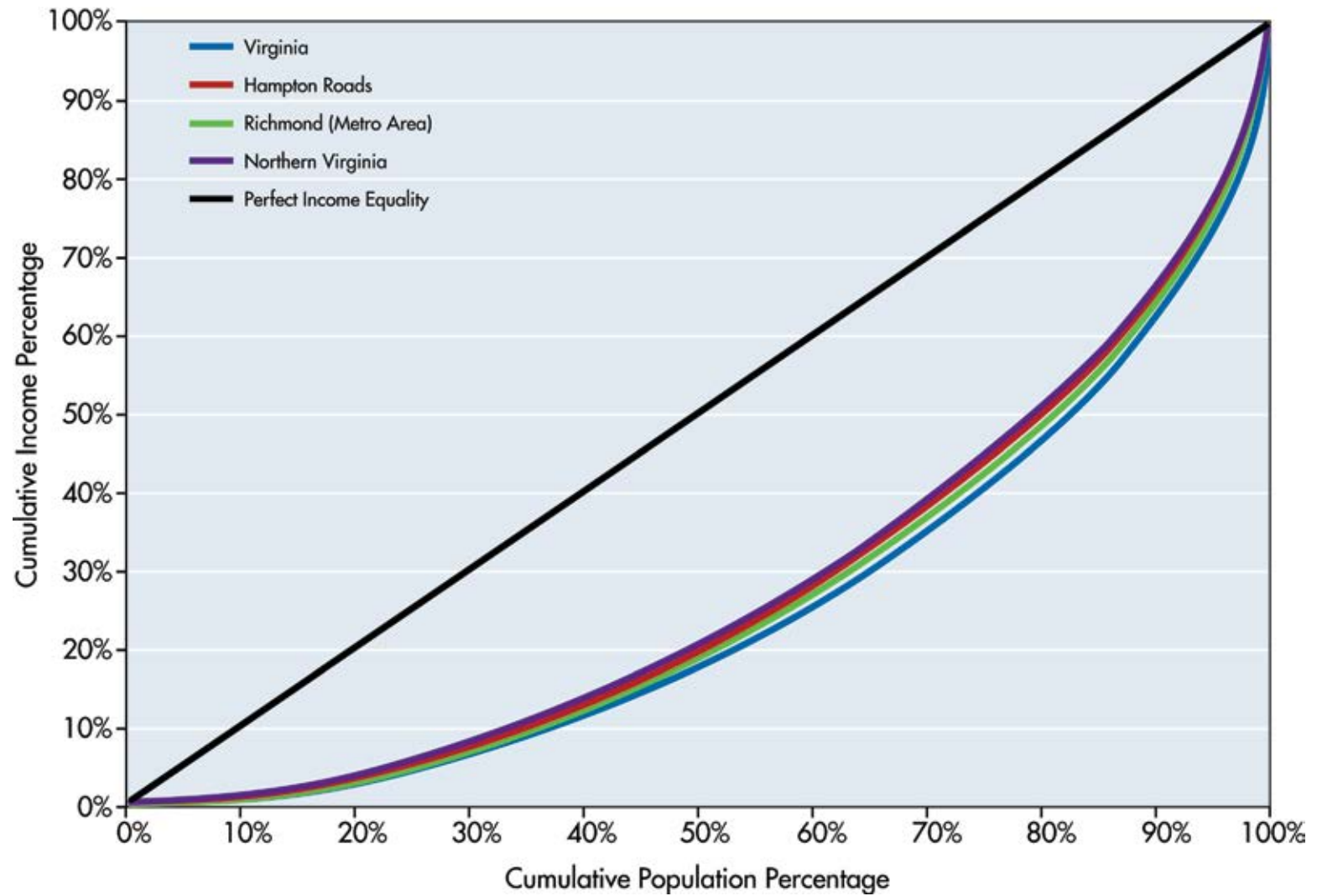
LORENZ CURVES FOR THE U.S., HAMPTON ROADS AND THE NEW YORK METRO AREA, 2010



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

GRAPH 4

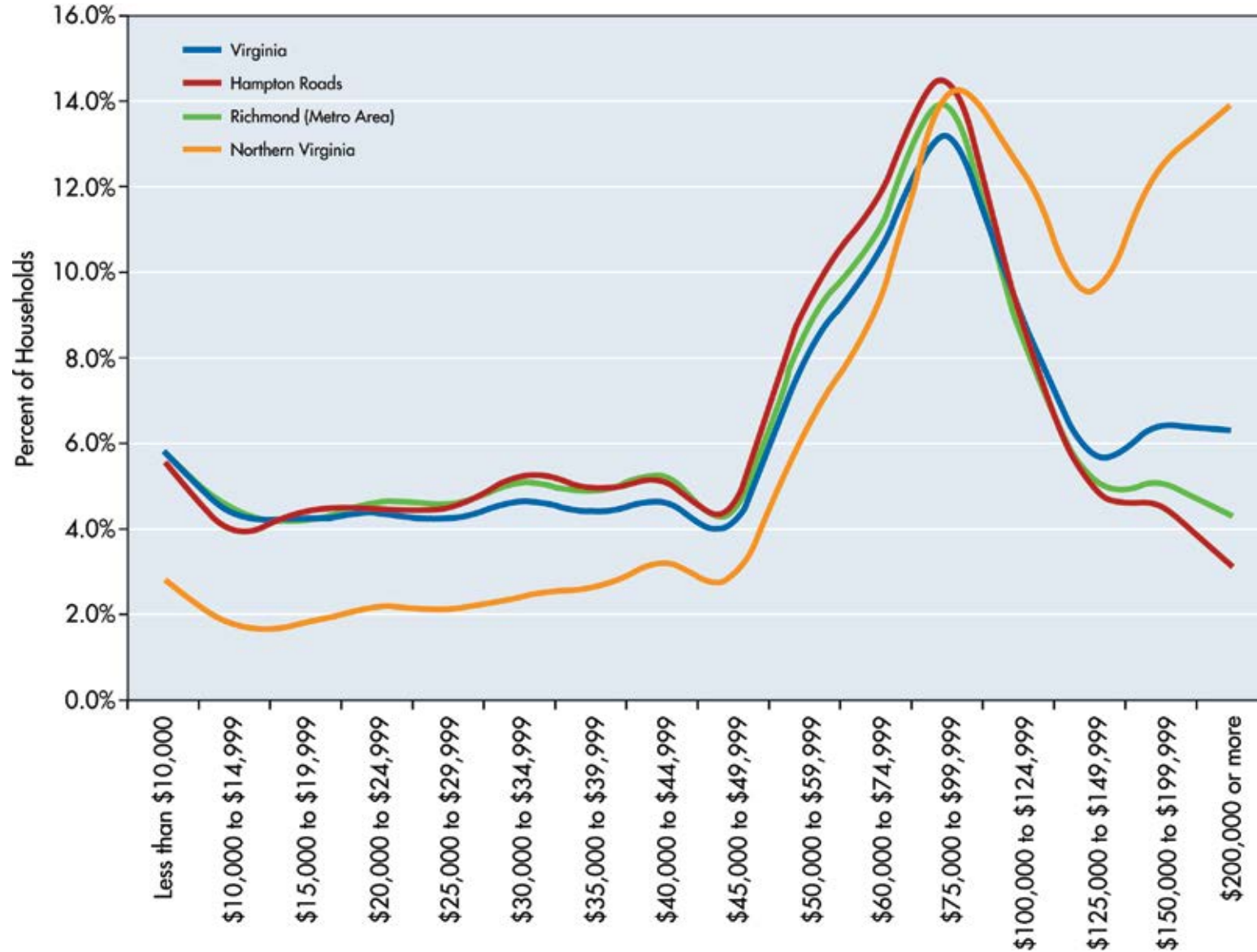
LORENZ CURVES FOR VIRGINIA, HAMPTON ROADS, RICHMOND AND NORTHERN VIRGINIA, 2010



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

GRAPH 5

PICTURING THE HOUSEHOLD INCOME DISTRIBUTION IN HAMPTON ROADS AND OTHER REGIONS, 2010



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

TAKING THE COST OF LIVING INTO ACCOUNT

How much of Northern Virginia's higher household incomes are whittled away when one takes into account the higher cost of living in NOVA? Table 3 tells us that some, but hardly all, of that income advantage disappears when one factors in the higher cost of living in NOVA (the ACCRA² cost of living index for NOVA was 139.9 in 2010 compared to 111.7 in Hampton Roads and 100 nationally). After taking living costs into account, the median (50th percentile) household income in NOVA was \$69,253 in 2010, but only \$51,571 in Hampton Roads and \$51,914 in the United States.

Notably, however, when one adjusts for differences in the cost of living, the median household income in Hampton Roads (\$51,571) is 27 percent higher than the median household income (\$40,576) in the New York City metropolitan area. This is a result that might astonish the typical Gotham resident, to say nothing of The New York Times, for it directly implies that the typical (50th percentile) household in our region is significantly better off, economically speaking, than the typical household in the New York metropolitan region. To be sure, amenities and other circumstances differ between our two regions. Nevertheless, the economic disparity is significant and not in the direction that many might believe.

What's more, the mean household income of Hampton Roads not only is higher than the mean household income in the New York metropolitan region for the lowest quintile (fifth) of households, but also for the second, third and fourth quintiles of households. It is not until one examines the top quintile (the 81st to 100th income percentiles) that the average New York City area household income is higher than that in Hampton Roads.

Table 4 supports this conclusion by examining the income distribution of households by specific income levels. While 47 percent of households in the New York metropolitan region earned less than \$50,000 in 2010, only 42.9 percent of households in Hampton Roads fell into the same category. (And note that this is without adjusting for differences in the cost of living.)

² The ACCRA cost of living index for regions is compiled by the Council for Community and Economic Research. It estimates how the prices of goods and services vary among the regions of the United States at specific points in time.

Thus, setting aside cultural amenities, sports teams, restaurants, pollution, crime, congestion and, indeed, everything except income, the lowest-earning 80 percent of households in Hampton Roads are better off economically than the comparable lowest 80 percent of households in the New York metropolitan region. Therefore, it is easy to support the assertion that the typical household in our region is better off, economically speaking, than the typical household in the New York City area.

Lest these interesting numbers go to our heads, it's wise to note that the data in Table 3 also inform us that the median income of a household in Hampton Roads, adjusted for cost of living differences, is 6.9 percent below that of Richmond, 34.3 percent below that of Northern Virginia and 18 percent below that of the Commonwealth. Further, this is true at every quintile (20th percentile) break in the data. Thus, putting New York City aside, it's fair to observe that households in Hampton Roads typically earn less than those in the "Golden Crescent" of Virginia, which extends from Hampton Roads, through Richmond, to NOVA. Our lower incomes, however, are more equally distributed than in these other urban areas.

TABLE 3

COST OF LIVING, MEDIAN INCOME AND MEAN INCOME 2010
(MEDIAN AND MEAN INCOMES ADJUSTED FOR COST OF LIVING DIFFERENCES)

	U.S.	New York (Metro Area)	Hampton Roads	Richmond (Metro Area)	Northern Virginia	Virginia
ACCRA Cost of Living Index, 2010	100.0	131.2	111.7	104.4	139.9	100.9
Median income (adjusted for cost of living)	\$51,914	\$40,576	\$51,571	\$55,117	\$69,253	\$60,858
Mean incomes by quintile (adjusted for cost of living)						
Lowest quintile (bottom 20%)	\$11,905	\$7,523	\$13,187	\$13,707	\$19,045	\$14,213
Second quintile	\$31,072	\$22,383	\$32,880	\$34,586	\$44,849	\$37,160
Third quintile (middle 20%)	\$52,153	\$40,944	\$51,770	\$55,385	\$69,222	\$61,175
Fourth quintile	\$81,365	\$68,070	\$76,322	\$83,744	\$100,624	\$94,734
Highest quintile (top 20%)	\$177,922	\$180,776	\$148,369	\$173,700	\$195,696	\$201,953
Top 5% of households	\$315,076	\$358,982	\$245,897	\$298,517	\$324,753	\$343,180

Sources: U.S. Census Bureau American Community Survey and the Old Dominion University Economic Forecasting Project. Data were adjusted for cost of living differences using ACCRA's Cost of Living Index, Annual Average Data for 2010. Virginia's cost of living is assumed to be the average of the cost of living for all of the metropolitan areas in the Commonwealth and the Washington, D.C., metropolitan area. Northern Virginia's cost of living is considered to be the Washington, D.C., metropolitan area's cost of living, and the cost of living for the U.S. is assumed to be the average for all metropolitan and nonmetropolitan areas covered by ACCRA's index.



TABLE 4

HOUSEHOLD INCOME DISTRIBUTION 2010
(PERCENTAGE OF HOUSEHOLDS IN EACH INCOME RANGE)

Income range	United States	Hampton Roads	New York (Metro Area)
Less than \$10,000	7.2%	5.6%	10.0%
\$10,000 to \$14,999	5.5%	4.0%	5.8%
\$15,000 to \$19,999	5.3%	4.4%	5.2%
\$20,000 to \$24,999	5.5%	4.5%	4.9%
\$25,000 to \$29,999	5.2%	4.5%	4.6%
\$30,000 to \$34,999	5.3%	5.2%	4.7%
\$35,000 to \$39,999	4.9%	5.0%	4.2%
\$40,000 to \$44,999	4.9%	5.1%	4.2%
\$45,000 to \$49,999	4.3%	4.6%	3.7%
\$50,000 to \$59,999	8.2%	9.2%	7.2%
\$60,000 to \$74,999	10.3%	11.7%	9.0%
\$75,000 to \$99,999	12.3%	14.4%	11.2%
\$100,000 to \$124,999	7.8%	9.1%	7.7%
\$125,000 to \$149,999	4.5%	5.1%	4.7%
\$150,000 to \$199,999	4.4%	4.5%	5.5%
\$200,000 or more	4.2%	3.2%	7.4%
Total	100%	100%	100%

Source: U.S. Census Bureau American Community Survey

INCOMES AND INCOME INEQUALITY INSIDE HAMPTON ROADS

What about income inequality inside our own region? We already know that the Gini Coefficient for Hampton Roads rose from .413 to .424 between 2000 and 2010, and this told us that household income was less equally distributed in 2010 than in 2000 in our region. Graph 6 illustrates this change, which one can see was not very large.

Table 5 reports median (50th percentile) household incomes for the cities and counties of our metropolitan region, both for 2000 and 2010. One can see that Poquoson and York County led the pack in 2010 and that Norfolk and Portsmouth brought up the rear in this regard. By far the greatest percentage increase, however, occurred in Suffolk, which experienced dramatic population growth during the decade, some of which involved new, upscale housing developments near I-664. The lowest increase occurred in Mathews County. Somewhat surprisingly, the median income of households in Virginia Beach grew a bit more slowly than the regional average.

Of interest for both humane and policy reasons is the percentage of households that have very low incomes. Table 6 reveals that approximately one-quarter of households in Norfolk reported incomes under \$10,000, both in 2000 and 2010, and this far exceeded the percentage in any other jurisdiction. Contrary to the expectations of some, Virginia Beach ranked second in 2010 with 16.9 percent of all households reporting incomes less than \$10,000.

At the other end of the income spectrum, Virginia Beach easily also reported the highest percentage of households earning more than \$200,000 in 2010 (see Table 7). Virginia Beach's 32.83 percent in this regard was more than twice that of any other jurisdiction.

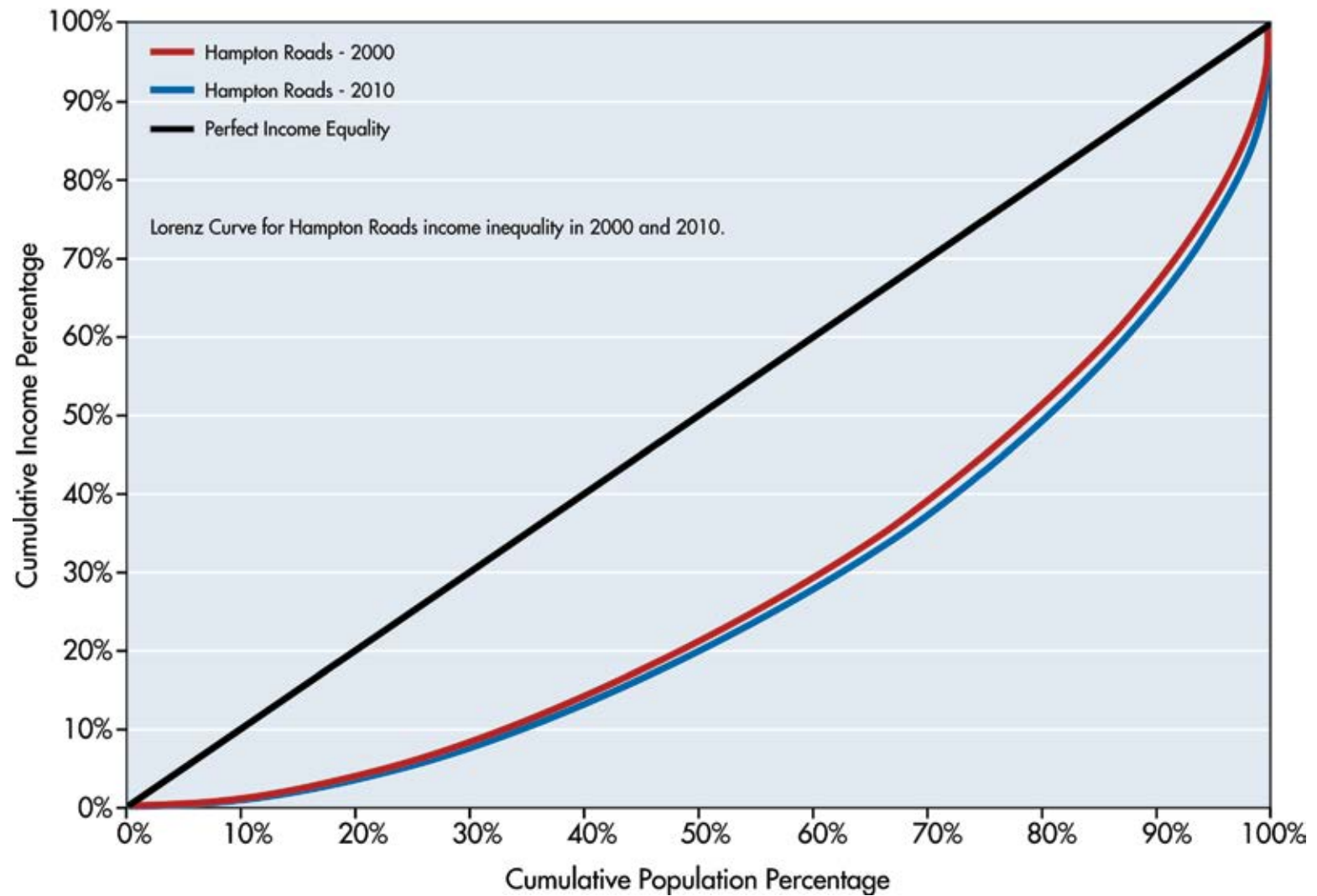
Even though we have established above that household incomes are more equally distributed in Hampton Roads than in the remainder of Virginia, the New York metropolitan region and the United States, between 2000 and 2010, all but three jurisdictions in our region saw their household income distributions exhibit greater inequality. Table 8 reports Gini Coefficients for each jurisdiction inside Hampton Roads for 2000 and 2010 based upon household incomes. In 12 of the 15 cities and counties, Gini Coefficients rose during this period (indicating less equal distributions of income). Only Hampton, James City County

and Williamsburg bucked this trend. Norfolk now exhibits the greatest inequality in its household incomes and York County the least. Graph 7 presents these data visually in terms of the percent change in the Gini Coefficient for each jurisdiction between 2000 and 2010. In general, income inequality tended to rise in cities and counties that experienced the most population growth, but that was not always the case (though Suffolk constitutes an exception).



GRAPH 6

LORENZ CURVES FOR HAMPTON ROADS: 2000 VS. 2010



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

TABLE 5

MEDIAN HOUSEHOLD INCOMES BY LOCATION IN HAMPTON ROADS, 2000 AND 2010

Location	Median Household Income 2000	Median Household Income 2010	Percentage Change 2000 to 2010
Hampton Roads	\$42,448	\$57,605	35.7%
Currituck County, N.C.	\$40,822	\$55,376	35.7%
Gloucester County	\$45,421	\$59,331	30.6%
Isle of Wight County	\$45,387	\$62,242	37.1%
James City County	\$55,594	\$73,903	32.9%
Mathews County	\$43,222	\$47,435	9.7%
York County	\$57,956	\$81,055	39.9%
Chesapeake	\$50,743	\$67,855	33.7%
Hampton	\$39,532	\$49,815	26.0%
Newport News	\$36,597	\$49,562	35.4%
Norfolk	\$31,815	\$42,677	34.1%
Poquoson	\$60,920	\$84,315	38.4%
Portsmouth	\$33,742	\$45,488	34.8%
Suffolk	\$41,115	\$65,104	58.3%
Virginia Beach	\$48,705	\$64,618	32.7%
Williamsburg	\$37,093	\$50,794	36.9%

Sources: U.S. Census Bureau Decennial Census (2000) and American Community Survey

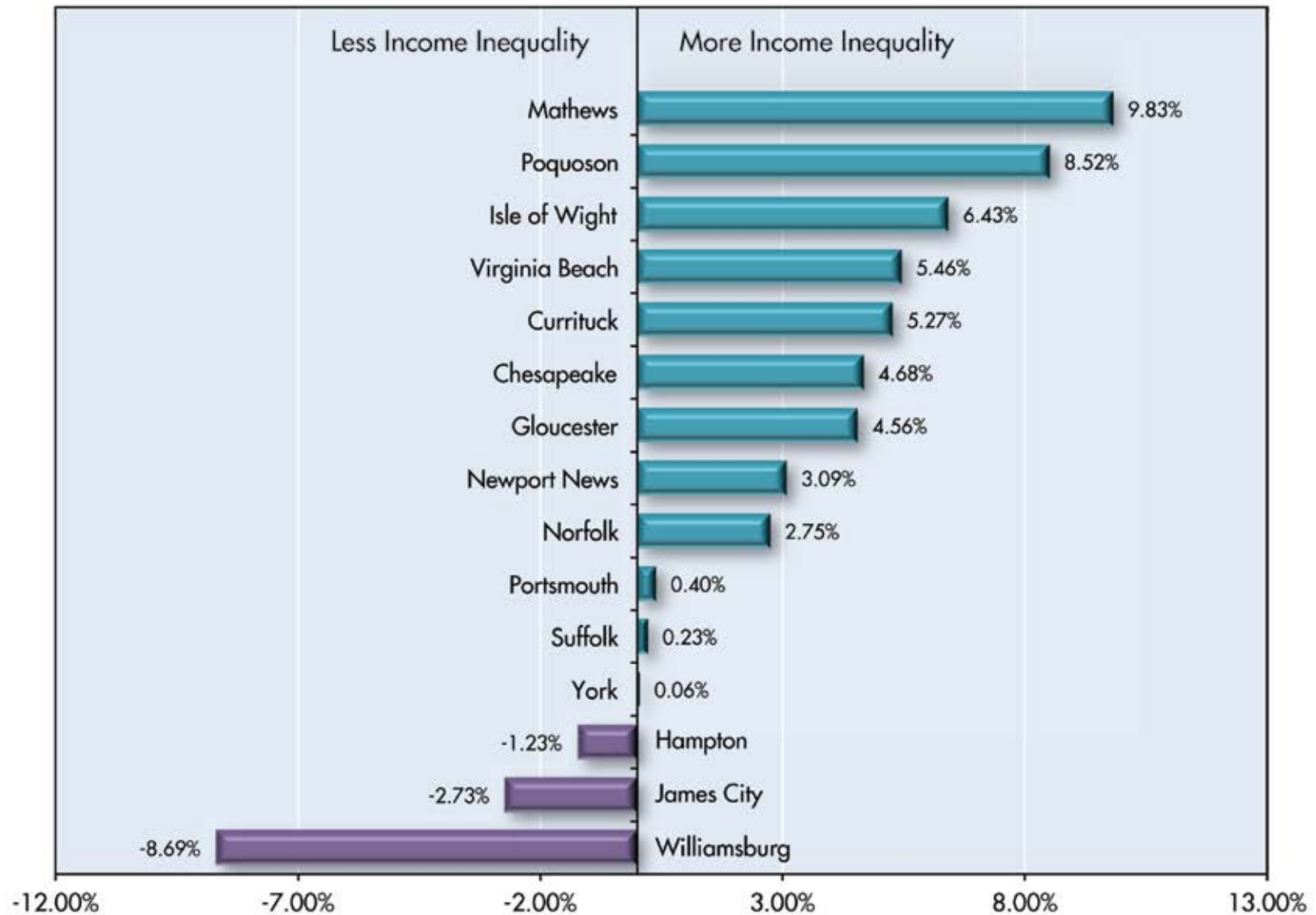
TABLE 6 DISTRIBUTION OF LOW-INCOME HOUSEHOLDS WITHIN HAMPTON ROADS, 2000 AND 2010 (INCOMES BELOW \$10,000 PER YEAR)		
Location	Percentage of Hampton Roads Households with Incomes Under \$10,000 (in 2000)	Percentage of Hampton Roads Households with Incomes Under \$10,000 (in 2010)
Currituck County, N.C.	0.98%	1.15%
Gloucester County	1.93%	1.68%
Isle of Wight County	2.11%	1.69%
James City County	2.23%	2.14%
Mathews County	0.45%	0.41%
York County	1.23%	1.80%
Chesapeake	8.59%	9.83%
Hampton	9.73%	9.91%
Newport News	15.70%	15.06%
Norfolk	25.98%	23.18%
Poquoson	0.26%	0.65%
Portsmouth	10.01%	8.00%
Suffolk	5.63%	6.12%
Virginia Beach	14.32%	16.90%
Williamsburg	0.85%	1.15%
Sources: U.S. Census Bureau Decennial Census (2000) and American Community Survey		

TABLE 7 DISTRIBUTION OF HIGH-INCOME HOUSEHOLDS WITHIN HAMPTON ROADS, 2000 AND 2010 (INCOMES OVER \$200,000 PER YEAR)		
Location	Percentage of Hampton Roads Households with Incomes Over \$200,000 (in 2000)	Percentage of Hampton Roads Households with Incomes Over \$200,000 (in 2010)
Currituck County, N.C.	1.25%	1.24%
Gloucester County	1.75%	1.67%
Isle of Wight County	1.19%	2.52%
James City County	8.58%	10.00%
Mathews County	0.78%	0.59%
York County	4.24%	7.05%
Chesapeake	10.39%	14.78%
Hampton	5.89%	3.40%
Newport News	6.38%	6.73%
Norfolk	13.79%	9.61%
Poquoson	1.18%	1.75%
Portsmouth	2.44%	2.12%
Suffolk	3.49%	4.29%
Virginia Beach	37.62%	32.83%
Williamsburg	1.04%	1.31%
Sources: U.S. Census Bureau Decennial Census (2000) and American Community Survey		

TABLE 8		
GINI COEFFICIENTS FOR CITIES AND COUNTIES IN HAMPTON ROADS		
	Gini Coefficient, 2000	Gini Coefficient, 2010
Currituck County, N.C.	.409	.431
Gloucester County	.399	.417
Isle of Wight County	.422	.449
James City County	.418	.407
Mathews County	.404	.423
York County	.400	.400
Poquoson	.386	.419
Williamsburg	.477	.439
Chesapeake	.405	.424
Hampton	.431	.426
Newport News	.435	.449
Norfolk	.456	.469
Portsmouth	.435	.436
Suffolk	.448	.449
Virginia Beach	.384	.435

GRAPH 7

CHANGES IN REGIONAL INCOME INEQUALITY, 2000-2010



Sources: U.S. Census Bureau Decennial Census (2000), American Community Survey and the Old Dominion University Economic Forecasting Project

Some Observations About Income Inequality

Nearly always, there exists a tradeoff between income equality and economic growth. More of one often means less of the other. Some degree of income inequality is necessary in order to provide people with incentives to perform, excel, innovate and progress. This is basic to the very nature of a market economy and the theory is that all citizens typically benefit (perhaps unknowingly) when an individual or business firm produces more output, or develops new products.

Consider that in 1800, approximately 80 percent of all workers in the United States were connected to agriculture; today, fewer than 2 percent are so occupied and they not only feed a U.S. population that is 50 times as large, but also export food throughout the rest of the world. The result has been a dramatic increase in our standard of living, and all of us now have time and money to devote to other pursuits. A key to this has been the ability of our farmers to keep most of the fruits of their labor (no pun intended).

Those who have attempted to eliminate income inequality and to submerge or eliminate economic incentives typically have experienced bad results. Witness the demise of the former Soviet Union and contrast it with the rise of the People's Republic of China, which abandoned Marxist notions concerning income inequality and incentives and has boomed ever since.

Nevertheless, while nearly everyone likes the many beneficial effects that incentives have upon economic growth, that same economic growth also can generate many costs. Further, economic growth nearly always generates economic inequality, and this can be problematic. High or increasing levels of income inequality may violate the notions of fairness that many people cherish. This can breed dissatisfaction, reduce societal cohesion and inspire feelings among many people that they are being left out or victimized. Such attitudes can result in falling economic productivity, antisocial behavior, political instability and even revolution. Thus, economic inequality is not a topic that one should sweep under the proverbial rug.

Suppose that we attempt to reduce income inequality by increasing taxes on our highest earners and also increasing tax rates on capital gains. High marginal income and capital gains tax rates discourage entrepreneurial activity. But, what is the supply elasticity of labor in that regard (i.e., how much of a reaction would we get by such tax rate changes)? The average long-run supply elasticity of labor found in economic studies is about +.3 for men and +1.0 for women (Journal of Economic Literature, December 2011). This means that increased marginal tax rates above current levels will reduce the amount of labor supplied. For men, for example, a 10 percent increase in marginal tax rates would result in a 3 percent decrease in labor supplied. However, our use of the term “average” supply elasticity here was deliberate because many studies have been done on this issue, and they have produced many different answers. We would be surprised if increased marginal tax rates did not reduce our labor supply and entrepreneurial activity at least somewhat. However, will the beneficial effects generated by the use of the funds raised by the taxes outweigh those costs? Perhaps, but reasonable people differ in their answers to this question.

How much is too much where income inequality is concerned? Many analysts have addressed this question and their answers are hardly consistent. What is clear is that income inequality has increased worldwide, in the United States, in Virginia and in Hampton Roads. It's also clear that this rise in income inequality violates some people's perceptions of what is fair and equitable. As a consequence, they favor redistributing income, not only because they perceive this to be a matter of justice, but also because they want to increase tax revenues, which variously might enable them to fund public spending that they like, or discourage certain behaviors or reduce budget deficits.

The American public appears to be almost evenly divided on issues relating to the distribution of income. Hence, there is no agreement on "how much is too much," or on the reasons why income inequality has been increasing, or on the most effective ways to diminish income inequality, if that is what we wish to do. Most economists believe that the two most influential causes of increased income inequality have been: (1) technological change that has been biased against workers; and (2) the globalization of economic activity. Neither of these forces is likely to dissipate soon, though there are policies we could adopt that might modify or channel the effects of technological change and globalization. Those policies, however, are a topic for another day.

NOTES

The analysis presented in this chapter relied upon the following definitions:

The 2002 State of the Region report examined many of the same issues and used the New York Primary Metropolitan Statistical Area (PMSA) as the unit of analysis. This included the following eight counties in New York State: Bronx, Kings, New York, Putnam, Queens, Richmond, Rockland and Westchester. The definition is available here: www.bls.gov/oes/2003/may/msa_def.htm#5600.

Effective 2004, all PMSAs were dissolved and replaced by "metropolitan divisions." See Office of Management and Budget Bulletin No. 04-03 for more information.

The 2010 income distribution data we have are for the New York-White Plains-Wayne, N.Y.-N.J., Metropolitan Division. This division includes the same eight counties as the 2000 New York PMSA, but it also now includes three counties from New Jersey: Bergen, Hudson and Passaic. The definition is available here: www.bls.gov/oes/current/msa_def.htm#35644. For purposes of comparison, we defined the New York metro area in 2010 using the same definition applied in 2000. However, this meant that we could no longer obtain mean income for the region and so we relied upon median income.

Northern Virginia is part of the Washington-Arlington-Alexandria, D.C.-Va.-Md.-W.Va. Metropolitan Statistical Area. We examined only the Virginia portion of the MSA, which includes: Alexandria city, Arlington County, Clarke County, Fairfax County, Fairfax city, Falls Church city, Fauquier County, Fredericksburg city, Loudoun County, Manassas Park city, Manassas city, Prince William County, Spotsylvania County, Stafford County and Warren County.



Attorneys and Law Firms in Hampton Roads



ATTORNEYS AND LAW FIRMS IN HAMPTON ROADS

Who hasn't heard a joke about lawyers? While it might be enjoyable for us to poke a bit of fun at attorneys here, we'll forgo that pleasure because we have a serious goal for this chapter. We want to illuminate the markets for lawyers, attorneys and law firms in Hampton Roads.

First things first. What is the difference between a *lawyer* and an *attorney*? These terms often are used almost interchangeably. **Traditionally, a lawyer is an individual trained in the field of law who can provide advice on legal matters. An attorney, however, is an individual licensed to act on a client's behalf and who is able to represent that client in court. Even so, the Code of Virginia typically utilizes the term lawyer rather than attorney except when referring to the attorney general.**

Lawyers rival politicians as targets for aggressive stereotyping. To wit: the notion that the legal profession is filled with rapacious individuals who are only interested in generating fees and billable hours that will increase their incomes. In this view, these lawyers have only a passing interest in "justice," however that might be defined.

Reality is that such stereotypes, while salient for the occasional legal miscreant, usually sail wide of the mark. Taken as a group, attorneys are notable for their probity, reliability and dedication. Millions of Americans can and do put their trust in the work of attorneys and are not disappointed. Further, many attorneys do not earn high incomes and more than a few donate pro bono hours of legal service to those in need.

An important reason why it is difficult to generalize about attorneys is that there is remarkable variation in their demographic and operational characteristics. This is true nationally and in Hampton Roads. Some attorneys are members of large firms that boast hundreds of attorneys who pursue their profession in multiple locations around the globe, while others ply their trade in the solitude of single-office firms that usually carry their own names.

Further, though many lawyers earn attractive incomes, this certainly is not true for all. **Table 1 reports data from the Bureau of Labor Statistics (www.bls.gov) that reveal that the mean annual income of the 4,950 individuals classified as lawyers in Hampton Roads was \$115,690 in May 2011.** In Washington, D.C./Northern Virginia, the BLS reported that the mean income of a lawyer was \$157,780. These are attractively high numbers, but they disguise a highly differentiated market. The 2012 annual report of the Association for Legal Career Professionals (NALP), http://www.law.syr.edu/_assets/documents/professional-and-career-development/James%20Leipold%20Article.pdf, found that the mean starting salary of a new lawyer was only \$63,000 in 2010 and that this salary had fallen 12.5 percent from 2009.

NALP also reported that the mean starting salary for lawyers working within the federal government was \$62,000, while it was \$44,000 within state government, \$50,000 within local government and \$42,900 for positions within public-interest groups.

Perhaps the most telling indication that all lawyers are not created equal, however, is NALP's finding that 29 percent of all new law school graduates either were working part time or in a temporary position, or both.

We will return to Table 1, but there is one additional point that should be made relative to the wage rates and incomes reported there. The BLS "mean hourly wage rate" computation for each metropolitan area rigidly assumes that each lawyer works 2,080 hours per year, that is, 40 hours per week, 52 weeks per year. Our conversations with local lawyers revealed that this is a misleading

assumption because many lawyers put in 60- to 70-hour weeks on a regular basis (though all of these hours may not be billed to clients) and it is commonly assumed that these work demands are the way medium- to large-sized legal firms operate. This makes a significant difference in how the income numbers in Table 1 are interpreted. In Hampton Roads, for example, if a lawyer works 60 hours rather than 40 hours per week, then her hourly wage rate shrinks from \$55.62 to \$37.08. It is not so easy to make a case that the typical lawyer is “overpaid” if she works much longer hours than the average employee and ends up earning only \$37.08 per hour for her efforts.

Nevertheless, lawyers in Hampton Roads are reasonably well paid compared to those who occupy other professions. Graph 1 reports the average income earned in May 2011 by workers in a variety of occupations that usually require considerable education beyond a baccalaureate degree. **The mean annual income of lawyers (\$115,690) is well below that of physicians, but well above incomes earned by a variety of other professional occupations, including computer and information research scientists, electrical engineers and social workers, and approximately the same as the average income earned by college administrators.**

Thus, while legal stereotypes may contain a few elements of truth, most are overly broad generalizations that don’t adequately characterize either the increasingly diverse demographics of the profession, or the rich variety of environments in which lawyers operate. Our region is home to many attorneys and they do many different things. One of our primary aims in this chapter is to enlighten readers as to how and why this is so. We will begin by examining the market for attorneys – that is, the supply of attorneys relative to society’s demand for them.

TABLE 1
BUREAU OF LABOR STATISTICS DATA FOR HAMPTON ROADS, WASHINGTON, D.C./NORTHERN VIRGINIA, RICHMOND, CHARLOTTE AND JACKSONVILLE, MAY 2011

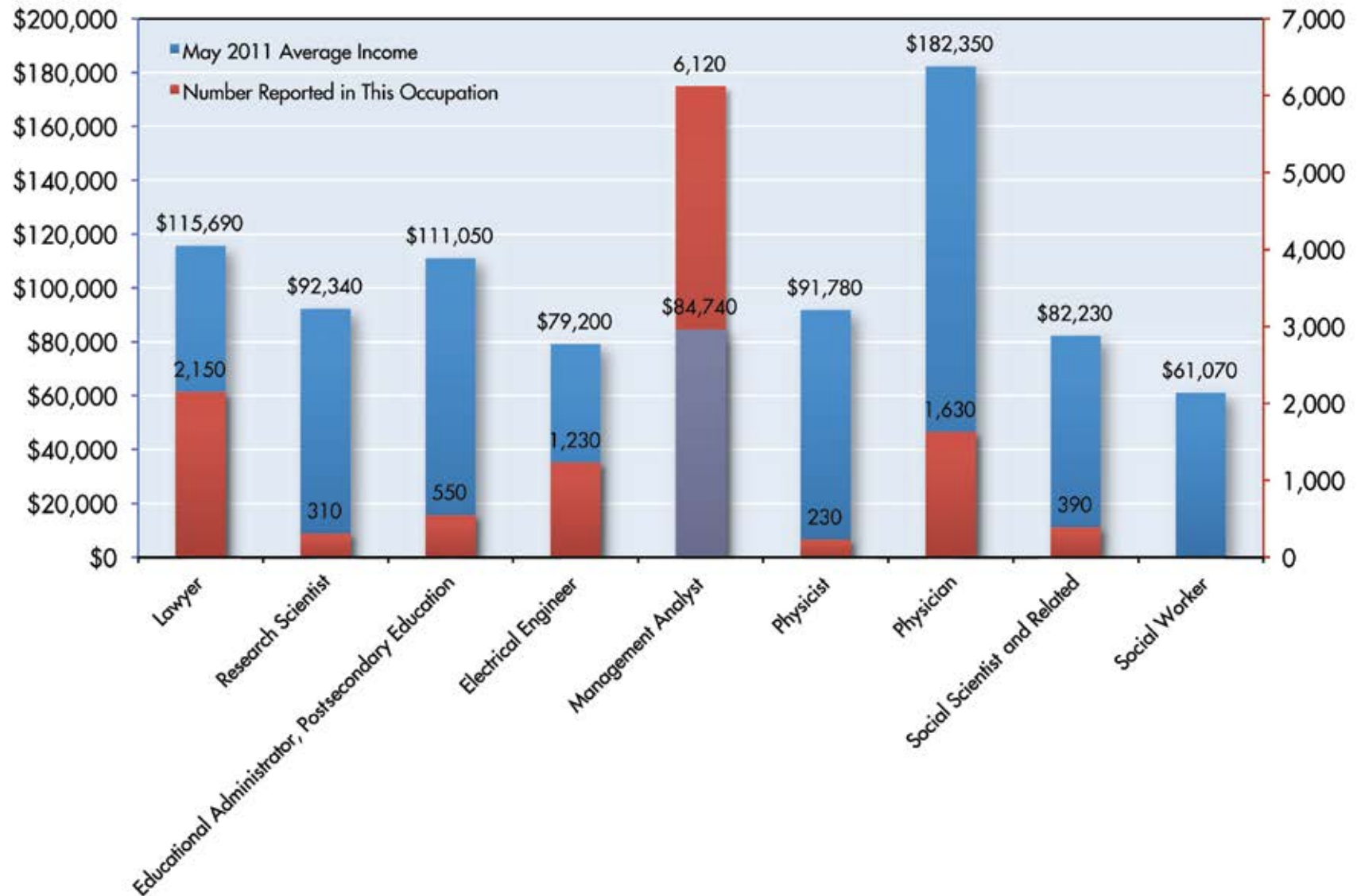
	Number of Lawyers and Percentage of Labor Force	Mean Hourly Wage	Mean Annual Wage
Hampton Roads	4,950 (0.030%)	\$55.62	\$115,690
Washington, D.C./Arlington/Alexandria	38,230 (1.655%)	\$75.86	\$157,780
Richmond	2,780 (0.047%)	\$60.87	\$126,600
Charlotte	3,150 (0.038%)	\$60.66	\$126,170
Jacksonville	2,410 (0.042%)	\$46.99	\$ 97,740

Source: Bureau of Labor Statistics, <http://www.bls.gov/ncs/ocs/compub.htm#Division>



GRAPH 1

COMPARING THE AVERAGE ANNUAL INCOMES OF WORKERS IN VARIOUS OCCUPATIONS IN HAMPTON ROADS, MAY 2011



Source: www.bls.gov/oes/current/oes_47260.htm

An Old Story: Supply And Demand

Numerous newspapers and professional trade journals have written about changes in the practice of law and have concluded that today we live in a world in which there is an oversupply of lawyers. What does “oversupply” mean? An excess supply of lawyers means that at existing wage rates paid them (as represented by their billing rates for their services, per hour), there are more lawyers wishing to provide work than there are clients who want to hire them.

Evidence (which we describe below) strongly indicates that there is an excess supply of lawyers, though not in all specialties, not in all localities and typically not for the graduates of the most prestigious law schools. The best indicators of the oversupply are stagnant legal incomes and the souring placement rates for new attorneys.

In what some might consider to be a “man bites dog” scenario, **a few law school graduates have sued the very institutions that granted them their degrees on the grounds that these schools falsely depicted overly favorable job market conditions for their graduates.** True, those suing typically did not graduate from the most prestigious law schools and in many cases they had accumulated impressively large debts in order to obtain their law degrees. Nevertheless, relative to their probably inflated job market expectations, they have not done well and have sought recompense from their law schools.

Two such legal actions have involved graduates of the nation’s largest law school, the 4,000-plus-student Thomas M. Cooley Law School (an institution with four campuses in Michigan and one in Florida), and the 1,600-student New York Law School. Neither is highly ranked in most law school ranking systems. Both have been accused of embroidering their placement and salary data even while charging increasingly high tuitions. For example, The New York Times (David Segal, July 16, 2011) reported that the New York Law School (not to be confused with New York University) was ranked in the bottom one-third of all law schools nationally in terms of quality, but charged \$47,800 per year in tuition in fall 2011. Indeed, with respect to tuition, the same New York Times

article reported that between 1989 and 2009, the overall increase in college tuition was 71 percent, but law schools raised their tuitions a stratospheric 317 percent during this period.

In most markets, when there is an excess supply of a good or service, those who are supplying that good or service either contract the amount they are supplying, or they exit the market. These actions exert downward pressure on prices as suppliers begin to compete with each other for the limited number of available customers. As prices fall, this causes two things to happen. First, some suppliers react by supplying fewer units. Second, a few other suppliers leave the market entirely. Eventually, customers find the good or service more attractive at lower prices and begin to purchase more units. This restores equality between the number of units that producers want to supply and consumers wish to purchase.

The market adjustment process just described doesn’t always occur immediately. Let’s contrast two familiar markets in this regard. If supply exceeds demand at existing prices at a Norfolk Tides baseball game, then hot dog vendors shutter their operations and go home. This can occur literally between innings.

On the other hand, when supply exceeds demand at going sales prices in the housing market, the adjustment process nearly always is much slower. An important reason for this is that the inventory of houses available seldom changes rapidly. Hot dog vendors at the Norfolk Tides’ Harbor Park may disappear in the middle of a game, but most houses are here to stay. Consequently, sometimes it takes years for the supply of housing to adjust to new realities.

Here is the nub of the matter – the market for lawyers has more in common with the housing market than it does with the hot dog vendors at Harbor Park. **The market for lawyers notoriously reacts slowly to changes in supply and demand.** Yes, when there is an excess supply of attorneys, billing rates and fees tend to decline, but not rapidly and often not publicly. In economic parlance, billing rates and fees are “sticky downward” and don’t decline as rapidly as one might anticipate. This delays market adjustments as law firms and individual lawyers only reluctantly abandon their previous billing schedules and then often without acknowledging such.

Historically, the existing supply of lawyers has not been highly responsive to changes in lawyers' incomes. In economic jargon, the elasticity of supply of lawyers relative to their incomes is small. There are several reasons for this. First, prospective law students do not seem to be especially well informed about supply and demand conditions for lawyers. They often enroll in law schools and accumulate debt in situations that a more detached, informed analysis would suggest is ill advised. However, some law schools have exacerbated this situation by promoting law degrees as an analog to an M.B.A. degree by arguing that a law degree broadly prepares holders for a wide range of positions, only some of which are specifically in the law itself (Katherine Mangan, *The Chronicle of Higher Education*, May 27, 2012).

Second, the pipeline for new lawyers is at least three years in length and once in the pipeline, most candidates tend to persist, sometimes because they believe – or hope – things will improve by the time they graduate.

Third, it has not been in the best financial interest of most law schools to contract the sizes of their programs. Compared to other post-baccalaureate professional programs (such as medical programs that produce physicians), the costs of providing legal education are not high. In fact, on most campuses, law school programs are “cash cows” that are capable of generating substantially more revenue than they cost. Further, law school graduates often occupy key occupational and political positions, and this is another reason administrators are loath to diminish the flow of potential law school alumni. When all is said and done, most senior administrators have decided to continue to generate law school graduates even though they know that many of those graduates will exit with crushing levels of debt and face dim employment prospects.

The results have been predictable, economically speaking. **New graduates often have encountered difficulty in finding full-time, permanent positions; the advancement of attorneys within their organizations has slowed; many attorneys' incomes have stagnated; actual billing rates have decelerated or ceased to climb; price cuts (often secret) are being offered; there is increasingly aggressive advertising of cut-rate legal**

services; many employers are making increased use of part-time and temporary attorneys; and the outright bankruptcy or dissolution of some legal firms has occurred.

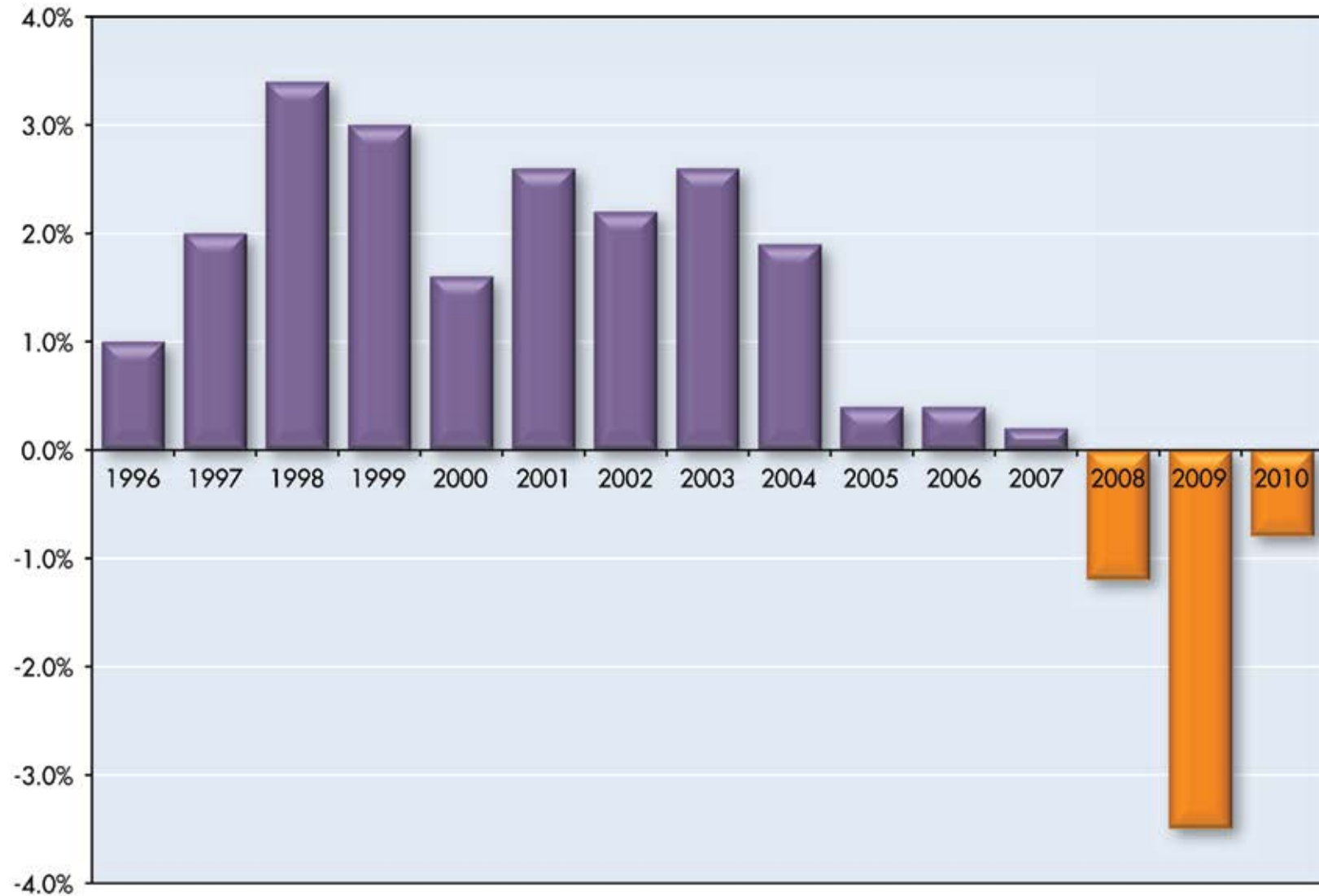
Graph 2 depicts the decline in employment that occurred nationally, 2008-10, in the general category of “legal services.” This is a term that includes not only lawyers, but also paralegals and a variety of other people who work for law firms. The largest 250 firms in the United States reduced their employment of lawyers by more than 9,500 (8 percent) in 2009 and 2010 (*The Economist*, May 11, 2011). This was an eye-opening change since employment in the legal services profession had expanded almost every year for half a century. **Indeed, the share of gross domestic product devoted to legal services grew from .4 percent in 1978 to 1.8 percent in 2003** (*The Economist*, May 11, 2011). Amazingly, during this interval, the legal industry grew approximately four times as fast as the American economy as a whole. The eminent economist Herb Stein once averred to the effect that things that cannot go on forever, don't. Such was true here. The steady expansion of the legal industry could not continue indefinitely and came to a screeching, reverberating halt.

One attorney to whom we talked in preparing this chapter highlighted several of the practical effects of the deterioration of the market for lawyers:

We are simply hiring fewer associates. I have noticed that it is much more difficult to make partner than it used to be. The criteria used to be rather subjective, but now the criteria are overly objective and heightened. Basically, only attorneys that control a substantial book of business will be making equity partner.

GRAPH 2

CHANGES IN U.S. EMPLOYMENT IN THE LEGAL SERVICES CATEGORY OF THE BUREAU OF LABOR STATISTICS, 1996-2010



Source: Adapted from data found in The Economist (May 11, 2011)

A CLOSER LOOK AT THE SUPPLY OF ATTORNEYS

The legal profession has grown significantly since World War II because of the increased legal, regulatory and contractual complexity that pervades nearly all sectors of society. Organizations, both public and private, that never employed their own legal counsel now have established legal departments. Many decline to take any action of consequence without the blessing of their legal counsel. There are those who decry these developments and argue that the allocation of resources to legal departments ultimately represents a dead-weight loss for society because legal departments seldom if ever increase productive efficiency, develop new technologies or lower production costs (see www.overlawyered.com for a précis of this view).

Regardless, the number of attorneys employed in the United States grew nearly every year after World War II until the financial upheaval in fall 2008 and the subsequent recession. **Graph 3 illustrates the 20.5 percent growth in the number of students entering the nation's law schools that occurred between 2000-01 and 2010-11.** Further, this increase in enrollment was accommodated by an increase in the number of American Bar Association-accredited law schools during the same time span. Currently, 201 ABA-accredited law schools exist in this country.

Without question, the Great Recession that began in fall 2008 was (perhaps still is) a wrenching experience for the legal profession because it brought with it diminished demand for many types of legal services and strong pressures to reduce billing rates and costs. These factors in turn led to a reduced demand for new lawyers.

Nevertheless, for years, law students seemingly were impervious to deteriorating labor market conditions for lawyers. **According to the NALP, only 64 percent of law school graduates in 2010 landed full-time jobs requiring a law license within nine months after graduation, and only 85.6 percent had any kind of job after nine months.** Further, unrealistic notions of future earnings caused some law school students to accumulate astonishingly high levels of debt in order to pay the costs of their education. Bloomberg reported in spring 2012 that the typical law school graduate exited law school with \$100,433 in debt, and at one institution,

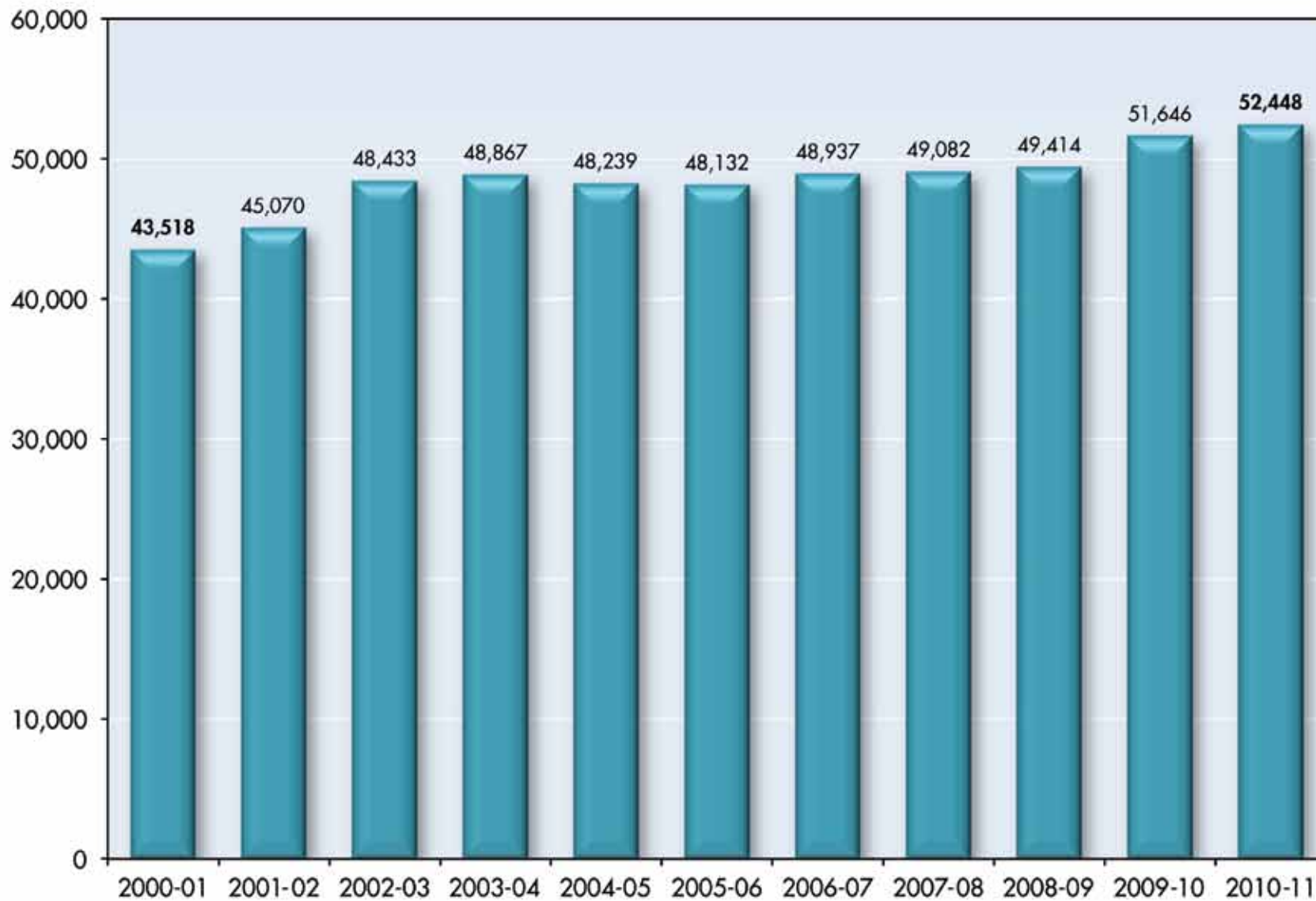
California Western School of Law, the average student debt upon graduation exceeded \$153,000 (<http://www.bloomberg.com/news/2012-04-18/law-school-student-debt-exceeds-100-000-amid-jobs-shortage.html>).

Only in 2012 have slow adjustments to these new market realities become evident. **For fall 2012, the Law School Admissions Council reports that applications for admission to law schools are down more than 15 percent** (Katherine Mangan, *The Chronicle of Higher Education*, May 27, 2012). This is a considerable reduction, though it must be noted that this followed the largest law school applicant pool in history in 2011.

The significant deterioration in the market for attorneys that occurred from 2008 to 2010 should not have come as a surprise. Storm warnings of a potential oversupply of attorneys were evident before the financial crisis. In 2007, *The Wall Street Journal* reported that since the mid-1980s, real, inflation-adjusted incomes had been flat for attorneys in solo practice, grew less than the rest of the economy for those in large firms and grew only modestly for lawyers in the public sector (Amir Efrati, *The Wall Street Journal*, Sept. 24, 2007).

Even a few law journals issued jeremiads. In 2007, Jason Dolin, in the *California Western Law Review* (<http://www.californiawestern.edu/content/journals/dolin.pdf>), argued that the profession suffered from two major labor market problems. One was that too many attorneys were being produced. The second was that the law students weren't being taught the right things. With respect to this second point, Dolin argued that students were being exposed to tremendous amounts of case law, but were acquiring insufficient practical experience. That is, they were being graduated without their actually knowing how to be a lawyer in real life. As an aside, Dolin also lamented what he saw as a decline in the degree of civility and professionalism within the legal ranks because of increasingly strident competition among a larger roster of attorneys for clients.

GRAPH 3
GROWTH IN LAW SCHOOL ENROLLMENTS



Source: Derived from data provided by the American Bar Association, www.americanbar.org

Attorneys are well-educated professionals who provide many different services to individuals and firms with the goal of enabling those parties to cope with an increasingly complex set of laws, regulations and institutions that circumscribe their activities. A minority of attorneys in the Hampton Roads region actually are members of the American Bar Association. The ABA advertises itself as “the largest voluntary professional association in the world” (www.americanbar.org) and claims almost 400,000 members. The ABA does many different things – it provides law school accreditation, engages in continuing legal education, dispenses information about the law, conducts programs to assist lawyers and judges in their work, and supports initiatives to improve the legal system for the public.

The ABA grandly proclaims that its goal is to serve attorneys and the public “by defending liberty and delivering justice as the national representative of the legal profession” (www.americanbar.org).

There are 726 ABA members in Hampton Roads, or about one of every five lawyers in our region.

MEASURING THE OVERSUPPLY OF ATTORNEYS

What is the size of the oversupply of attorneys? Economic Modeling Specialists Inc. (EMSI), a research firm specializing in economic analysis, performed a simple analysis of the supply/demand situation for new law school graduates in each state and the District of Columbia in 2009 and 2010. EMSI first utilized an econometric model to forecast the annual number of law openings in each state and the District. The research firm then looked at the number of students passing the bar exam and added those to the existing stock of attorneys. In all but three cases (Nebraska, Wisconsin and the District of Columbia), EMSI found a surplus of attorneys. New York had the greatest surplus at almost 7,700; California was next with almost 3,000. Virginia rounded out the top one-third of the states (and was ranked No. 17) with a surplus of 419 attorneys (Catherine Rampell, *The New York Times*, June 27, 2011).

Table 2 adds the estimates from EMSI to data found on the website Law School Tuition Bubble (www.lawschooltuitionbubble.com) in order to identify the relative severity of the surplus of lawyers in selected states. The second column of Table 2 provides the number of attorneys per 10,000 residents in 2010 in each state and the District. Note that slightly more than 8 percent of the residents of the District of Columbia are lawyers! The U.S. government has done its very best to employ the nation’s lawyers.

Column three of Table 2 estimates the number of active lawyers, defined here as those actually practicing law rather than the number of individuals with law degrees. Hence, it does not include law school graduates that are not formally practicing law and may be corporate managers, consultants or university professors.

Column four of Table 2 estimates the actual surplus of practicing lawyers and takes into account both the number of estimated openings for lawyers and the number of individuals who have newly passed the bar exams in each state and the District.

The final column shows the surplus or shortage of the total roster of active lawyers in each state and the District as a means to identify the extent of the imbalance in selected jurisdictions.

The data indicate that comparatively speaking, Virginia is not particularly lawyer intensive. The District of Columbia has an incredible 28 times as many lawyers per capita as does Virginia. Even so, EMSI also estimated no surplus of lawyers currently exists in the District because of the powerful demand for lawyers' services generated by the U.S. government and those who seek to deal with it.

According to EMSI, while Virginia does have a surplus of lawyers, it is not as dramatic as in some other states. The state that reports the lowest number of lawyers per 10,000 population is Arkansas, with 19.89 (about 50 percent fewer than Virginia), but Arkansas' demand for lawyers is comparably low and hence the Land of the Razorbacks has a surplus of only 48 attorneys.

Not everyone accepts the argument that the supply/demand situation for attorneys is dire. Aaron Taylor, a law professor at St. Louis University, argued in *The National Jurist* (Oct. 11, 2011) that law school is still a good investment for most students and that the best evidence of this is the relatively low unemployment rate for attorneys (about 6 percent nationally compared to about 8 percent for all occupations). Very few attorneys are standing on street corners with tin cups. Further, because fewer people now are applying for admission to the nation's law schools and some law schools have reduced the size of their entering class, future labor market prospects for law school graduates likely

will be brighter, especially if the U.S. economy approaches full recovery and large firms resume extensive hiring. Thus, individuals such as Professor Taylor argue that the legal profession glass is half full rather than half empty insofar as employment is concerned.

The University of California's Hastings College of the Law said that it would reduce the size of its incoming class by 20 percent in fall 2012 (Bob Egelko, *The San Francisco Chronicle*, May 2, 2012). Other law schools that have made similar announcements include George Washington University, Albany Law School, Creighton University and Touro Law Center.

TABLE 2

LAWYER STATISTICS FOR SELECTED STATES AND WASHINGTON, D.C., 2009-2010

(1) State/District	(2) Lawyers per 10,000	(3) Active Lawyers	(4) Surplus	(5) Percent Surplus (+) or Shortage (-)
Virginia	28.26	22,472	419	1.86%
New York	80.59	157,778	7,687	4.87%
District of Columbia	805.89	49,207	-345	-0.70%
Maryland	38.61	22,149	717	3.24%
Florida	33.66	62,875	755	1.20%
North Carolina	21.38	20,266	529	2.61%

Sources: <http://economix.blogs.nytimes.com> and the Law School Tuition Bubble, <http://lawschooltuitionbubble.wordpress.com>

Focusing On Hampton Roads

Among Hampton Roads' largest cities, Norfolk easily is the most lawyer-intensive, according to the data reported in Table 3. Norfolk is the region's legal center and to the extent that large regional and national law firms are located in Hampton Roads, their offices typically are in downtown Norfolk. That said, Virginia Beach is gaining currency in terms of legal activity and within a few years may host more lawyers than Norfolk, though many fewer on a per capita basis.

Williamsburg/James City County is the most lawyer-intensive small city in the region. This reflects a variety of factors, but especially the presence of the law school at the College of William and Mary.

The legal needs of Hampton Roads are specific to the activities and residents here. One would expect to find more attorneys with maritime specialties in Hampton Roads because of the region's shipbuilding and repair facilities, the U.S. Navy presence and the Port of Virginia. By contrast, a city such as Charlotte, N.C., does not have similar needs and instead focuses on the needs of its huge banking community and other Fortune 500 headquarters. Table 4 reports the broad legal specialties ("practice areas") that plausibly would be reported by attorneys in Hampton Roads and Graph 4 depicts how common those specialties are among attorneys in our region by means of legal profession specialty coefficients. These coefficients compare the relative size of legal specialties in Hampton Roads to the national average. For example, the criminal law specialty coefficient in Graph 4 is 1.25. This tells us that in Hampton Roads we have about 25 percent more criminal lawyers than the national average.

One can see in Graph 4 that the legal profession specialty coefficient for maritime law exceeds 2.5. Thus, Hampton Roads has at least 150 percent more attorneys that focus on maritime law than the national average. As just noted, this hardly comes as a surprise in light of our region's geography, port and naval activity.

Jurisdiction	Number of Lawyers		Total	Number of Lawyers per 10,000 Residents
	Private Practice	Corporate		
	Government	Counsel		
Chesapeake	208	7	215	9.68
Hampton	184	6	190	13.82
Newport News	335	22	357	19.75
Norfolk	1,160	95	1,255	51.69
Portsmouth	160	1	161	16.85
Suffolk	75	4	79	9.34
Virginia Beach	1,082	28	1,110	25.34
Franklin	12	1	13	15.15
Poquoson	7	0	7	5.76
Williamsburg/ James City	240	10	250	31.64
Yorktown/ York County	44	1	45	6.85
Isle of Wight	2	0	2	0.56
Surry	7	0	7	9.91

Sources: Martindale-Hubbell Law Directory and the U.S. Census

With respect to specialties, one lawyer to whom we talked told us that the mix of legal activity and specialties in Hampton Roads has been changing:

Probably the legal market for business deal making has shrunk in recent years; however, the market for restructuring deals has grown as many of the deals put together in the boom days have begun to fall apart. Litigation seems to stay the same, but the issues may change.

TABLE 4
PRACTICE AREA DEFINITIONS

Area of Specialty	Definition
Litigation	Trial practice, administrative hearing, Alternate Dispute Resolution (ADR)
Real Estate	Real estate transactions and related matters
Personal Injury	Plaintiff tort actions
Corporate	Business transactions
Insurance	Defense of claims insurance policies
Trusts and Estates	Testamentary instruments and estate planning
Tax	Tax planning, avoidance and tax litigation
Workers Compensation	Practice before Workers Compensation Commission
Maritime	Claims and matters arising from commercial activities at sea
Immigration	Practice before the Immigration and Naturalization Service (INS) and federal courts
General Practice	Advice and representation across many specialties
Criminal Defense	Defense against criminal charges
Family	Marital rights and family-related matters
Patent/Intellectual Property	Patent, copyright, trademark, trade secrets
Labor	Practice based upon labor and management relations laws
Civil Rights and Contracts	Actions based on antidiscrimination laws and contracts
Bankruptcy	Practice before federal bankruptcy courts

In general, however, Hampton Roads has fewer attorneys in most legal specialties than the national average. That is, ours is not an attorney-intensive region. Ironically, those who bemoan what they perceive to be the excessive intrusion of attorneys into everyday affairs don't know how good they have it here!

Graph 5 specifically compares Hampton Roads to Charlotte, N.C., and Jacksonville, Fla., in terms of legal specialty representation, but does so in terms of the number of lawyers in each specialty area per 1,000 adults in the regions' labor force. Somewhat surprisingly, by this standard, the Jacksonville

metropolitan area has more lawyers than either Hampton Roads or Charlotte, and this is true in 13 of the 17 specialties. Hampton Roads is marginally more lawyer-intensive than Charlotte by virtue of having higher lawyer representation in nine of the 17 specialty areas. This is despite the fact that Charlotte hosts the headquarters of nine Fortune 500 firms, including the gigantic Bank of America, the retailer Lowe's, steel maker Nucor and utility giant Duke Energy. Our region's greatest areas of representational advantage relative to Charlotte are criminal, family, litigation, personal injury, maritime and bankruptcy law.

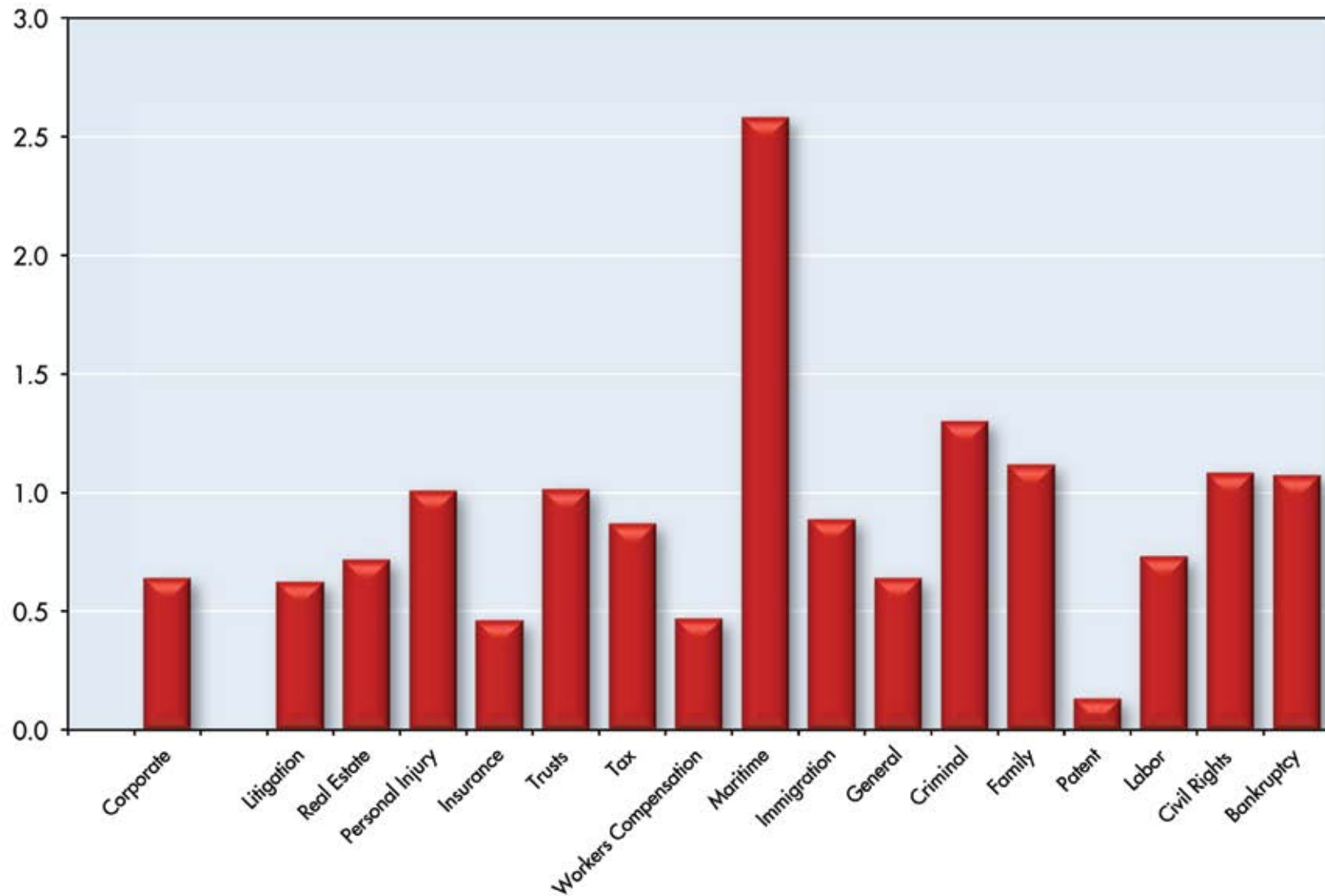
It's not clear why Jacksonville should be so lawyer-intensive other than the peculiar nature of the Florida statutes and legal system. On the other hand, it's also not obvious why Hampton Roads should lead either of the other two regions in terms of having substantially more attorneys specializing in criminal law.

Graph 6 performs a comparable analysis for Hampton Roads versus Richmond and Northern Virginia.¹ **It is immediately apparent that Richmond, presumably fed by the state government and corporate headquarters, is far more lawyer intensive than either Richmond or Hampton Roads.** There are six specialty areas in which Hampton Roads is more lawyer intensive than either Richmond or Northern Virginia – personal injury, trusts and estates, general, family, bankruptcy, and maritime and admiralty.

¹ Hampton Roads is defined here as the cities of Chesapeake, Franklin, Hampton, Norfolk, Poquoson, Portsmouth, Newport News, Suffolk and Virginia Beach, plus the counties of Isle of Wight, Williamsburg/James City and Yorktown/York. Richmond is defined as the city of Richmond and the counties of Chesterfield, Henrico and Hanover. Northern Virginia is defined as the cities of Fairfax, Alexandria, Manassas, Manassas Park and Falls Church, and the counties of Prince William, Fairfax and Loudoun.

GRAPH 4

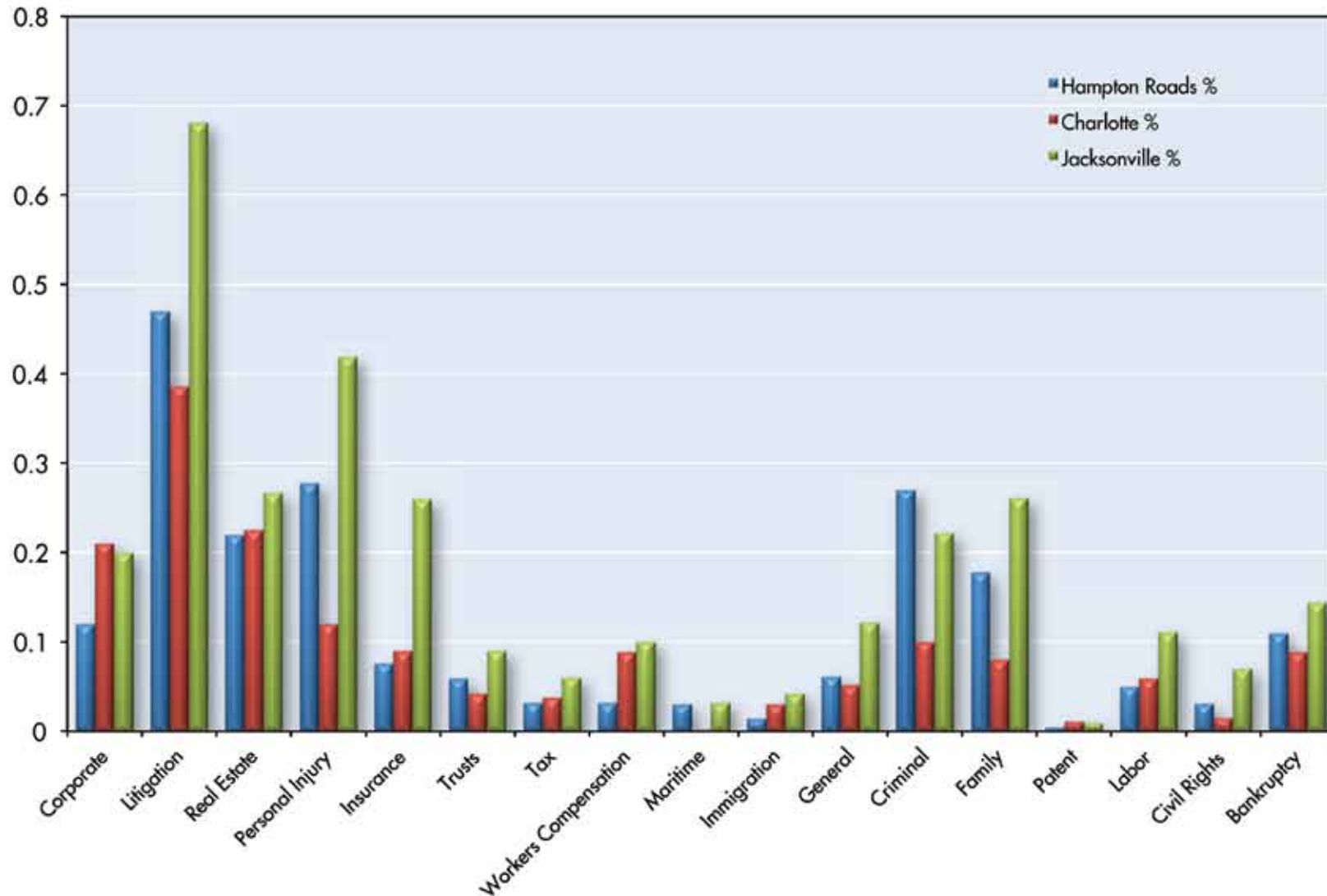
**LEGAL PROFESSION SPECIALTY COEFFICIENTS IN HAMPTON ROADS:
SPECIALTIES WITH REPRESENTATION ABOVE OR BELOW THE NATIONAL AVERAGE (1.00)**



Sources: Martindale-Hubbell Law Directory and the U.S. Census

GRAPH 5

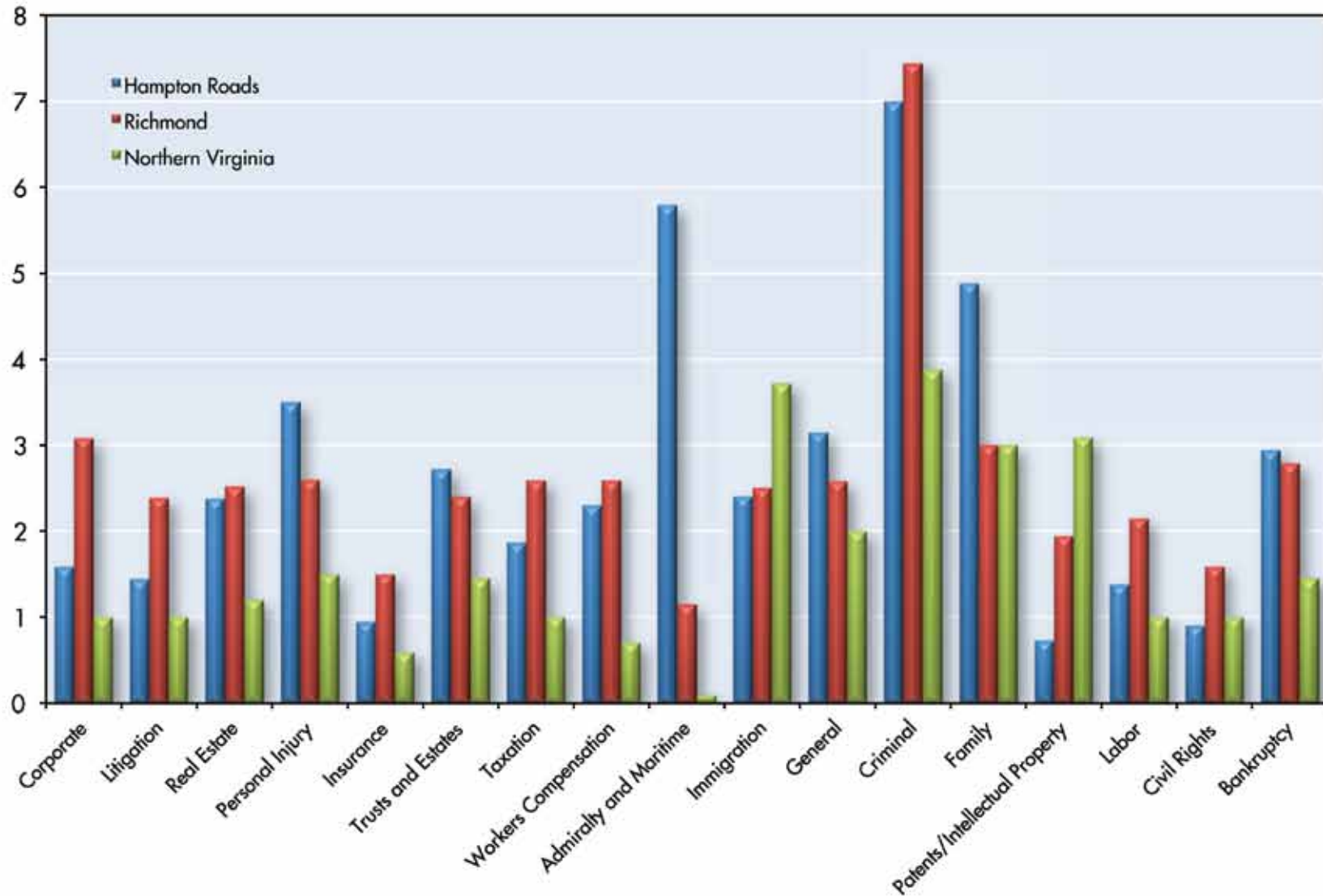
**COMPARING LEGAL SPECIALTY REPRESENTATION IN HAMPTON ROADS WITH CHARLOTTE AND JACKSONVILLE
(LAWYERS PER 1,000 PEOPLE IN LABOR FORCE)**



Sources: Martindale-Hubbell Law Directory and the U.S. Census

GRAPH 6

LAWYER SPECIALTY REPRESENTATION IN VIRGINIA (LAWYERS PER 1,000 PEOPLE IN LABOR FORCE)



Sources: Martindale-Hubbell Law Directory and the U.S. Census

THE REGIONAL OFFICE PHENOMENON

In recent years, Hampton Roads has seen the establishment of regional offices of medium- and large-sized law firms whose headquarters are in other cities. Why has this been occurring? Based upon the analysis in the previous section, one could argue that Hampton Roads is “under lawyered,” at least compared to metropolitan areas such as Northern Virginia and Jacksonville. Thus, to legal outsiders, it may appear that opportunities exist within our region.

It may also be true, however, that large law firms, having invested considerable time and money in developing their reputations and “brands,” can capitalize further on their investments by entering new markets and establishing a presence there. A highly regarded local lawyer told us that the large firms then are able to handle cases that strain the resources and competence of lawyers in smaller firms. Ordinarily, this occurs via the process of referral and their presence in Hampton Roads in essence makes them much more likely recipients of referrals from lawyers in smaller practices.

An equally important reason, however, is that there are economies of scale associated with the operation of law firms. Larger law firms may enable affected firms to spread their fixed costs over more lawyers and clients and thus reduce their unit costs. Larger law firms also may benefit from “learning by doing” (the increased magnitude of cases in a specialty area may increase competence and perhaps even reduce costs) and avoid under-employing lawyers with more exotic specialties.

Economies of scale may especially be present where the management of law firms and their use of information technology are concerned. A simple illustration of the latter is software such as Microsoft Office, whose cost per unit typically declines as the number of Office licenses in a law firm rises. More substantial information technology examples relate to the purchase and operation of accounting, financial and personnel systems, the purchase of access to databases, the use of broadband hookups and switches, and system maintenance and troubleshooting.

Two examples of mergers that appear to reflect hopes of realizing economies of scale involve the law firms Williams Mullen and Troutman Sanders, both of

which now have offices in Norfolk. Richmond-based Williams Mullen acquired the Virginia Beach-based firm Clark and Stant in 1999. In 2004, it acquired the Norfolk law firm Hofheimer Nusbaum. Some local attorneys believe that an impetus for this latter merger was the valuable set of clients that Hofheimer Nusbaum had accumulated. One of the most important among them was Dollar Tree, the large discount variety store chain. By 2008, Dollar Tree had earned a spot on the annual Fortune 500 list of the largest national firms and hence would be a valued client for any law firm.

The Troutman Sanders case is interesting because it reflects what some lawyers refer to as “the law firm food chain.” The story begins with Mays & Valentine, also a Richmond-headquartered law firm, entering the Hampton Roads market in 1989. It gradually expanded here and elsewhere, and eventually boasted 150 lawyers in Richmond, Norfolk, Tysons Corner and Virginia Beach. However, in 2001, Mays & Valentine, after some internal management challenges, was acquired by the Atlanta-based Troutman Sanders firm.

In addition to Williams Mullen and Troutman Sanders, other large regional and national law firms that have established offices in Hampton Roads include McGuire Woods, LeClairRyan and Hunton and Williams. **Data from Virginia’s Largest Law Firms 2011 Directory, published by Virginia Lawyers Weekly (a trade journal), reveal that the largest law firm in Virginia, Richmond-based McGuire Woods, has more than 900 lawyers in major cities and foreign countries, but only 15 lawyers in Norfolk.** By comparison, McGuire Woods has 49 lawyers in Tysons Corner and 219 in its Richmond headquarters. Thus, McGuire Woods has staked out a position in Hampton Roads, but relies on Richmond-based talent to service many of its clients.

The net result of these and similar mergers for Hampton Roads is that our region now is an outpost for much larger law firms. They offer the area a much larger potential stable of lawyers as well as a much larger pool of resources to deploy on specific cases. Simultaneously, there usually is a sifting out of putatively less ambitious or talented lawyers from the acquired firms and these lawyers frequently end up moving to smaller firms within our region.

Some local clients (and some lawyers) have harsh things to say about these and similar developments. They argue that the regionally or nationally based firms do not provide personalized (“I know you and your problem”) service and that their billing rates are too high. While these complaints could have occasional validity, there is an economic market test that appropriately applies to such situations. Reality is that many other local law firms continue to exist, and both clients and lawyers are free to take their business to them and/or work for them. Alternatively, clients could desert local firms for the regional and national firms. If the regionally and nationally based firms begin to lose clients and market share, then this will signal that these assertions about service and billing rates probably hold water. It is too early to determine if this is the case.

The largest law firm headquartered in Hampton Roads is Norfolk-based Kaufman and Canoles, which has 116 lawyers overall. Approximately 100 of these lawyers are located in Hampton Roads and nearly all of the remainder are situated in Richmond.

Of the 10 largest law firms in Virginia, six have their headquarters in Richmond, two in Northern Virginia and two in Norfolk. All of the five largest law firms in the Commonwealth are located in Richmond. Taken together, however, these Richmond-based firms have 87 lawyers positioned in Hampton Roads. Table 5 reports lawyer employment data for the 10 legal firms with the most lawyers in Hampton Roads in 2011 and 2012.

Historically, in the area of antitrust economics, much attention has been paid to what is termed the “four-firm concentration ratio.” This is defined as the share of the market controlled by the largest four firms. When this percentage is high (as currently is the case in the market for breakfast cereals, where the four-firm concentration ratio is about 80 percent, and in textbooks, where the four-firm concentration ratio is about 84 percent), the presumption is that the firms involved exercise some degree of monopoly power and have the ability to push prices above competitive levels. Experience indicates consumers often fare badly in these markets. The U.S. Department of Justice (DOJ) frequently disapproves mergers between large firms when the four-firm concentration ratio in a market is high. In some cases (for example, those involving IBM

TABLE 5
THE TOP 10 LEGAL FIRMS IN HAMPTON ROADS IN TERMS OF
THE NUMBER OF LAWYERS EMPLOYED, 2011 AND 2012

	Number of Lawyers Employed		Increase/ Decrease
	2011	2012	
Kaufman and Canoles	100	104	+4
Williams Mullen	75	66	-9
Willcox and Savage	58	58	0
Vandeventer Black	48	49	+1
Pender and Coward	36	31	-5
Wolcott Rivers Gates	29	28	-1
Troutman Sanders	31	28	-3
Patten, Wornom, Hatten and Diamondstein	23	24	+1
Poole Mahoney	23	21	-2
Glasser & Glasser	20	20	0

and Microsoft), the DOJ even files suit to break apart dominant firms in highly concentrated markets.

While we don’t know the actual revenues of the privately owned law firms in Hampton Roads, a rough proxy for those income amounts is the number of lawyers each firm maintains. In 2012, the four firms with the most lawyers in the region together employ 277 lawyers. Since there are approximately 3,500 lawyers in Hampton Roads firms, according to Martindale-Hubbell (or 4,950, according to the Bureau of Labor Statistics), our four-law firm concentration ratio is between 5 percent and 8 percent. **Thus, the legal market in Hampton Roads is not highly concentrated on the seller side and certainly is not monopolized.**

In fact, the legal market in Hampton Roads is highly competitive in an overall sense, even though the number of competitors in some specialty areas may be small. Many different sizes of law firms exist and appear to prosper. Barriers

to entry into the market are relatively low. It's relatively easy for one or more lawyers to hang their proverbial shingle out in front of a rented office and quickly begin the practice of law. As a consequence, the residents of Hampton Roads benefit from a plentiful and diverse set of possibilities when they desire legal representation.

THE INFLUENCE OF LAW SCHOOLS

The Commonwealth of Virginia boasts seven law schools and two of them are located in Hampton Roads. One of these, the School of Law at the College of William and Mary, was founded in 1779, while the other, the Regent University School of Law, was founded 210 years later in 1989. Table 6 lists Virginia's law schools, the dates of their founding, and their 2011 student enrollments according to U.S.News & World Report's annual college edition for 2011.

TABLE 6 VIRGINIA'S SCHOOLS OF LAW, THEIR FOUNDING DATES AND THEIR ENROLLMENTS, 2011		
	Date Founded	Enrollment
College of William and Mary School of Law	1779	628
University of Virginia School of Law	1819	1,105
University of Richmond School of Law	1830	452
Washington and Lee University School of Law	1923	407
George Mason University School of Law	1980	505
Regent University School of Law	1989	409
Appalachian School of Law	1994	127
Source: U.S.News & World Report Best Colleges, 2012		

Two of Virginia's law schools – those at the College of William and Mary and the University of Virginia – are widely considered to be among the very best in the United States. U.S.News' 2011 edition ranked the School of Law at U.Va. ninth in the country and W&M's law school 27th. However, three other Virginia law schools were in the top 100: Washington and Lee at 30th, George Mason at 40th and the University of Richmond at 67th.

These highly regarded law schools are an attractive source of supply of lawyers for Hampton Roads law firms. Even so, only 11 percent of the graduates from the U.Va. law school stay in Virginia, while 29 percent of the graduates of W&M's law school remain in the Commonwealth. On the other hand, approximately 60 percent of the graduates from the UR law school stay in Virginia (data from www.top-law-schools.com).

In spite of the percentages just cited, the University of Virginia is an important source of talent for the largest law firms in the state. The largest in Hampton Roads, Kaufman and Canoles, employed 100 lawyers in the region in 2011 (and 116 in all sites). Approximately one-third (32 percent) of Kaufman and Canoles lawyers listed in the Martindale-Hubbell Law Directory are graduates of law schools from outside the Commonwealth of Virginia, with 5 percent emanating from Ivy League institutions. More than 30 percent of Kaufman and Canoles lawyers, however, are graduates of the School of Law at the University of Virginia. Lawyers educated at the University of Richmond and the College of William and Mary each claim about 14 percent of the roster at Kaufman and Canoles. Washington and Lee University is responsible for about 7 percent and Regent University 3.5 percent.

LAWYERS' INCOMES

Graph 7 reports the mean annual income earned by lawyers in Hampton Roads and selected other metropolitan areas in May 2011. One can see that Hampton Roads ranks fourth among the five metropolitan areas in terms of the annual incomes earned by their lawyers.

One should resist assigning too much meaning to these numbers, however, because of the proverbial “apples and oranges” problem. The rosters of attorneys in each metropolitan area vary in many different ways. Of course, lawyers in the Washington, D.C., metropolitan area typically earn more than those in Hampton Roads, but that does not necessarily mean that comparably situated lawyers in areas such as Richmond and Hampton Roads earn different salaries. For example, it could be the case that the somewhat higher incomes earned by Richmond lawyers compared to Hampton Roads lawyers reflects the distribution of specialties of the lawyers in each region. Thus, it could be possible for lawyers in each specialty to be paid the same in each region, but for Richmond’s average to be higher because it claims more lawyers in the most highly paid specialty areas.

The “Salaries of Lawyers” section of the website www.aboutlawschools.org appropriately notes that many different factors determine the ultimate salaries of lawyers. Work experience is perhaps the most important factor and salaries of new lawyers often rise by more than 50 percent after they have accumulated five to nine years of experience. One local lawyer told us, “New lawyers just out of law school aren’t even diamonds in the rough; they’re usually pieces of coal. They need lots of training before they really become useful.” He added that as new lawyers acquire experience, often by working very long hours, their salaries usually rise significantly.

The nature of a lawyer’s employer can also be an important determinant of salary – those lawyers working in large firms are paid more than government lawyers, and government lawyers in turn are paid more than lawyers in nonprofit agencies.

Fields of legal specialization within the law are also significant. Lawyers in corporate law usually earn substantially more than lawyers who specialize in general, family-oriented practices that focus on wills, divorces and small claims. Salaries for corporate lawyers are almost twice those of criminal lawyers.

The size of the employer usually also makes a difference. Lawyers working in very large firms (more than 600 lawyers) earn about twice what lawyers earn in practices with fewer than 10 attorneys. Lawyers in large firms typically enjoy challenging work, but it can at times be all-consuming work that demands long hours. In certain high-stress time periods, perhaps involving imminent legal briefs

or trials, such lawyers literally must block out other competing commitments, including those involving families and recreation.

As one might expect, lawyers in large cities such as New York City, Washington, D.C., Chicago and Los Angeles typically earn much higher salaries than those, say, in Norfolk or Nashville. Of course, the cost of living is higher in populous locations, but lawyers’ salaries in the largest cities typically are higher than those in smaller cities even after they have been adjusted for cost of living differences. This is primarily a function of the type of cases such lawyers take and the nature of the clients they serve.

As we already have noted, lawyers and law practices have not been immune to the effects of the economic downturn. **Data from Virginia Lawyers Weekly (April 18, 2011) indicate that in 2011 only two of the 10 largest law firms in the Commonwealth increased the number of lawyers in their employ.** Oblon, Spivak, McClelland, Maier & Neustadof of Alexandria gained four lawyers, and Vandeventer Black of Norfolk expanded by seven lawyers. The other eight of the 10 largest law firms in Virginia collectively shed 39 lawyers between 2010 and 2011.

An apparently unhappy attorney to whom we talked characterized his work situation this way:

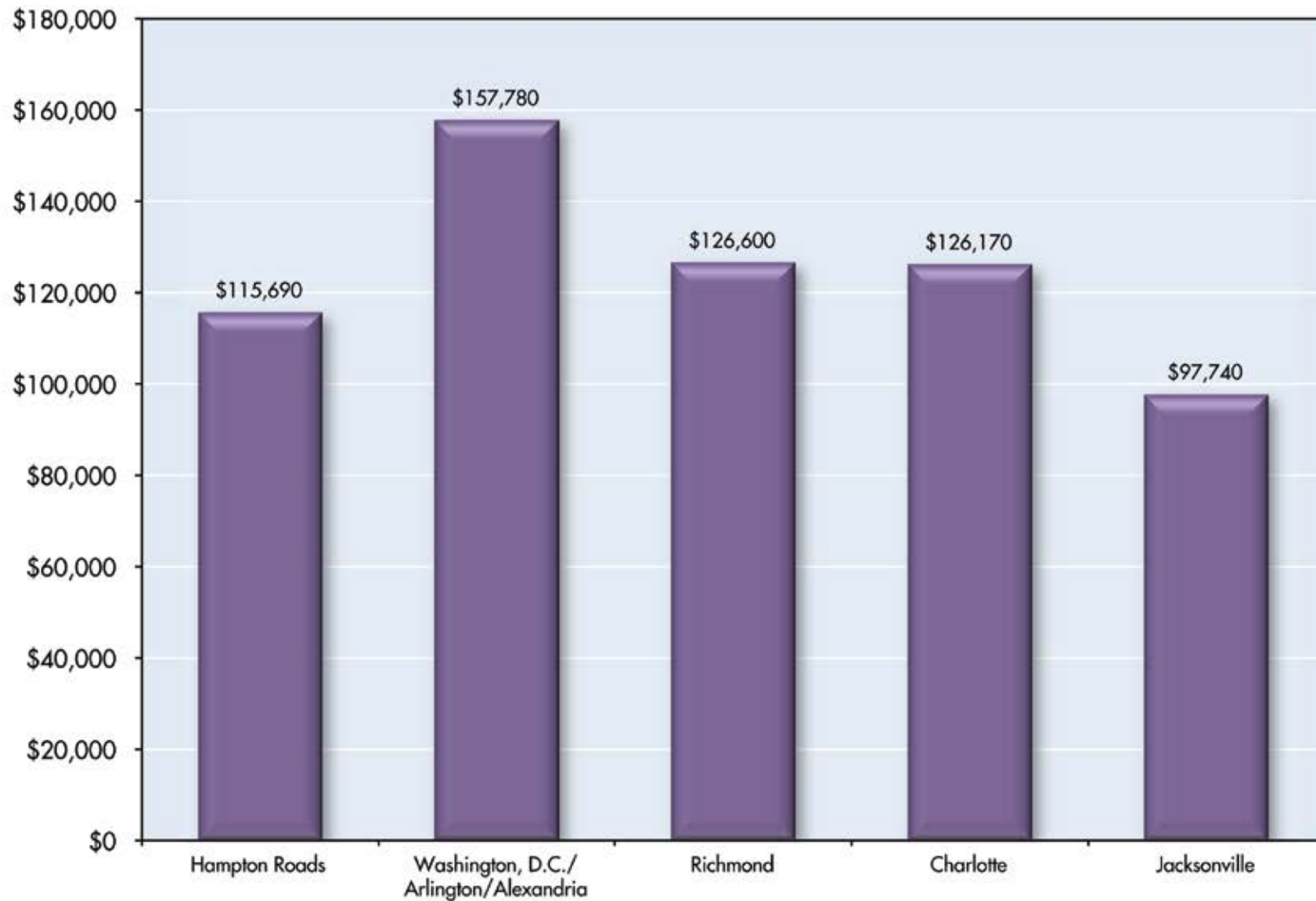
We are working much harder for far less money. It is now also a buyer’s market when it comes to clients paying bills. Many will not argue about the legal bill until the matter is essentially already concluded, and then they will insist on a discount in bad faith. Theoretically, we could always request advance deposits or credit card payments from every client, but the fear of not having files to work on minimizes the amount that we are able to do this confidently.

Another lawyer opined:

We have not reduced any positions. We froze salaries just for one year three years ago. We have become more efficient in how we practice law. We also see that clients are looking for more advantageous fee arrangements. We have reexamined our marketing activities to focus our marketing dollars on things that work.

GRAPH 7

ANNUAL INCOMES OF LAWYERS IN HAMPTON ROADS AND OTHER METROPOLITAN AREAS, 2011



Source: Bureau of Labor Statistics, <http://www.bls.gov/ncs/ocs/compub.htm#Division>

LAWYERS IN HAMPTON ROADS TELL US ABOUT THEIR PROFESSION

In spring 2012, we surveyed a broadly selected group of 28 lawyers in Hampton Roads and asked them to tell us about the nature of their work and their challenges. We already have utilized several of their comments in the material above.

We asked these lawyers what is distinctive about the practice of law in Hampton Roads. Two separate responses were salient:

The only thing that I recognize as being unique to practicing in Hampton Roads from other regions of the state is the high percentage of service [military] members; consequently (at least in my practice), I am dealing with service members who are deployed/transferred out of the area, sometimes temporarily, sometimes permanently. Because they are from other areas, I am dealing with insurance policies from other states and sometimes dealing with health care providers whose practices are located in other states.

You have to be able to practice in several courts – Virginia Beach, Norfolk, Chesapeake, federal, etc. I think practicing here may be less rigid than in other areas where there's a benefit to being from that area, like Richmond.

The lawyers that we queried were not especially enamored of very large law firms. While some respondents indicated that there was not an ideal size for law firms in Hampton Roads, almost half averred that the ideal size was only four or five lawyers, while almost as many opted for medium-sized law firms, with 10 to 30 lawyers.

When asked how clients gain access to their services, 57 percent of the respondents indicated that they obtain most of their clients from referrals. However, “out of the blue” telephone inquiries at 13 percent and Internet inquiries at 17 percent also were important. In this regard, the manner in which clients access lawyers in Hampton Roads does not differ greatly from other sections of the country.

Respondents to our survey indicated that the mergers of legal firms in the region have pushed salaries and billing rates higher than they would have

been otherwise. However, some of this is due to a change in the mix of cases handled by the lawyers in the larger firms. They frequently handle more complex cases that require high levels of skill and specialization, and their billing rates reflect this.

Given the low level of law firm concentration (the largest four firms in the region have only 5 percent to 8 percent of the region's lawyers), it's not clear why this should hold true unless clients of larger firms believe they gain access to superior talent and resources and this then translates to their being willing to pay higher billing rates. Whether or not this is true, the pricing model we see in legal services in Hampton Roads is hardly unusual and is replicated in many other industries and professions, including automobiles, personal computers, earthmoving equipment and physicians.

When we asked our sampled lawyers how their law firms have responded to recent law firm consolidations and mergers, approximately 70 percent indicated that they had not changed their operations. When things did change, it was usually via their firms broadening the scope of their practices and adding legal specialties. Specialties with net increases included trusts and estates, and intellectual property.

Nevertheless, reflecting the impact of the recession, twice as many respondents said their firms recently had cut back on specialty offerings. Labor and personal injury law was the area of specialty that most often was discontinued, though criminal defense, employment and litigation also were among those areas that were, as the British put it, found to be redundant.

Law firms do not exist in a vacuum. Implicitly or explicitly, they compete with each other for clients and income. Since a groundbreaking U.S. Supreme Court decision in 1977², one way for law firms to compete for clients is via advertising. When asked if legal advertising is effective, two-thirds of our respondents indicated their belief that it is effective. However, about 40 percent of those lawyers who believed it was effective also indicated that the degree of effectiveness varied by specialty. One lawyer told us:

² Bates v. Arizona State Bar 433 U.S. 350 (1977)

It depends upon your target audience. For consumer work, advertising is very effective. Absent a referral (which is our largest source of business), most people have no idea who to call or where to go. Advertising gives them a starting point. I am not opposed to all advertising, but do have an issue with those ads designed to make people litigious (i.e., personal injury ads offering piles of cash).

Another respondent indicated:

Legal advertising is effective for segments of legal services, i.e., personal injury and domestic relations. The website for larger law firms has become the source of information and "marketing" for many firms. Lawyer advertising is legal regardless of the taste exhibited in the advertising.

Head-to-head competition among law firms, by custom, occurs constantly and is basically unavoidable. How does this competition take place? Two lawyers told us:

I don't see firms taking aim at their competitors. More often, I see firms competing for the same business by marketing their firm/attorneys and covertly obtaining business from competitors by contacts, prior client referrals and word of mouth.

The market has grown larger. It has become more competitive because large law firms have struggled with the recession and they have become more "aggressive."

Improvements in technology have led to changes in how local law firms practice law. Respondents indicated that generally they now have a smaller support staff and no longer maintain an extensive law library because most legal research now is performed online. Further, federal courts now require that most court filings be done online.

Our panel of lawyers also told us that mediation and pretrial arbitration have become increasingly important in their lives and that Alternative Dispute Resolution (ADR) techniques have become more common in lieu of court litigation. Half of our lawyers indicated that they have used ADR techniques.

Our survey shows that their use of ADR varies by specialty and occurs most frequently in personal injury, real estate and employment law cases.

Our respondent lawyers indicated that their firms have changed how they are hiring, granting partnerships and terminating lawyers. Not surprisingly, we were told that local law firms now are hiring more contract and part-time attorneys and are using more paralegals as well. **One lawyer told us somewhat ruefully that "paralegals are now doing the work that bar-admitted attorneys used to do,"** but it also is clear that when guided by a talented senior lawyer, paralegals can increase the productivity and effectiveness of that senior lawyer. Reflecting changed supply and demand conditions for lawyers, another lawyer said:

We have become more demanding because we get dozens of resumes for each position, so we can pick and choose. We used to receive fewer resumes. Now even for paralegal positions, we receive resumes from people who are licensed attorneys. Candidates are desperate. We do not generally use part-time attorneys, although if the person we want to hire is the right fit and prefers a reduced schedule, we have accommodated those requests on occasion, but not by design. We never use temporary attorney services.

Lawyers in the region may not be amused by the situation, but they recognize that market conditions for lawyers have changed significantly in recent years. Eighty percent of the respondents that answered a question concerning the labor market for lawyers agreed that there is an excess supply of lawyers in Hampton Roads. Which areas are most afflicted by oversupply? Litigation, family law, personal injury, real estate and general practice.

A direct consequence of this oversupply, the lawyers told us, has been falling billing rates. Approximately half of them reported that their rates have fallen and many clients now feel they have additional negotiating power. One respondent said:

There are many more lawyers now in HR than in years past that are making a living and many graduates looking for jobs. I think the oversupply has held down salaries, earnings and hourly rates.

Not all agreed with this assessment, however, with respect to billing rates. Said one:

Yes, there is an oversupply. My personal opinion is that this situation is not limited to any one practice area. When times are good, firms over-hire in the business and real estate sections. When times are bad, they over-hire in the bankruptcy/creditor's rights sections. I have not seen the oversupply impact rates, however.

Given the many changes that have been occurring in the legal profession, is life as a lawyer in Hampton Roads still attractive? Or, if they had to do it over again, would some of our lawyers opt for a different career and lifestyle? **By more than a 2:1 ratio, our panel of lawyers told us that the quality of their professional lives has declined.** Respondents cited more hours, more demanding clients, greater stress, and the need now to spend increased time working on marketing and community involvement to “show our flag” and “troll for clients” as examples of less-attractive aspects of their current responsibilities.

One lawyer candidly told us that he wouldn't do it again if he had the choice:

I would definitely go to medical school. The quality of life has just become too poor, and there is no way to adequately manage client expectations to change the deficiencies in the firm model. Too much of the administrative burden and client management falls only on the attorney and these are functions that cannot be adequately delegated downstream. As a result, each partner essentially has not less than three different jobs. The medical profession has done a far better job of allocating resources and functions in managing patients' expectations.

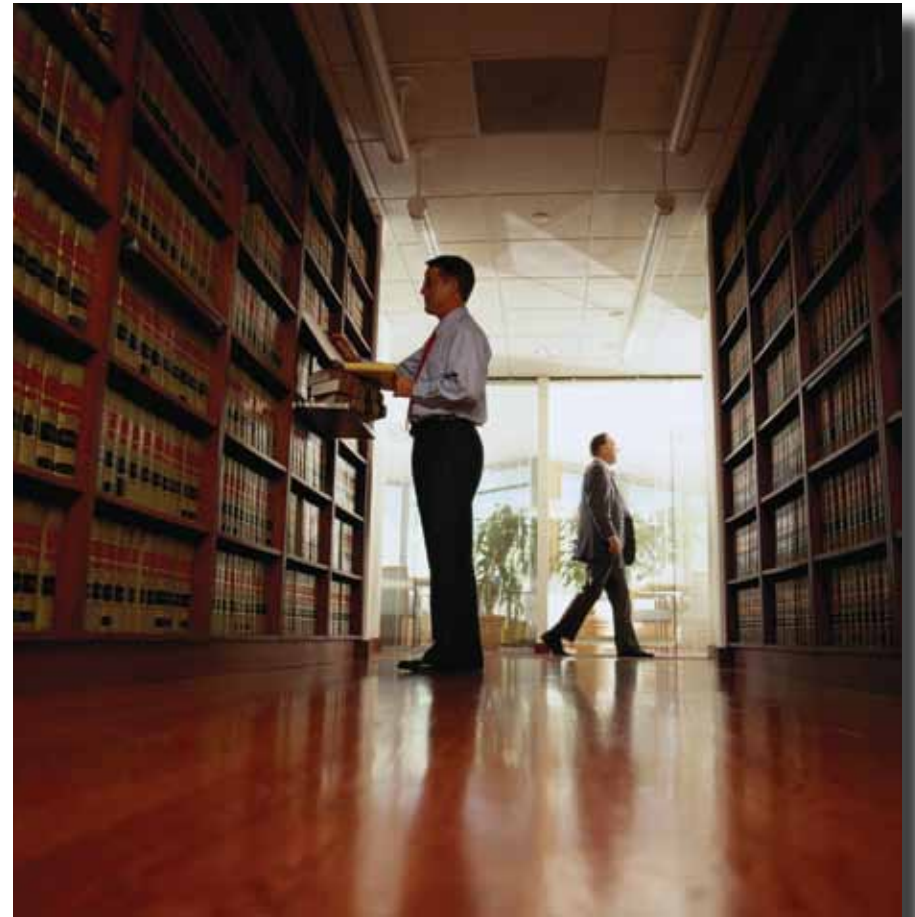
Another lawyer succinctly informed us:

The lawyers and clients make it difficult to do your job. It has stopped being a profession and now is just a daily grind.

Fifty-five percent of our respondents indicated that they would become a lawyer again if they had the choice, but an impressive 30 percent indicated that they would not.

Still, some of the lawyers on our panel are still in love with what they do. Said one:

I enjoy what I do and who I do it with. Despite its problems, the practice of law remains an honorable and valuable profession.



Final Observations

In April 2011, a task force commissioned by the New York State Bar Association (NYSBA) to examine the future of the legal profession noted in its published report ³:

“There is strong evidence that unprecedented changes in practice are producing a restructuring in the way legal services are delivered. These changes include widespread access to legal information, the routinization of many legal tasks, demands by clients for more control of legal service delivery, and the emergence of an increasingly competitive marketplace. This restructuring in the way legal services are delivered affects all law firms – regardless of size, geographic location, and substantive practice area – although it may impact different firms in different ways. Clients are seeking more efficient services, predictable fees, and increased responsiveness to their needs, and they are willing to replace their lawyers if they are not satisfied with the services they receive.”

Our examination of the market for lawyers in Hampton Roads confirms these observations. There is ferment in the legal profession that bodes to change everything, from how lawyers are trained to how they are compensated for their work. The economic recession and an oversupply of lawyers have punched the legal profession in the solar plexus and consequently have driven law firms and other employers to substitute less-expensive personnel and technology for conventionally trained lawyers.

One attorney with whom we talked about legal developments in Hampton Roads somewhat wistfully recalled salad days when “lawyers were well paid and respected, we acted like colleagues, clients didn’t hop around as much and one could predict where next year’s billable hours were going to come from.” Even though lawyers in our region earn well more than twice the regional average income, almost one-third of the respondents in our sample

confessed that they would not become lawyers if they had the ability to make an occupational choice again. By more than a 2:1 ratio, they perceived that the quality of their lives had declined.

If law school enrollments at long last taper off and our nation experiences economic recovery, then many of the economic circumstances that have prompted these lamentations will change for the better. Nevertheless, the impact of new technologies on the practice of law will continue unabated. Further, most employers are not likely to forget their discovery that less-expensive employees and paralegals have the ability to perform or backstop a variety of legal tasks that previously were accomplished only by bar-admitted lawyers.

Given the nature of our increasingly complicated society and the litigious American legal system, there always will be a significant demand for lawyers, both nationally and in Hampton Roads. However, as professional brethren such as physicians and college professors have learned (sometimes painfully), lawyers likely will find that the Camelot-like epoch one lawyer pensively labeled “the good old days” is unlikely ever to return. *Plus ça change.*

³ http://www.nysba.org/AM/Template.cfm?Section=Task_Force_on_the_Future_of_the_Legal_Profession_Home&Template=/CM/ContentDisplay.cfm&ContentID=48108

Do We Have Enough Physicians in Hampton Roads?



DO WE HAVE ENOUGH PHYSICIANS IN HAMPTON ROADS?

Demographics, government policies and more expensive medical innovations likely all will increase the demand for health care in future years. Will there be sufficient numbers of physicians available to serve those who need care? Alas, our outlook is not favorable.

The Supply Of Physicians Relative To Demand: The National Picture

The Association of American Medical Colleges (AAMC) forecasts that our nation will face a shortage of 150,000 physicians in 2025. There are three reasons, says the AAMC, why insufficient numbers of doctors are being produced each year in the United States relative to anticipated future demands for medical care. First, the U.S. population is aging and more mature individuals consistently demand more medical care. Second, new health care legislation has increased the ability of citizens of all ages to demand more medical care. Third, the existing stock of physicians gradually has been aging and a spate of retirements is likely over the next two decades that will further diminish the numbers of available physicians.

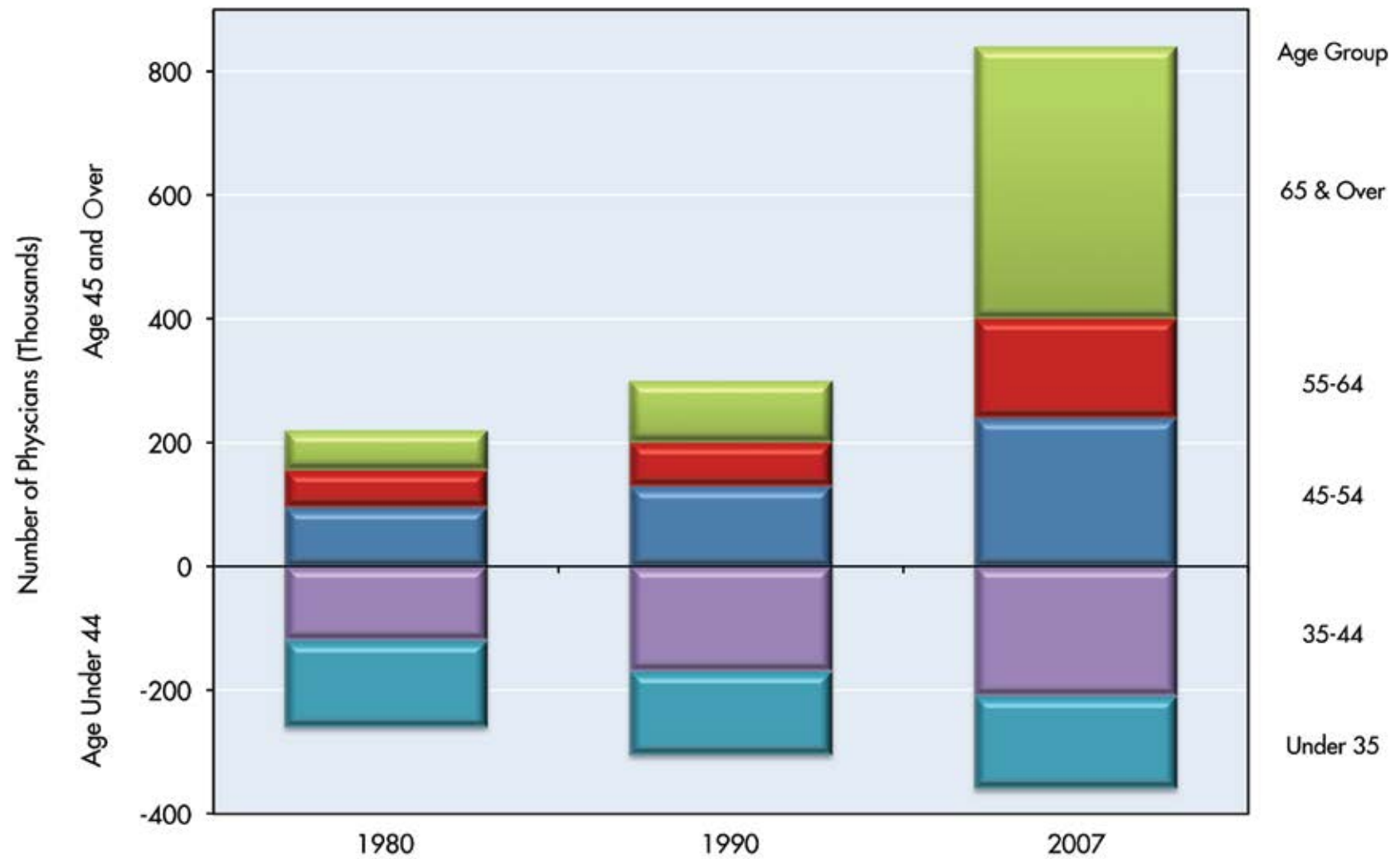
The aging of physicians as a group is a phenomenon that many have ignored. Graph 1 (the American Medical Association's Chart 5.8 in its "2009 Chart Book" report) shows that the proportion of the nation's doctors age 45 or older has been growing steadily since 1980. In fact, the American Medical Association (AMA) data indicate the average age of physicians in the United States rose approximately from 41.2 to 45.9 between 1980 and 2007. These doctors must be replaced as they retire.

Graph 2 provides a different perspective on the age distribution of U.S. physicians. These data are derived from Table 4.6 in "Physician Characteristics and Distribution in the United States," 2011 edition, published by the AMA. **An amazing 26.1 percent of active male physicians (151,382) were 65 or older in 2010. Another 21.9 percent (127,022) were between 55 and 64 years of age.**

What about female physicians? According to the AMA, 38,102 were 65 or older and 21,618 were between 55 and 64 years of age. Taken together (men and women), 338,124 physicians, constituting 39.7 percent of all active physicians, are prime candidates for retirement or partial duties in the near future.

When they do opt to retire or cut back, there can be little doubt that this will result in painful adjustments in most health care markets.

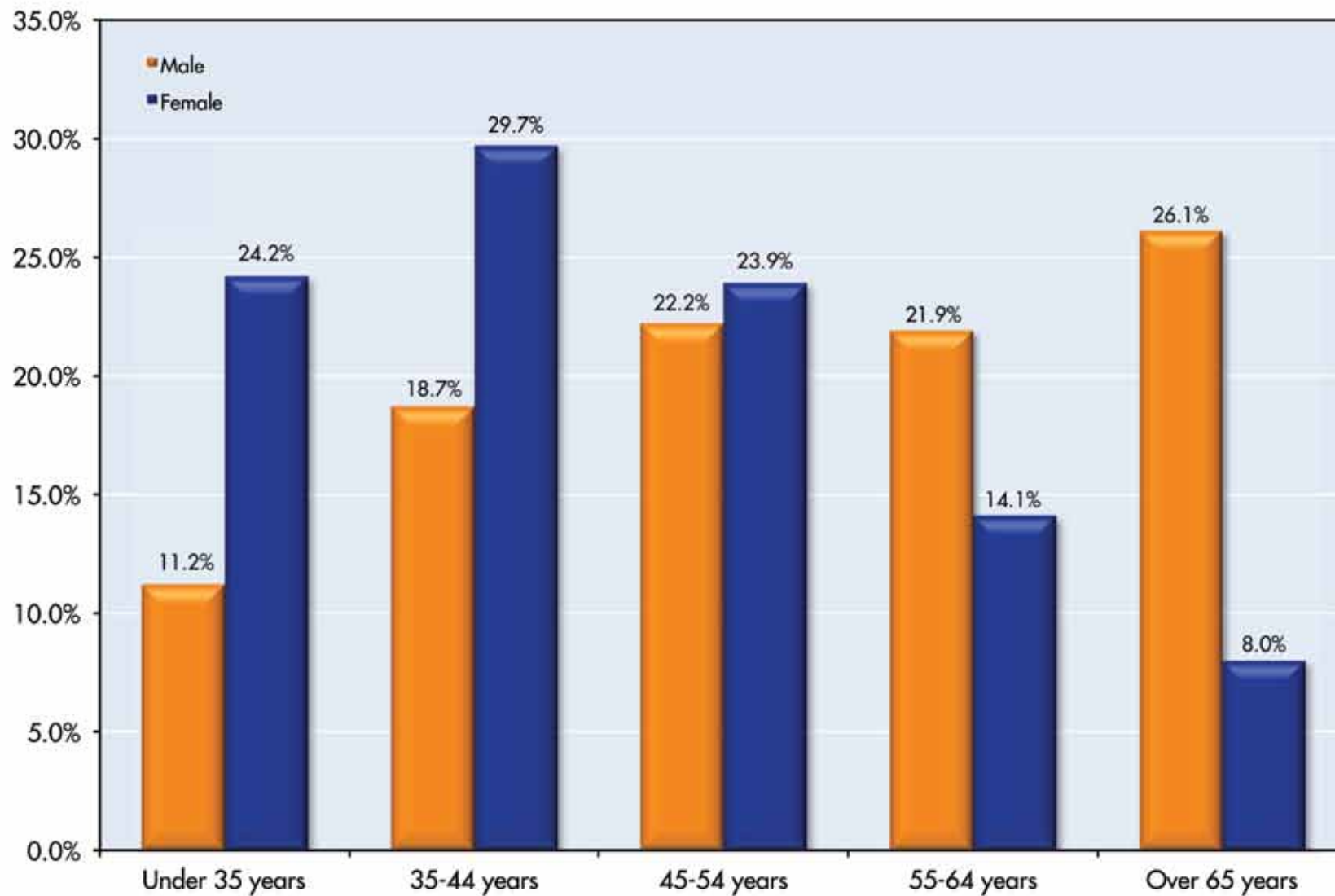
GRAPH 1
NUMBER AND AGE OF U.S. PHYSICIANS, 1980-2007



Source: American Medical Association, (2009 Chart Book), Physician Characteristics and Distribution in the U.S.

GRAPH 2

AGE DISTRIBUTION AND GENDER OF PHYSICIANS IN THE UNITED STATES, 2010



Supply/Demand Projections For Hampton Roads: Some Rough Estimates

The U.S. population is 312 million, while the population of Hampton Roads is 1.67 million. If the impact of the projected physician shortage is evenly distributed across the country (though it probably is not), then our region will experience $1.67/312$, or .0054 percent, of any problematic shortage. This translates to a shortage of 504 physicians within our region in 2025.

However, for a variety of reasons, including the existence of institutions such as Eastern Virginia Medical School (EVMS), other regional institutions of higher education and the Department of Defense, our region is more intensely populated with health personnel than the typical region in the United States. Hence, while the average number of active physicians per 1,000 people is about 2.8 in the country (from the "American Hospital Association Chart Book, 2011"), it is 3.3 per 1,000 in Hampton Roads, according to Healthcare Practitioners and Technical Occupations, Bureau of Labor Statistics, www.bls.gov. If, in 2025, the population of Hampton Roads has risen to 1,836,818 as a result of a .6325 percent annual growth rate (our actual rate of growth between 2000 and 2010), then our region will need 6,061 physicians, or 565 more than the 5,495 we have today.

However, labeling the 565 shortfall an actual shortage assumes that the number of additional physicians who come to Hampton Roads is precisely matched by the number that chooses to retire or depart. Clearly, much depends upon the rate of retirement of physicians, which was discussed previously.

Another way to assess the prospective shortage of physicians is to examine the current share of the nation's physicians that is practicing in Hampton Roads and project that forward. According to the Bureau of Labor Statistics' Healthcare Practitioners and Technical Occupations' data, www.bls.gov, there were 5,494 active physicians in Hampton Roads in 2011. They constitute .701 percent of all physicians in the United States. Thus, another rough and ready estimate

of the impact of the projected shortage of physicians on Hampton Roads is $.00701 \times 150,000 = 1,052$ physicians in 2025.

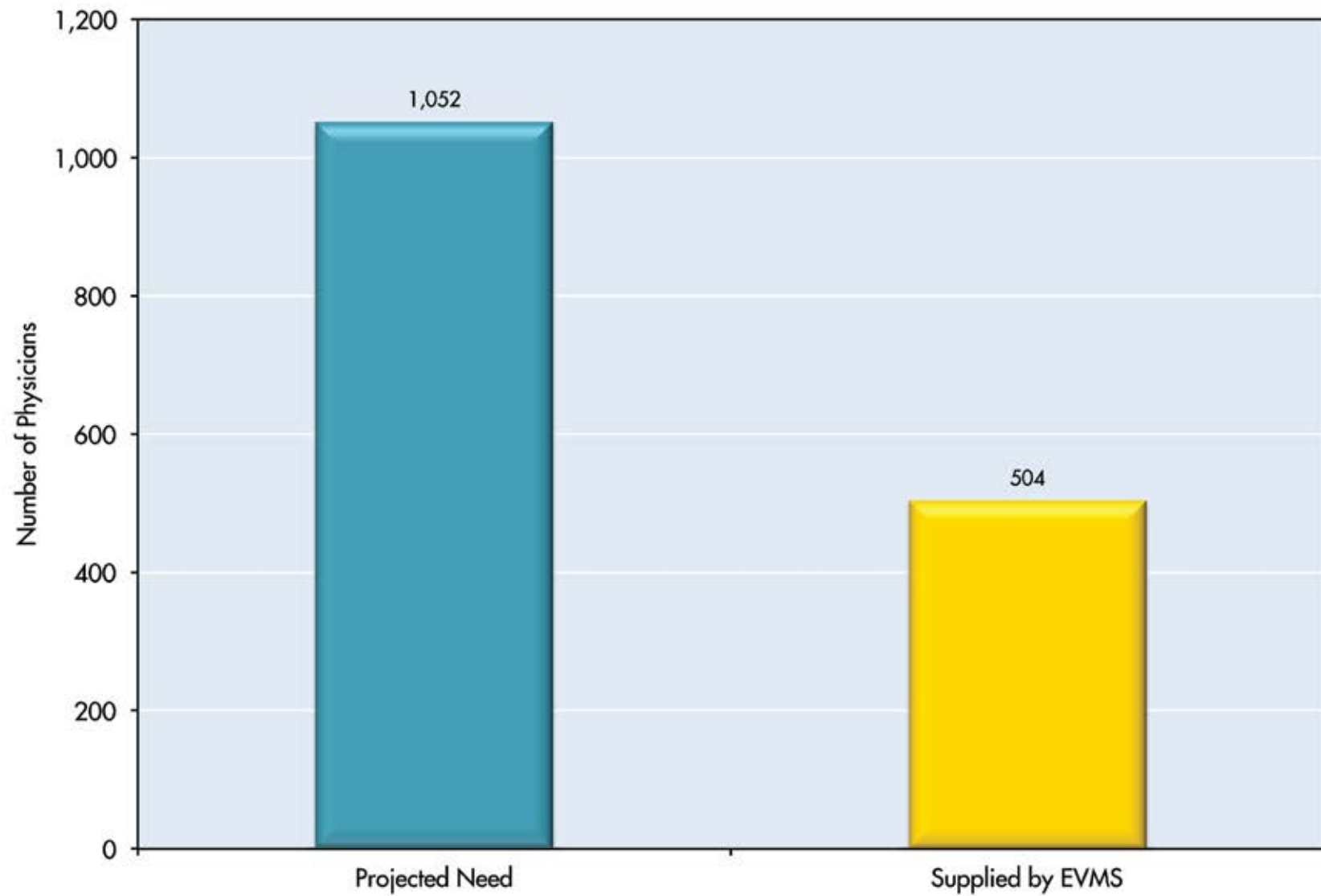
It appears, then, that Hampton Roads will require between 504 and 1,052 additional physicians in 2025, but this assumes that the current level of demand for health care by individuals will remain the same and that the number of physicians entering our region is matched precisely by the number leaving. In fact, as noted above, both of these assumptions are dubious. It seems probable that the demand for health care will increase because of the Patient Protection and Affordable Care Act and the aging of the population. Further, Graphs 1 and 2 suggest that a flood of physician retirements is on the horizon. Therefore, even 1,052 may constitute a low estimate of the region's shortage of physicians in 2025.

Nevertheless, let's assume that we will require 1,052 additional physicians in 2025. Where will these physicians come from? Clearly, EVMS, with its larger classes of medical students, will meet a healthy segment of projected needs. Currently, slightly more than 500, or approximately 10 percent of all active physicians in Hampton Roads, have earned their medical degree from EVMS. This percentage will increase significantly in the future as more mature doctors who did not graduate from EVMS retire and are replaced by new EVMS graduates.

If EVMS graduates 145 M.D.s annually and one-quarter of these graduates remain in the region (very close to the 23 percent of recent graduates that currently reside in the region), then Hampton Roads will add 36 M.D.s per year. Over a 14-year time period, EVMS would generate $14 \times 36 = 504$ additional physicians for Hampton Roads. This is highly positive, but even assuming no retirements or departures of existing physicians, this scenario would provide only about one-half of the expected additional need of 1,052 physicians in our region in 2025. Graph 3 illustrates the prospective shortage. Even the increased sizes of EVMS graduating classes will be insufficient to meet projected future needs.

GRAPH 3

PROJECTED DEMAND AND SUPPLY FOR PHYSICIANS IN HAMPTON ROADS, 2025





Realism requires that we plan for a significant number of retirements and departures from active practice by the region's physicians over the next 14 years. Nationally, 39.7 percent of all physicians are 55 or older. Let's assume the same age distribution applies to Hampton Roads and that four out of five of these doctors will have retired by 2025. **This means that 31.7 percent of the current group of physicians in the region will have retired by 2025. This equates to 1,741 physicians. If this is what the future holds for our region in terms of physician retirements and departures, then we will find ourselves in big trouble, as 1,741 retirements and departures would absolutely swamp the production of EVMS M.D.s (504) that likely would be retained in Hampton Roads through 2025.**

There are at least two other ways, in addition to EVMS, to augment the supply of physicians in Hampton Roads, or at least make the supply stretch further. The first is international medical graduates (IMGs). In the United States as a whole, 25.66 percent of all physicians are IMGs and earned their medical degree outside the United States. However, only 21.77 percent of active physicians in Virginia have earned international degrees. The percentage within Hampton Roads is unknown. Competitive forces likely will induce Virginia and Hampton Roads to utilize more IMGs. There simply will not be enough "native" M.D.s being produced by medical schools inside the United States.

It is beyond the scope of this analysis to evaluate all of the benefits and costs that would be attached to increased use of IMGs in Hampton Roads. However, the increased recruitment of international medical school graduates will not work well unless time and resources are allocated to the process. EVMS well could become a centerpiece of efforts to train IMGs. This usually involves cultural and medical orientation, education, mentorships, residencies and sometimes language instruction. Given the projected supply/demand situation for physicians, this is a task that EVMS should consider, though it is hardly one that the medical school could undertake without additional financial support.

The second way to deal with the impending shortage of physicians is to make more extensive use of nurses and physician assistants (PAs) in lieu of physicians. **Nurses and PAs can perform some of the same tasks**

as physicians, but are less expensive. Hence, straightforward economics will push medical providers in this direction.

However, greater reliance upon nurses and PAs will require that more generous compensation packages be offered them than heretofore in order to attract sufficient numbers.

There is yet another problem on the horizon – an insufficient number of available medical residencies. Even the best attempts to increase the supply of physicians will falter if recent physician graduates cannot be placed in residencies, because one cannot become a physician without doing a residency.

Nevertheless, at the same time medical school enrollments have been increasing both nationally and in Virginia because of increased class sizes and the opening of new medical schools, the number of new residencies available to serve these students has stagnated. In 2006-07, the Accrediting Council for Graduate Medical Education (ACGME) reported 106,383 medical residencies. By 2010-11, that number had grown only to 113,142, or an average of slightly less than 1.3 percent per year (ACGME, "Data Resource Book," academic years 2006-07 and 2010-11). If this slow growth rate continues, then it will be impossible to supply the projected number of new physicians needed in the future.

The residency supply problem stems primarily from financial reality. Those medical organizations hosting residencies rely heavily upon Medicare to reimburse them for the residents. In 1997, Congress imposed a cap on the funding of medical residencies. Medical organizations retain the option to pay for additional residents themselves and some do, especially where a profitable medical specialty is involved. Regardless, when a medical organization adds a medical resident that is not funded by Medicare, then the cost of doing so is passed on to those who pay the bills – patients, insurance companies and (ironically) also the U.S. government.

The Bottom Line

It's difficult to avoid the conclusion that the future supply/demand situation for physicians in Hampton Roads could be grim. Despite larger graduating classes at EVMS, it appears that the number of new physicians the region will need between now and 2025 is far greater than the number the medical school currently is scheduled to supply. This suggests a health care future that will be characterized by patients enduring long waits for appointments, health care personnel who will be stressed to care for their patients and the likelihood that our region will be unable to offer care to some populations.

In most comparable economic situations, shortages of personnel drive up wages and prices and supply and demand ultimately adjust. In this case, however, because of the Patient Protection and Affordable Care Act, this may not be an allowed outcome. Instead, we may see a combination of some people receiving delayed health care, or none at all, and some health care providers declining to serve certain patients (namely, Medicare) if they believe the reimbursements they are receiving are insufficient to cover their costs.



Does the Commonwealth Balance Its Budget on the Backs of Local Governments?



DOES THE COMMONWEALTH BALANCE ITS BUDGET ON THE BACKS OF LOCAL GOVERNMENTS?

In late 2011 the Virginia Municipal League and the Virginia Association of Counties conducted a survey of their members about “local government fiscal issues.” Of the 121 localities responding to the survey, slightly more than half (62) of local cities and counties indicated their greatest fiscal concern to be “reductions in state funding.” The next most important issue for the respondents was their worry about a “lack of local revenue growth/real estate assessment reductions” (55 responses). Respondents expressed five other concerns, but only a “loss of federal funding” attracted more than 15 responses.

Perhaps Solomon had local government officials in mind when he wryly commented in Ecclesiastes that “there is nothing new under the sun” (1:9). Good times or bad, local government officials always express concerns about their revenue streams. Faced with the almost insatiable demands of citizens for services, local government officials constantly must struggle to balance budgets.

Thus, one cannot be surprised when local government officials complain that the Commonwealth habitually seems to find ways to reduce their revenue streams, or openly shifts costs to them. As we shall see, there is considerable truth to their laments in this regard. School funding provides an excellent example. Historically, the goal for school funding has been to have the Commonwealth pay 55 percent of the freight and localities 45 percent. Between 2008 and 2010, legislated policy changes relating to Standards of Quality payments to local school systems resulted in a series of reductions that have totaled approximately \$400 million on a biennial basis within Hampton Roads. As a consequence, localities in our region now are paying approximately one-half of the costs of public education.



The Impact Of The Dillon Rule

Virginia is a “Dillon Rule” state. In 1868, Iowa Judge John Forest Dillon issued a momentous ruling in which he asserted: “Municipal corporations owe their origin to, and derive their powers and rights wholly from, the legislature. It breathes into them the breath of life, without which they cannot exist. As it creates, so may it destroy. If it may destroy, it may abridge and control” (Clinton v. Cedar Rapids and the Missouri River Railroad, [24 Iowa 455; 1868]).

Judge Dillon effectively ruled that local governments have only those powers granted to them specifically in their charters, or in general laws passed by their state legislatures. Thus, to quote one Hampton Roads legislator who prefers to remain anonymous, “Local governments can’t do diddly unless they receive explicit permission from the General Assembly.”

By contrast, some states have chosen not to operate under the Dillon Rule because they have made general grants of power to their localities to govern as needed unless specifically denied such power by their state legislatures. There is little doubt that many, perhaps most, state legislators like the Dillon Rule because it establishes them as the center of power. Any and all must come to state legislators as supplicants if they want to get anything accomplished. Proponents of the Dillon Rule argue that it promotes desirable standardization and that it avoids situations where each locality operates by a different set of rules. Perhaps, but it is costly in terms of time and removes decision making from localities to Richmond. To observe that the Dillon Rule frustrates many local government officials is an understatement.

The oftentimes neglected flip side of the Virginia General Assembly assuming all power and parceling out limited authority to local governments is that it means that the state has to be willing to assume responsibility for cities, counties and towns having the resources needed in order to effectively govern their communities. Put simply, either Virginia must be willing to grant revenue-raising authority to local governments, or the state must be willing

to sufficiently fund programs for the localities, or there must be a combination of fundraising authority to local governments along with state assistance.

Virginia grants powers to local governments through the charters that establish local units of government, and the charters can be amended. There are also provisions of general law that apply to all units of government similarly situated. Some localities adopt a particular form of government that involves a city manager, while others seek a package of powers that may be further amended with special legislation to meet the unique needs of the local community.

Whatever the basic organization of a local government, it still must perform the core functions of government related to education, public safety, transportation and social welfare. In the best case, productive partnerships exist between local government units and the Commonwealth that result in efficient and cost-effective provision of the core functions of government.

Since Virginia is a Dillon Rule state, this leads us to the following questions: How has the state met these responsibilities and how have local governments fared in this partnership with the Commonwealth? Does a review of state and local revenues for the cities and counties of Hampton Roads reveal, as some have expressed, that our local governments have a legitimate concern about a loss of fiscal support from the all-powerful state government in Richmond?

In order to answer these questions, we first must examine where the Commonwealth raises its own revenues.

Where The Commonwealth Raises Its Revenues

As background to delving into the questions of state aid to local governments in Hampton Roads, it is instructive to review the sources of revenue available to state government and the performance of these sources in producing revenue over the last decade. A significant share of that revenue ends up being provided to local government units. In general, the Commonwealth's revenues are sensitive to the business cycle, but (and this often is important) changes in government revenue tend to lag the private sector both in times of recession and recovery. Graph 1 illustrates this sensitivity in terms of general fund tax collections. These fluctuations profoundly influence the willingness of state government to meet its funding obligations to local government units.

Commonwealth revenues are divided into two categories – general fund and non-general fund (see Graph 2). **General fund revenue is derived from specific taxes levied on individuals or transactions. This constitutes about 40 percent of the state's total budget revenue. Examples include individual and corporate income taxes, which account for nearly 71 percent of general fund revenue, as well as sales and use taxes, which account for 21 percent of the total.**

The remaining 60 percent of the state's revenue comes from a variety of sources referred to as "non-general fund revenue." This is derived from fees and transfers rather than generally levied taxes, as displayed in Graph 4. About 42 percent of non-general revenue comes from federal grants and contracts that are awarded to the Commonwealth. The second-largest source of non-general fund revenue at 24 percent is institutional fees. These fees include the tuition and fees that are collected at state colleges and universities and patient fees paid at state hospitals and mental health institutions. Transportation-related revenues come from a variety of taxes, but are considered non-general funds because they go into a special fund for expenditures rather than to support general costs of

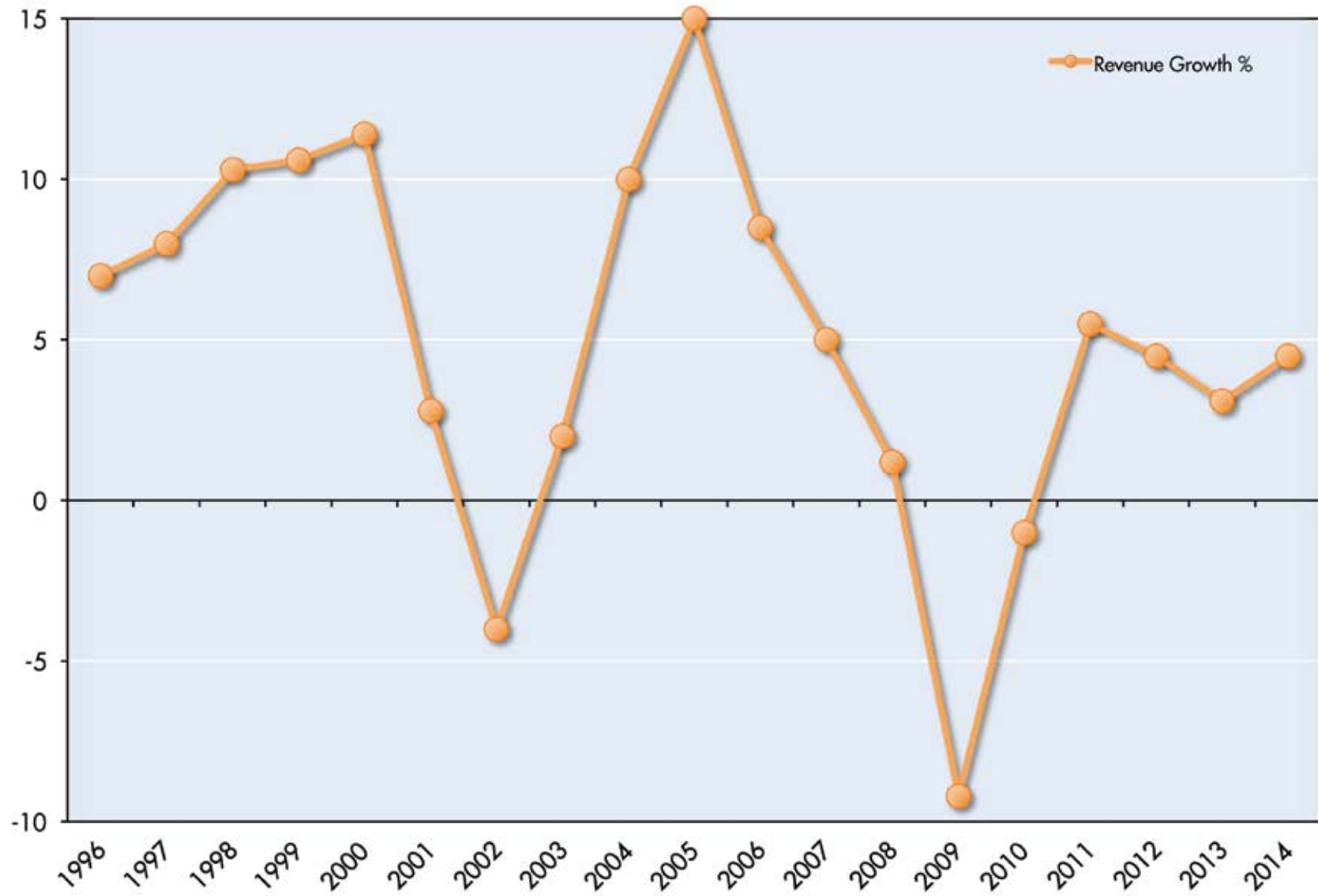
government. These taxes include motor vehicle fuels taxes, motor vehicle sales and use taxes, vehicle license fees and other miscellaneous fees.

The other 24 percent of non-general funds comes from a variety of taxes that include the unemployment insurance fund, hunting and fishing and other license sales, lottery ticket sales, sale of state property and interest earnings on state funds.

Graph 5 clearly reveals that non-general fund growth greatly exceeded the growth of general funds during the past decade. This is important because Commonwealth financial aid to localities always has come primarily from general funds. A portion of the expansive growth of non-general funds is the result of switching the support of state government programs from tax-dollar support to fees. Rapidly rising tuition and fees at state-assisted colleges and universities provide a prime example of this switch. Legislators have tended to view their general fund allocations to institutions of higher education as checking accounts from which they can make withdrawals. While they may dutifully decry the situation, they know that some of the impact of their general funds cuts is likely to be mitigated by tuition increases.

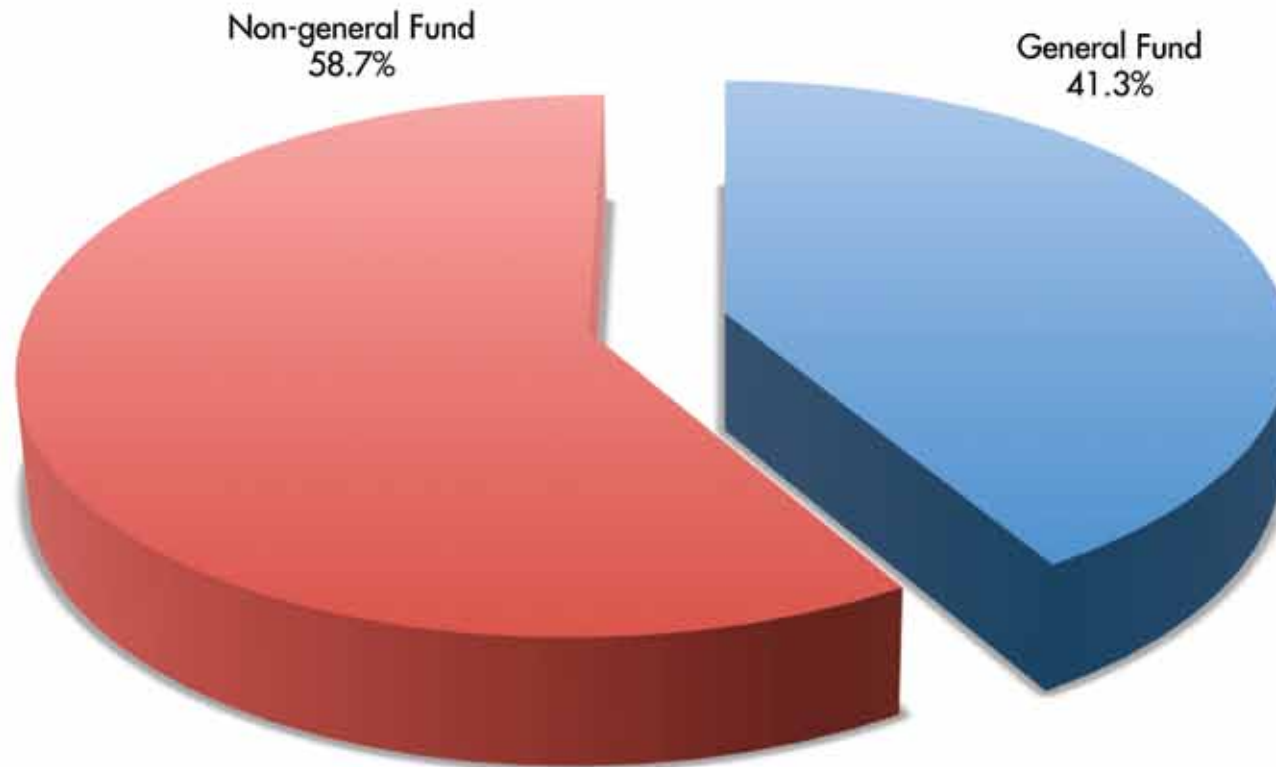
GRAPH 1

GENERAL FUND REVENUE GROWTH, 1996 PROJECTED TO 2014



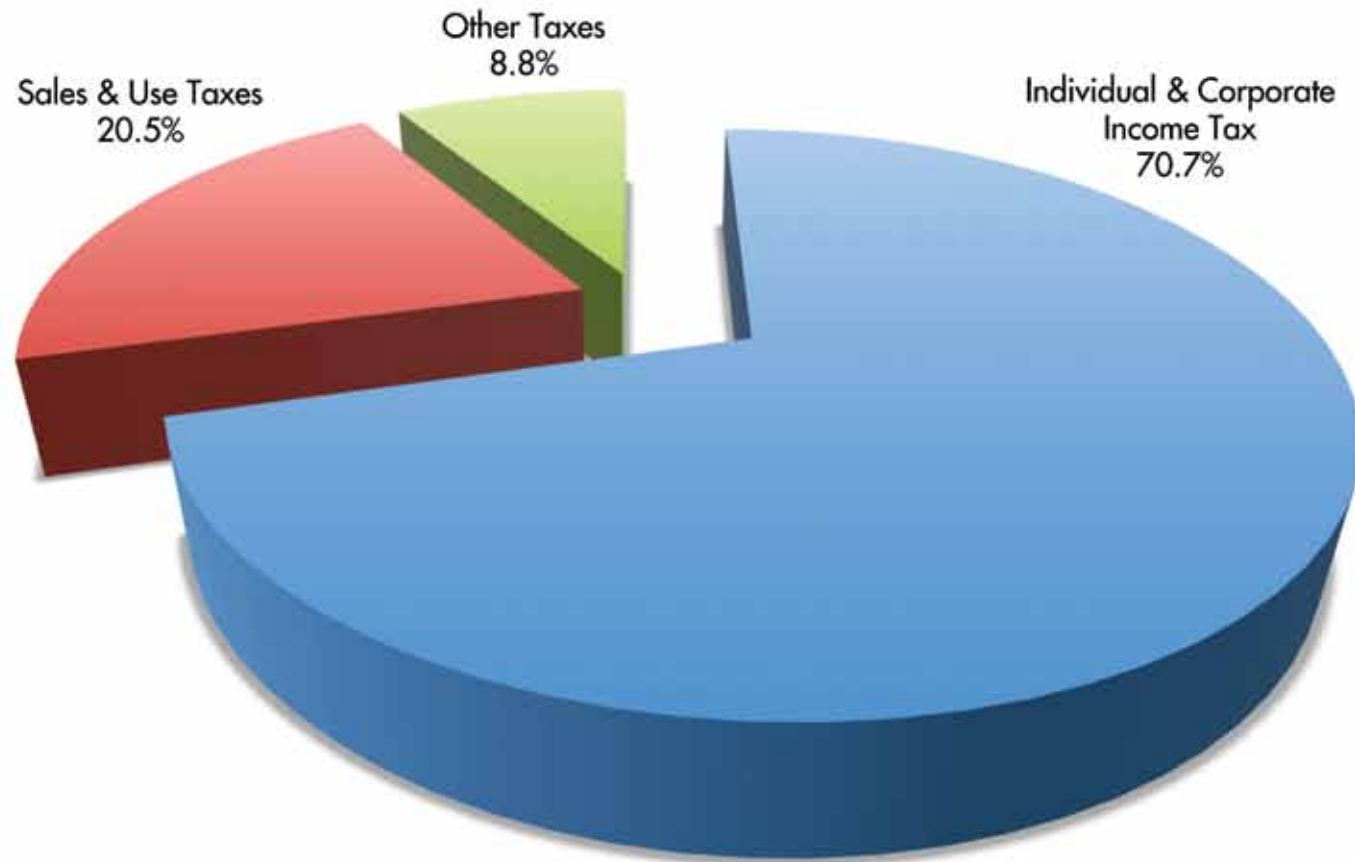
Source: Virginia Department of Planning and Budget

GRAPH 2
COMPONENTS OF THE VIRGINIA STATE BUDGET



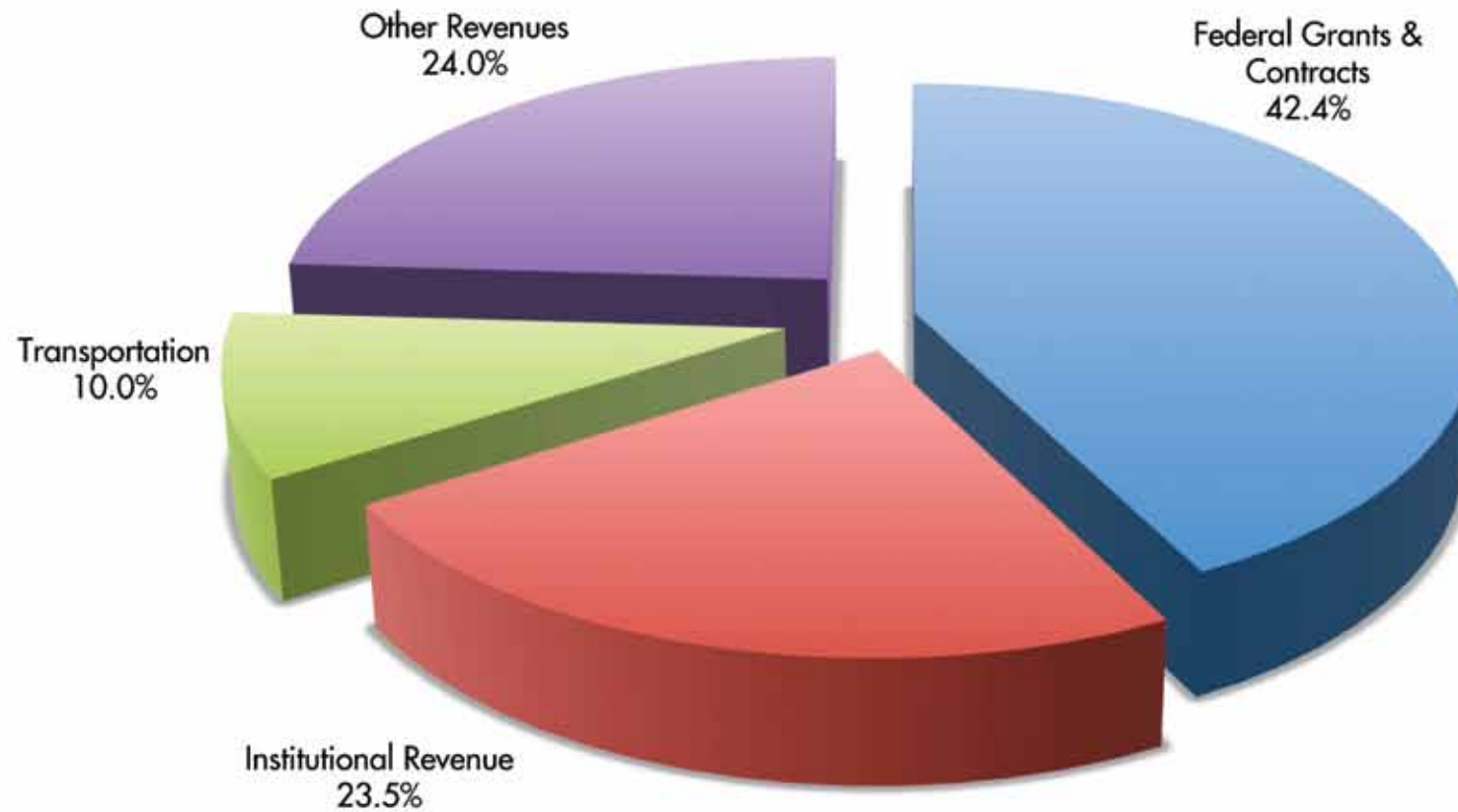
Source: Virginia Department of Planning and Budget

GRAPH 3
SOURCES OF GENERAL FUND STATE REVENUE IN VIRGINIA, 2012



Source: Virginia Department of Planning and Budget

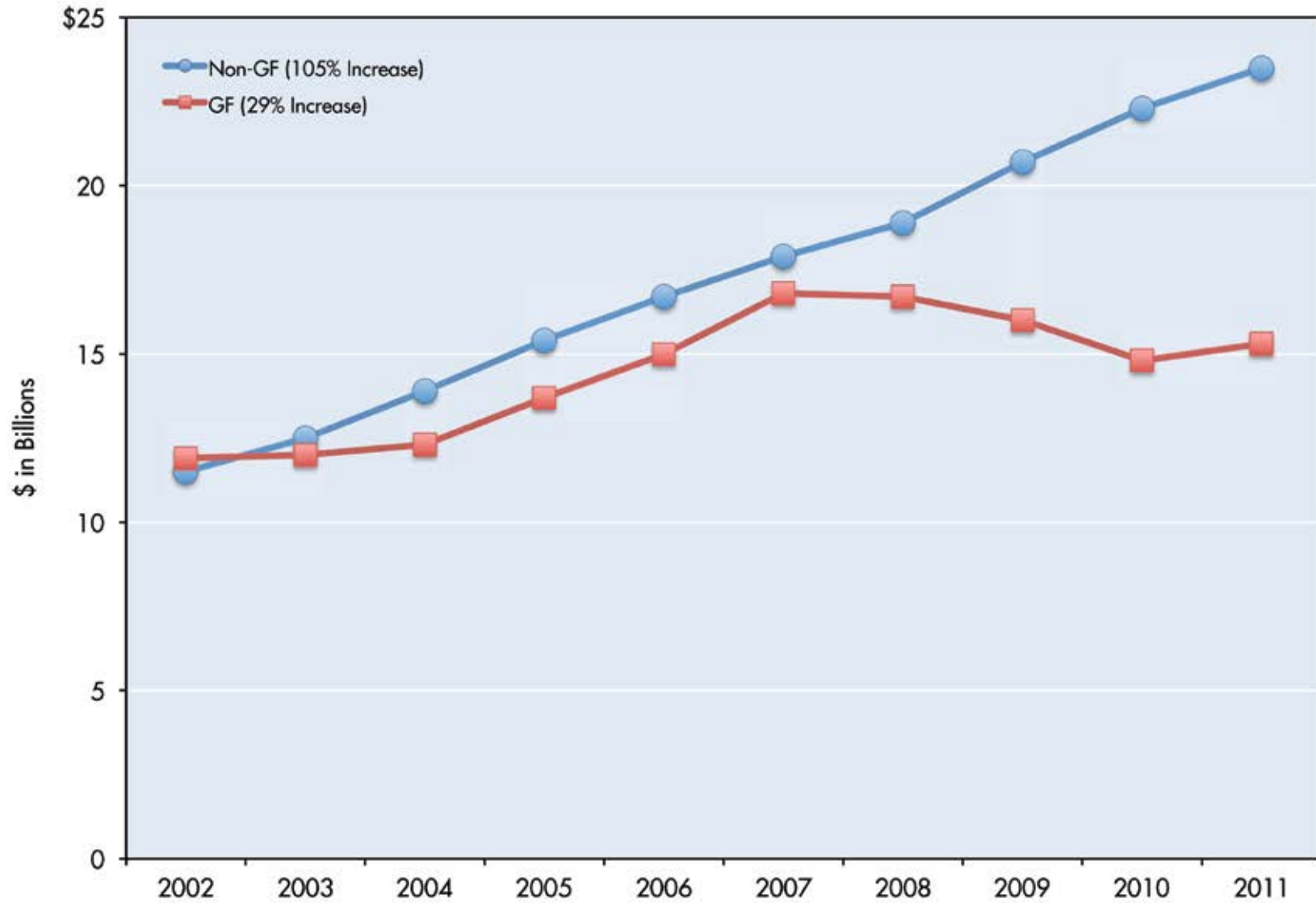
GRAPH 4
SOURCES OF NON-GENERAL REVENUE IN VIRGINIA, 2012



Source: Virginia Department of Planning and Budget

GRAPH 5

COMPARISON OF GROWTH OF GENERAL AND NON-GENERAL FUNDS IN VIRGINIA, 2002-2011



Source: Virginia Joint Legislative Audit and Review Commission, 2011

Where Local Governments Get Their Money

Through their individual charters and general law, localities in Virginia are given the power to levy certain taxes. There are at least 20 different taxes that some or all local governments are empowered by state government to enact. Of these, however,

only three taxes have been enacted by all 39 cities and 95 counties in the Commonwealth. These are the real property, personal property and local one-cent sales tax, and they account for 80 percent of local government revenue.

By itself, the real property source of revenue accounts for about 63 percent of the total. Communications sales and use taxes on services such as telephones and cable television have been imposed by all local governments, but they raise less than 5 percent of local revenue.

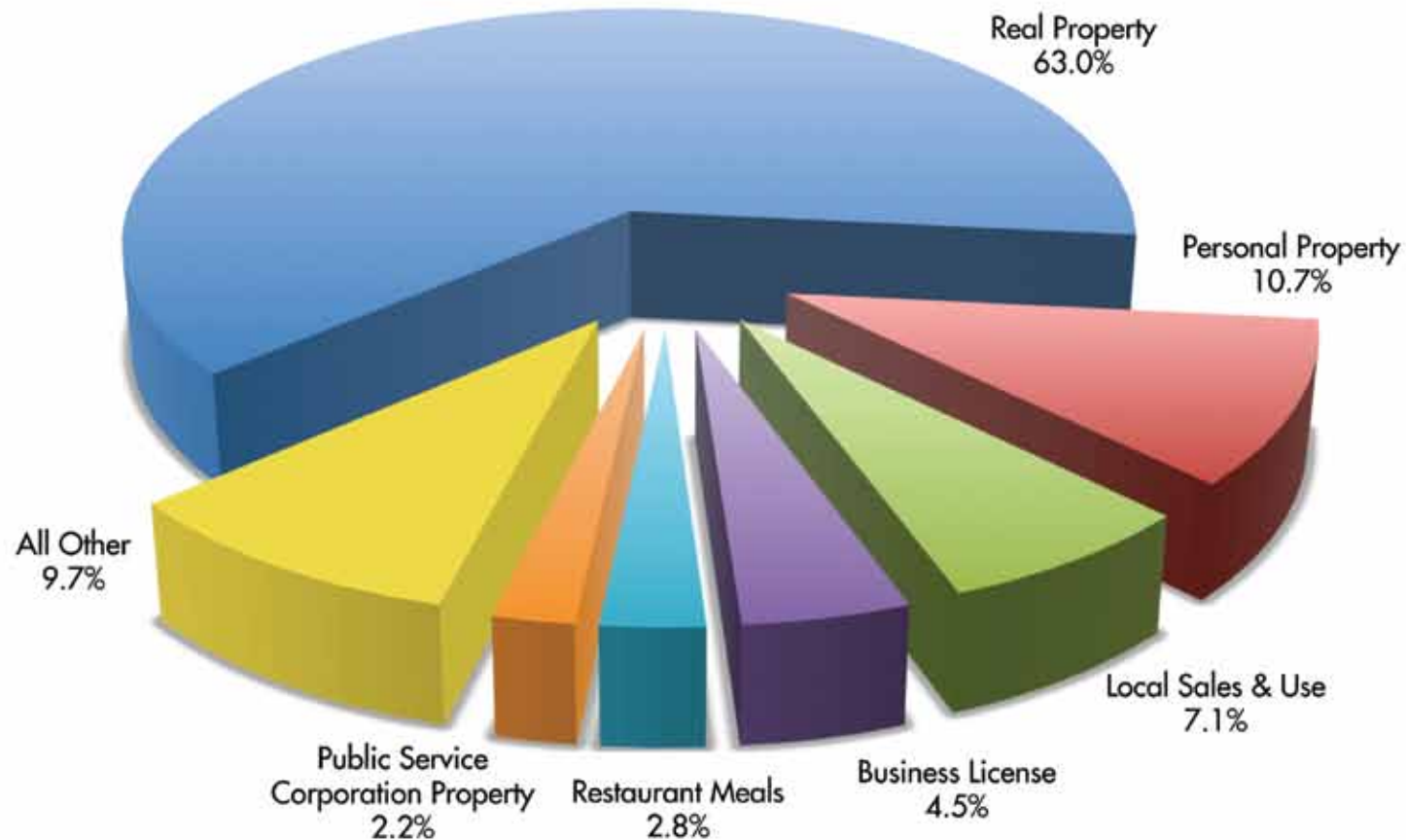
Restaurant meal taxes have been imposed in 79 of Virginia's 134 jurisdictions, but they raise only about 2.5 percent of local revenues. All the cities in Hampton Roads have implemented a meal tax; none of the counties that must have a referendum before imposing a meal tax has one. James City and York counties forfeit about \$2.3 million each in annual revenue because they do not have meal taxes.

Table 1 records the sources of revenue of Virginia's local government units. Cities and counties tend to adjust their tax rates on real property to balance their budgets or to provide relief to taxpayers when assessed valuations rise rapidly.

TABLE 1		
VIRGINIA LOCAL TAX REVENUE BY SOURCE, FY 2011		
Tax	Amount (\$)	% of Total
Total taxes	13,880,131,877	100.0
Real property	8,750,515,404	63.0
Personal property	1,489,328,194	10.7
Local sales and use	982,221,495	7.1
Business license	630,976,370	4.5
Restaurant meals	383,358,092	2.8
Public service corporation property	303,900,488	2.2
Consumer utility	300,705,489	2.2
Machinery and tools property	207,816,158	1.5
Hotel and motel room	165,761,501	1.2
Motor vehicle license	159,373,460	1.1
Recordation and will	96,767,397	0.7
Bank stock	90,217,513	0.6
Tobacco	61,329,877	0.4
Coal, oil and gas	46,299,028	0.3
Franchise license	18,128,491	0.1
Admission	17,184,269	0.1
Merchants' capital	10,924,990	0.1
Other local taxes	66,587,298	0.5
Penalties and interest	98,736,363	0.7

Source: "Virginia Local Tax Rates, 2011," Weldon Cooper Center, University of Virginia

GRAPH 6
SOURCES OF LOCAL TAX REVENUE IN VIRGINIA, FY 2011



Source: Auditor of Public Accounts, Draft Comparative Report of Local Government Revenues and Expenditures, Year Ended June 30, 2011 (Richmond: Jan. 26, 2012), Exhibits B and B-2
<http://www.apa.state.va.us/ComparativeReport.cfm>

State Financial Assistance Given To Local Government Units

About one-third of Virginia's operating budget either goes directly to localities, or is spent by the state on behalf of localities. This usually is referred to as "state aid" and consists of:

- Any payment made directly to a local government or a school division,
- Any payment made on behalf of a local government or school division, or
- Any payment made to an organization or group that provides a direct benefit to a local government or its residents, such as a public library, planning district commission or a mental health community services board.

The Executive Budget for FY 2013-14 lists aid to localities by each state secretariat, as shown in Table 2. The numbers displayed here are projections that must be approved by the General Assembly and the governor.

State aid supplied to localities funds in whole or in part the operations of police departments and the construction and maintenance of secondary roads. The salaries of local elected officials, such as treasurers, commissioners of the revenue, commonwealth's attorneys, sheriffs and clerks of the courts are partially funded by the state as well. Local sheriffs' offices and jails receive the largest share of state support for constitutional officers. The Commonwealth also funds local social services and health departments, programs for community-operated juvenile corrections, and programs for individuals with mental illness, intellectual disabilities or substance abuse problems, and a wide range of local activities and services jointly with local governments. State aid also includes partial funding for local libraries, improvements to local airports, parks and recreation programs, local emergency services teams, litter control and recycling, and wastewater treatment plants.

The formulas for distributing monies to these diverse programs and services are as numerous as the programs themselves. Components of distribution formulas

State Secretariat	FY 2013 Estimated Distribution	FY 2014 Estimated Distribution
Administration	\$627,309,647	\$627,954,451
Agriculture and Forestry	\$4,283,398	\$4,283,398
Commerce and Trade	\$145,798,610	\$132,862,568
Education	\$6,570,552,867	\$6,618,309,460
Finance	\$1,115,376,520	\$1,114,130,240
Health and Human Resources	\$1,725,803,557	\$1,692,605,895
Natural Resources	\$82,569,798	\$37,300,404
Public Safety	\$349,793,201	\$350,305,701
Technology	\$27,740,251	\$27,740,251
Transportation	\$1,184,747,158	\$1,209,620,486
Source: Virginia Department of Planning and Budget		

typically include population, form of government, measured financial need and characteristics unique to the objectives of the specific funding.

Local governments in Virginia have been expected to generate larger portions of their budgets themselves. The Commonwealth's share of local government expenditures has declined significantly in recent years. FY 2011 was no exception, as Virginia reduced its contribution to each local government unit by 5.47 percent (see Table 3). As a consequence, in FY 2011, 61.4 percent of local government expenditures were financed by locally raised revenues, up from 58.3 percent in FY 2002.

It's worth noting that Hampton Roads localities only received about the same amount of funding from the Commonwealth in FY 2011 as they did in FY 2006. In effect, the financial world has stood still half a decade for local government units in our region, insofar as state support is concerned.

TABLE 3

REDUCTIONS IN COMMONWEALTH SUPPORT TO LOCALITIES IN HAMPTON ROADS, FY 2011

	FY 2011 Commonwealth Base Support	Reduction	Percent
Franklin	\$893,781	\$48,865	-5.47%
Gloucester	\$4,270,352	\$233,469	-5.47%
Isle of Wight	\$2,346,451	\$128,285	-5.47%
Poquoson	\$760,773	\$41,593	-5.47%
Surry	\$681,459	\$37,257	-5.47%
Williamsburg	\$781,835	\$41,104	-5.47%
York	\$4,490,798	\$245,521	-5.47%
Chesapeake	\$26,538,061	\$1,450,889	-5.47%
Hampton	\$22,689,105	\$1,240,459	-5.47%
Newport News	\$30,931,197	\$1,691,071	-5.47%
Norfolk	\$50,410,861	\$2,756,063	-5.47%
Portsmouth	\$21,238,702	\$1,161,163	-5.47%
Suffolk	\$6,851,785	\$374,601	-5.47%
Virginia Beach	\$47,635,986	\$2,604,355	-5.47%
Commonwealth	\$1,097,453,714	\$60,000,000	-5.47%

To deal with this reality, local governments have had to supply their own locally raised revenues (see Table 4). Since 63 percent of locally generated revenue comes from the property tax, this substitution has meant rising property taxes in nearly every jurisdiction. Thus, some (though not all) of the property tax increases that the region's citizens have experienced in recent years effectively have been manufactured in Richmond.

TABLE 4

SOURCES OF LOCAL GOVERNMENT REVENUE, FY 2002 – FY 2011

FY	Total Revenue	State Aid	Local Revenue	Federal Revenue
2002	100	34.8	58.3	6.9
2003	100	33.9	59.1	7.6
2004	100	32.6	59.0	8.4
2005	100	33.2	59.3	7.5
2006	100	32.2	60.5	7.3
2007	100	33.0	60.2	6.8
2008	100	32.5	60.9	6.5
2009	100	32.8	60.5	6.7
2010	100	30.6	60.6	8.8
2011	100	30.6	61.4	8.0

Source: Auditor of Public Accounts: Comparative Reports

The Special Case Of Public School Funding

The majority of money provided to localities by the Commonwealth goes to public education. But the amount of money going to a school division is heavily dependent on the ability of the local government to provide adequate funding.

The Virginia Constitution requires the Board of Education to formulate Standards of Quality (SOQ) for public schools. The General Assembly is charged with revising the SOQ, determining SOQ costs and apportioning the cost between the state and localities. The decision about how much to appropriate for public schools is left to the General Assembly. The SOQ is established in the Virginia Constitution as the minimum educational program school divisions must provide. Every school division exceeds the standards in order to operate its schools. The specific requirements of the SOQ are set out in the Code of Virginia and the

Appropriation Act and include requirements for programs and staffing. Because the standards are included in the Appropriation Act as well as in the Code, they have been changed frequently in recent years. The end result nearly always has been a reduction in the costs the state has mandated for itself to meet.

State funding must be matched by the locality. Localities may spend more than the required amounts and offer programs and employ staff beyond what is required, and as indicated above, find it necessary to exceed SOQ minimums in order to run their schools. The amount of match is related to the Composite Index.

The Composite Index determines a school division's ability to pay education costs that are part of the Commonwealth's Standards of Quality. The index is calculated using three indicators of a locality's ability to pay:

- True value of real property (weighted 50 percent)
- Adjusted gross income (weighted 40 percent)
- Taxable retail sales (weighted 10 percent).

The rather complex formula for determining a local government's ability to fund its schools is provided in Figure 1. Each locality's index is adjusted in an attempt to maintain an overall statewide local share of 45 percent and an overall state share of 55 percent. The index is recalculated every two years. The Composite Index range is from .20 to .80. The lower the Composite Index, the fewer resources the locality has to support its schools and the higher the state aid.

The goal is to create equal access to schools of at least a prescribed minimum level of quality throughout Virginia. There are, however, serious questions as to how effectively the current formula levels the playing field across the state, but the formula has not been tested in court as has happened in several other states. The biggest problem is that the index is applied to the SOQ costs described above, not the real or actual cost of operating schools.

Table 5 reports the Composite Index for Hampton Roads localities for 2012-14. Lower index numbers reflect greater financial need.

TABLE 5	
2012-2014 COMPOSITE FUNDING INDEX	
Franklin	0.3276
Gloucester	0.3798
Isle of Wight	0.4258
Poquoson	0.3816
Southampton	0.3171
Williamsburg	0.8000
York	0.4049
Chesapeake	0.3678
Hampton	0.2912
Norfolk	0.3102
Newport News	0.2934
Portsmouth	0.2755
Suffolk	0.3530
Virginia Beach	0.4110
Arlington	0.8000
Alexandria	0.8000
Charles City	0.4483
Chesterfield	0.3539
Danville	0.2767
Fairfax	0.6789
Hanover	0.4203
Loudoun	0.5666
Lynchburg	0.3727
Petersburg	0.2516
Tazewell	0.2695

Source: Virginia Department of Education, http://www.doe.virginia.gov/school_finance/budget/compositeindex_local_abilitypay/index.shtml

FIGURE 1

DERIVATION OF THE COMPOSITE INDEX OF THE COMMONWEALTH'S LOCAL ABILITY TO PAY FORMULA

ADM Component =

$$.5 \left[\frac{\frac{\text{Local True Value of Property}}{\text{Local ADM}}}{\frac{\text{State True Value of Property}}{\text{State ADM}}} \right] + .4 \left[\frac{\frac{\text{Local Adjusted Gross Income}}{\text{Local ADM}}}{\frac{\text{State Adjusted Gross Income}}{\text{State ADM}}} \right] + .1 \left[\frac{\frac{\text{Local Taxable Retail Sales}}{\text{Local ADM}}}{\frac{\text{State Taxable Retail Sales}}{\text{State ADM}}} \right]$$

Population Component =

$$.5 \left[\frac{\frac{\text{Local True Value of Property}}{\text{Local Population}}}{\frac{\text{State True Value of Property}}{\text{State Population}}} \right] + .4 \left[\frac{\frac{\text{Local Adjusted Gross Income}}{\text{Local Population}}}{\frac{\text{State Adjusted Gross Income}}{\text{State Population}}} \right] + .1 \left[\frac{\frac{\text{Local Taxable Retail Sales}}{\text{Local Population}}}{\frac{\text{State Taxable Retail Sales}}{\text{State Population}}} \right]$$

Local Composite Index =

$$[(.6667 \times \text{ADM Component}) + (.3333 \times \text{Population Component})] \times 0.45 \text{ (average local share)}$$

Source: Virginia Department of Education

Over the past decade, the components of the Composite Index have been altered to diminish the funds that the Commonwealth must provide to meet the SOQ. The net effect has been to shift costs to localities and in the final analysis to impose a greater than 45 percent share of total costs on the localities. Since 2008, there have been a number of changes in state funding policies related to Standards of Quality that have had a substantial impact on Hampton Roads school systems and public schools throughout Virginia. These changes (catalogued in Table 6) alter factors within the SOQ process that result in lowering state assistance to the funding of public schools. **Cumulatively, these changes have cost localities in Hampton Roads approximately \$400 million on a biennial basis.**

Table 7 focuses on per-pupil expenditures of school districts in Hampton Roads, the sources of the revenues that support those expenditures and the trends of those expenditures. Note that Commonwealth funding comes from two sources – state general fund support and sales tax revenue. The ultimate amount of state funding provided represents the interaction of the SOQ requirements, the Composite Index and the funding formula.

The funding challenges facing local government units in Hampton Roads are vividly illustrated in Table 7. **The Commonwealth's general fund contribution per student fell 23.7 percent statewide between 2009 and 2011, but 26.2 percent in Hampton Roads.** Counteracting this decline was additional local government support, slightly increased sales tax revenue and greater funding from the U.S. government.

The bottom line, however, is that expenditures per student within Hampton Roads fell 4.3 percent between 2009 and 2011, and easily the major factor was a sharp decline in financial support from the Commonwealth. Thus, it is difficult to avoid the conclusion that one of the major tools state government has used to balance its budget is to “put the cities and counties on a diet” (the view of a legislator) or to “use local government as a type of bank account” (the view of a Hampton Roads city official).

TABLE 6		
STATE SCHOOL FUNDING POLICY CHANGES, 2008-2010		
State Funding Policy Changes	Year	Biennial Change \$ in Millions
Cap funding for support positions	2009	(\$754)
Eliminate school construction grants	2009	(55)
Adjust health care for participation rates	2010	(269)
Eliminate certain school expenditures from SOQ calculation (equipment, travel)	2010	(244)
Include \$0 values in linear weighted average calculation	2010	(79)
Eliminate lottery support for school construction and operating costs	2010	(67)
Reduce K-3 class size program	2010	(36)
Update federal deduction percentage	2010	(34)
Extend school bus replacement cycle from 12 to 15 years	2010	(19)
Eliminate enrollment loss assistance	2010	(16)
		Total = (1,573)
Source: Senate of Virginia Finance Committee		

TABLE 7

SOURCES OF PER-PUPIL EXPENDITURES IN HAMPTON ROADS

	Locality	End-of-Year ADM for Determining Cost Per Pupil	Local		State		State Retail Sales and Use Tax		Federal		Total Expenditures	
			Amount	Per Pupil	Amount	Per Pupil	Amount	Per Pupil	Amount	Per Pupil	For Operations	Per Pupil
2003	Chesapeake	38,879	\$124,414,791	\$3,200	\$122,191,548	\$3,143	\$26,810,176	\$690	\$18,580,788	\$478	\$291,997,303	\$7,510
2005	Chesapeake	40,125	\$138,968,750	\$3,463	\$144,139,778	\$3,592	\$34,644,773	\$863	\$20,860,907	\$520	\$338,614,209	\$8,439
2007	Chesapeake	39,351	\$184,857,184	\$4,698	\$147,223,372	\$3,741	\$40,212,884	\$1,022	\$24,215,929	\$615	\$396,509,370	\$10,076
2009	Chesapeake	39,109	\$175,117,027	\$4,478	\$195,674,631	\$5,003	\$38,486,531	\$984	\$22,383,446	\$572	\$431,661,635	\$11,037
2011	Chesapeake	38,827	\$162,866,145	\$4,195	\$156,061,326	\$4,019	\$38,156,378	\$983	\$50,206,617	\$1,293	\$407,290,466	\$10,490
2003	Franklin	1,387	\$3,600,713	\$2,596	\$5,597,363	\$4,036	\$906,445	\$654	\$1,537,833	\$1,109	\$11,642,354	\$8,394
2005	Franklin	1,378	\$4,135,746	\$3,002	\$6,611,600	\$4,798	\$1,083,429	\$786	\$2,111,433	\$1,532	\$13,942,208	\$10,119
2007	Franklin	1,287	\$4,052,104	\$3,148	\$7,806,495	\$6,065	\$1,248,560	\$970	\$2,057,991	\$1,599	\$15,165,150	\$11,782
2009	Franklin	1,224	\$4,917,456	\$4,017	\$7,810,471	\$6,380	\$1,111,646	\$908	\$1,868,224	\$1,526	\$15,707,797	\$12,831
2011	Franklin	1,202	\$4,631,771	\$3,855	\$6,264,420	\$5,213	\$1,210,164	\$1,007	\$2,817,340	\$2,345	\$14,923,695	\$12,419
2003	Gloucester	6,265	\$16,225,614	\$2,590	\$20,710,056	\$3,306	\$4,282,316	\$684	\$3,026,480	\$483	\$44,244,466	\$7,062
2005	Gloucester	6,072	\$19,325,747	\$3,183	\$22,457,231	\$3,698	\$5,387,437	\$887	\$3,311,666	\$545	\$50,482,081	\$8,313
2007	Gloucester	5,931	\$22,447,016	\$3,785	\$25,468,978	\$4,294	\$5,917,873	\$998	\$3,272,636	\$552	\$57,106,503	\$9,629
2009	Gloucester	5,895	\$23,025,450	\$3,906	\$27,309,810	\$4,633	\$5,638,621	\$957	\$3,630,115	\$616	\$59,603,995	\$10,111
2011	Gloucester	5,864	\$22,299,728	\$3,803	\$20,208,933	\$3,446	\$5,640,655	\$962	\$5,236,389	\$893	\$53,385,704	\$9,104
2003	Hampton	22,845	\$52,590,392	\$2,302	\$82,840,334	\$3,626	\$17,109,235	\$749	\$14,778,240	\$647	\$167,318,201	\$7,324
2005	Hampton	22,521	\$57,841,966	\$2,568	\$93,530,460	\$4,153	\$21,595,796	\$959	\$19,360,454	\$860	\$192,328,677	\$8,540
2007	Hampton	21,753	\$61,864,753	\$2,844	\$110,079,124	\$5,060	\$22,588,261	\$1,038	\$19,486,549	\$896	\$214,018,687	\$9,839
2009	Hampton	20,955	\$66,852,906	\$3,190	\$118,923,795	\$5,675	\$21,497,142	\$1,026	\$20,571,119	\$982	\$227,844,960	\$10,873
2011	Hampton	20,709	\$69,931,563	\$3,377	\$92,647,308	\$4,474	\$19,736,650	\$953	\$24,622,192	\$1,189	\$206,937,712	\$9,992
2003	Isle of Wight	4,981	\$14,648,598	\$2,941	\$14,659,480	\$2,943	\$3,534,024	\$710	\$2,360,109	\$474	\$35,202,212	\$7,067
2005	Isle of Wight	5,044	\$15,987,400	\$3,170	\$17,238,698	\$3,418	\$4,626,235	\$917	\$2,851,545	\$565	\$40,703,878	\$8,070
2007	Isle of Wight	5,276	\$19,991,040	\$3,789	\$20,959,966	\$3,973	\$5,400,145	\$1,024	\$3,180,655	\$603	\$49,531,806	\$9,388
2009	Isle of Wight	5,326	\$24,722,946	\$4,642	\$23,576,612	\$4,427	\$5,207,127	\$978	\$3,454,702	\$649	\$56,961,387	\$10,695

TABLE 7

SOURCES OF PER-PUPIL EXPENDITURES IN HAMPTON ROADS

	Locality	End-of-Year ADM for Determining Cost Per Pupil	Local		State		State Retail Sales and Use Tax		Federal		Total Expenditures	
			Amount	Per Pupil	Amount	Per Pupil	Amount	Per Pupil	Amount	Per Pupil	For Operations	Per Pupil
2011	Isle of Wight	5,359	\$22,310,126	\$4,163	\$19,055,281	\$3,556	\$5,666,345	\$1,057	\$5,625,746	\$1,050	\$52,657,498	\$9,827
2003	Newport News	31,382	\$82,205,732	\$2,620	\$105,167,219	\$3,351	\$24,073,034	\$767	\$26,633,838	\$849	\$238,079,823	\$7,587
2005	Newport News	31,327	\$79,189,640	\$2,528	\$128,012,338	\$4,086	\$31,262,693	\$998	\$29,596,722	\$945	\$268,061,394	\$8,557
2007	Newport News	30,113	\$90,845,960	\$3,017	\$149,190,630	\$4,954	\$32,057,626	\$1,065	\$31,304,701	\$1,040	\$303,398,917	\$10,075
2009	Newport News	29,138	\$94,467,083	\$3,242	\$157,126,807	\$5,393	\$30,374,599	\$1,042	\$39,468,050	\$1,355	\$321,436,539	\$11,032
2011	Newport News	28,235	\$92,591,731	\$3,279	\$126,762,002	\$4,490	\$29,726,406	\$1,053	\$49,703,892	\$1,760	\$298,784,032	\$10,582
2003	Norfolk	34,474	\$82,891,757	\$2,404	\$128,178,655	\$3,718	\$25,531,397	\$741	\$37,533,025	\$1,089	\$274,134,835	\$7,952
2005	Norfolk	33,693	\$95,178,369	\$2,825	\$142,523,954	\$4,230	\$32,220,179	\$956	\$35,861,850	\$1,064	\$305,784,352	\$9,076
2007	Norfolk	32,764	\$88,308,202	\$2,695	\$168,439,491	\$5,141	\$31,830,412	\$972	\$49,422,837	\$1,508	\$338,000,943	\$10,316
2009	Norfolk	31,748	\$99,438,271	\$3,132	\$175,291,528	\$5,521	\$30,102,433	\$948	\$45,470,191	\$1,432	\$350,302,423	\$11,034
2011	Norfolk	31,098	\$106,856,958	\$3,436	\$135,312,352	\$4,351	\$28,993,920	\$932	\$55,369,166	\$1,780	\$326,532,396	\$10,500
2003	Poquoson	2,483	\$6,610,323	\$2,662	\$7,393,395	\$2,978	\$1,465,923	\$590	\$590,355	\$238	\$16,059,995	\$6,468
2005	Poquoson	2,568	\$7,054,193	\$2,747	\$8,803,424	\$3,428	\$1,888,203	\$735	\$808,904	\$315	\$18,554,723	\$7,224
2007	Poquoson	2,570	\$7,986,512	\$3,108	\$9,988,436	\$3,887	\$2,178,317	\$848	\$817,613	\$318	\$20,970,878	\$8,161
2009	Poquoson	2,459	\$8,405,235	\$3,418	\$11,172,914	\$4,544	\$2,065,716	\$840	\$973,363	\$396	\$22,617,227	\$9,198
2011	Poquoson	2,317	\$8,874,068	\$3,831	\$8,292,500	\$3,579	\$1,994,792	\$861	\$1,149,597	\$496	\$20,310,957	\$8,767
2003	Portsmouth	15,476	\$30,113,534	\$1,946	\$65,274,282	\$4,218	\$10,625,226	\$687	\$14,998,781	\$969	\$121,011,824	\$7,819
2005	Portsmouth	15,220	\$32,881,851	\$2,160	\$72,078,139	\$4,736	\$12,536,029	\$824	\$15,586,683	\$1,024	\$133,082,702	\$8,744
2007	Portsmouth	14,739	\$29,094,171	\$1,974	\$83,344,036	\$5,655	\$12,206,131	\$828	\$23,825,764	\$1,617	\$148,470,103	\$10,074
2009	Portsmouth	14,422	\$34,828,815	\$2,415	\$91,616,384	\$6,353	\$11,810,986	\$819	\$18,911,868	\$1,311	\$157,168,053	\$10,898
2011	Portsmouth	14,159	\$38,313,457	\$2,706	\$69,347,105	\$4,898	\$13,382,728	\$945	\$26,920,248	\$1,901	\$147,963,539	\$10,450
2003	Southampton	2,767	\$6,803,418	\$2,459	\$10,754,097	\$3,887	\$2,259,801	\$817	\$1,947,299	\$704	\$21,764,616	\$7,866
2005	Southampton	2,800	\$7,790,704	\$2,783	\$11,626,841	\$4,153	\$2,747,044	\$981	\$2,084,884	\$745	\$24,249,473	\$8,661
2007	Southampton	2,777	\$8,518,999	\$3,068	\$13,824,934	\$4,979	\$3,135,050	\$1,129	\$2,455,525	\$884	\$27,934,508	\$10,060

TABLE 7

SOURCES OF PER-PUPIL EXPENDITURES IN HAMPTON ROADS

	Locality	End-of-Year ADM for Determining Cost Per Pupil	Local		State		State Retail Sales and Use Tax		Federal		Total Expenditures	
			Amount	Per Pupil	Amount	Per Pupil	Amount	Per Pupil	Amount	Per Pupil	For Operations	Per Pupil
2009	Southampton	2,763	\$8,195,551	\$2,967	\$15,957,399	\$5,776	\$2,968,108	\$1,074	\$2,391,007	\$866	\$29,512,065	\$10,683
2011	Southampton	2,752	\$9,333,091	\$3,392	\$13,486,621	\$4,901	\$2,522,606	\$917	\$3,408,264	\$1,239	\$28,750,582	\$10,449
2003	Suffolk	12,492	\$29,636,713	\$2,372	\$42,701,650	\$3,418	\$8,865,674	\$710	\$6,506,550	\$521	\$87,710,586	\$7,021
2005	Suffolk	13,331	\$35,761,533	\$2,683	\$49,744,663	\$3,732	\$11,560,735	\$867	\$10,090,351	\$757	\$107,157,281	\$8,038
2007	Suffolk	13,441	\$39,025,460	\$2,904	\$59,665,490	\$4,439	\$14,111,930	\$1,050	\$10,650,923	\$792	\$123,453,803	\$9,185
2009	Suffolk	13,648	\$47,105,627	\$3,451	\$68,433,245	\$5,014	\$13,550,545	\$993	\$11,820,533	\$866	\$140,909,951	\$10,324
2011	Suffolk	13,940	\$48,724,032	\$3,495	\$56,259,509	\$4,036	\$14,011,327	\$1,005	\$17,967,669	\$1,289	\$136,962,537	\$9,825
2003	Surry	1,108	\$9,487,688	\$8,563	\$1,283,223	\$1,158	\$679,260	\$613	\$804,344	\$726	\$12,254,515	\$11,060
2005	Surry	1,055	\$9,226,956	\$8,744	\$1,762,860	\$1,671	\$808,239	\$766	\$816,346	\$774	\$12,614,400	\$11,955
2007	Surry	1,000	\$10,254,813	\$10,253	\$1,813,171	\$1,813	\$1,009,852	\$1,010	\$964,254	\$964	\$14,042,090	\$14,040
2009	Surry	976	\$10,529,872	\$10,793	\$3,146,222	\$3,225	\$963,479	\$988	\$1,100,578	\$1,128	\$15,740,152	\$16,133
2011	Surry	897	\$11,112,439	\$12,387	\$2,120,391	\$2,364	\$913,433	\$1,018	\$1,572,684	\$1,753	\$15,718,947	\$17,521
2003	Virginia Beach	75,554	\$241,170,140	\$3,192	\$213,155,329	\$2,821	\$51,447,271	\$681	\$54,367,110	\$720	\$560,139,850	\$7,414
2005	Virginia Beach	74,230	\$270,318,729	\$3,642	\$247,384,614	\$3,333	\$64,861,559	\$874	\$58,256,933	\$785	\$640,821,835	\$8,633
2007	Virginia Beach	71,270	\$325,037,400	\$4,561	\$290,107,605	\$4,071	\$72,151,254	\$1,012	\$60,244,476	\$845	\$747,540,736	\$10,489
2009	Virginia Beach	69,654	\$333,604,259	\$4,789	\$310,611,676	\$4,459	\$69,168,038	\$993	\$54,203,644	\$778	\$767,587,617	\$11,020
2011	Virginia Beach	69,458	\$358,869,482	\$5,167	\$240,944,480	\$3,469	\$70,058,126	\$1,009	\$78,316,621	\$1,128	\$748,188,709	\$10,772
2003	Williamsburg	8,535	\$51,193,049	\$5,998	\$14,107,652	\$1,653	\$5,973,971	\$700	\$3,073,312	\$360	\$74,347,984	\$8,711
2005	Williamsburg	719	\$5,567,726	\$7,748	\$1,067,267	\$1,485	\$657,483	\$915	\$4,068,623	\$5,662	\$11,361,099	\$15,810
2005	James City	8,690	\$50,721,850	\$5,837	\$19,079,563	\$2,196	\$7,087,921	\$816	\$10,394	\$1	\$76,899,728	\$8,849
2007	Wmb./James	10,028	\$61,183,857	\$6,101	\$28,353,161	\$2,827	\$9,217,623	\$919	\$4,113,345	\$410	\$102,867,986	\$10,258
2009	Wmb./James	10,241	\$68,431,062	\$6,682	\$33,094,656	\$3,232	\$8,958,284	\$875	\$4,690,720	\$458	\$115,174,721	\$11,247
2011	Wmb./James	10,493	\$69,040,150	\$6,580	\$26,177,934	\$2,495	\$9,895,154	\$943	\$9,430,761	\$899	\$114,543,999	\$10,916
2003	York	12,340	\$31,689,542	\$2,568	\$34,541,149	\$2,799	\$7,291,953	\$591	\$10,960,709	\$888	\$84,483,353	\$6,846

TABLE 7

SOURCES OF PER-PUPIL EXPENDITURES IN HAMPTON ROADS

	Locality	End-of-Year ADM for Determining Cost Per Pupil	Local		State		State Retail Sales and Use Tax		Federal		Total Expenditures	
			Amount	Per Pupil	Amount	Per Pupil	Amount	Per Pupil	Amount	Per Pupil	For Operations	Per Pupil
2005	York	12,618	\$39,160,563	\$3,103	\$39,657,110	\$3,143	\$9,306,537	\$738	\$12,537,762	\$994	\$100,661,971	\$7,977
2007	York	12,647	\$44,637,597	\$3,530	\$47,807,004	\$3,780	\$10,823,988	\$856	\$13,870,456	\$1,097	\$117,139,045	\$9,262
2009	York	12,746	\$46,410,764	\$3,641	\$54,296,624	\$4,260	\$10,473,202	\$822	\$12,530,359	\$983	\$123,710,950	\$9,706
2011	York	12,478	\$46,093,861	\$3,694	\$42,534,573	\$3,409	\$11,861,997	\$951	\$17,197,390	\$1,378	\$117,687,822	\$9,431
2003	State	1,154,815	\$4,886,864,074	\$4,232	\$3,134,398,349	\$2,714	\$781,300,156	\$677	\$650,989,969	\$564	\$9,453,552,548	\$8,186
2005	State	1,178,704	\$5,350,178,843	\$4,539	\$3,717,388,928	\$3,154	\$1,005,038,160	\$853	\$773,814,530	\$656	\$10,846,420,461	\$9,202
2007	State	1,188,524	\$6,114,823,391	\$5,145	\$4,480,982,743	\$3,770	\$1,135,152,370	\$955	\$848,290,617	\$714	\$12,579,249,120	\$10,584
2009	State	1,200,765	\$6,608,951,019	\$5,504	\$5,013,396,165	\$4,175	\$1,089,629,856	\$907	\$875,879,632	\$729	\$13,587,856,673	\$11,316
2011	State	1,212,413	\$6,512,439,602	\$5,371	\$4,091,526,935	\$3,375	\$1,125,126,903	\$928	\$1,356,530,556	\$1,119	\$13,085,623,996	\$10,793
2003	Hampton Roads	263,152	\$737,656,682	\$2,803	\$855,515,047	\$3,251	\$185,539,219	\$705	\$198,694,084	\$755	\$1,977,405,031	\$7,514
2005	Hampton Roads	271,389	\$869,111,724	\$3,202	\$1,005,718,541	\$3,706	\$242,274,291	\$893	\$218,215,457	\$804	\$2,335,320,013	\$8,605
2007	Hampton Roads	264,946	\$998,105,068	\$3,767	\$1,164,071,893	\$4,394	\$264,089,906	\$997	\$249,883,654	\$943	\$2,676,150,525	\$10,101
2009	Hampton Roads	260,303	\$1,046,052,324	\$4,019	\$1,294,042,775	\$4,971	\$252,376,456	\$970	\$243,467,919	\$935	\$2,835,939,473	\$10,895
2011	Hampton Roads	257,788	\$1,071,848,602	\$4,158	\$1,015,474,735	\$3,939	\$253,770,682	\$984	\$349,544,577	\$1,356	\$2,690,638,596	\$10,437

Source: Virginia Department of Education: State Superintendent Reports

Final Thoughts

Virginia is well regarded and has often been ranked at or near the top of all of the states as being the “best managed state” and “best state in which to do business.” The Commonwealth has an AAA bond rating.

A state cannot receive such kudos without managing its finances capably and it must be able to deal effectively with the revenue declines associated with virtually inevitable economic recessions. Virginia has demonstrated the ability to do so without tax increases. **However, the evidence presented in this chapter reveals that the Commonwealth has utilized its local government units as a sort of fiscal balance wheel in order to surmount revenue challenges. Progressively, it has been off-loading costs to local government units.**

One might be tempted to view this evolving funding pattern and conclude that it really doesn’t make any difference as long as vital services such as K-12 education actually receive adequate funding. The problem is that this is beginning to distort our tax structure. **Virginia now ranks 13th in terms of the tax revenue it generates from local government units, but 35th in terms of the revenue it generates at the state level** (Virginia Joint Legislative Audit and Review Commission, “Virginia Compared to Other States, 2012 Edition”).

Local citizens are keenly aware of this trend because the primary revenue source of local governmental units is property taxes. **Excessively high property taxes distort residential housing and rental markets and depress commercial property markets. This is not a recipe for either housing market recovery or economic growth. Reality is that the Commonwealth is best situated via its income and sales taxes to raise the revenue needed to support local services. Indeed, it is essential that state government step up to the plate because, under the Dillon Rule, it has assumed the ultimate responsibility to provide such funding.**

We need a more balanced, growth-friendly state and local government tax structure in Virginia. It is time for elected state officials to recognize the cost-shifting behavior that has occurred for at least the last decade, and take gradual, but firm, steps over the current decade to halt this unproductive trend. The Hampton Roads legislative delegation should lead the way.

A Powerful Economic Engine: The Impact of Eastern Virginia Medical School



A POWERFUL ECONOMIC ENGINE: THE IMPACT OF EASTERN VIRGINIA MEDICAL SCHOOL

Eastern Virginia Medical School (EVMS) is one of the region's most viable economic engines. At a time when the region's economy has been sputtering, EVMS's economic impact has expanded. It now is the 20th largest private-sector employer in Hampton Roads and its estimated annual economic impact has risen to \$823.6 million, \$125.8 million (18 percent) higher than in 2007.

A minimum estimate of the costs the region would incur if EVMS did not exist is \$220 million, or \$132 per citizen. Without EVMS, approximately 98,000 patients would be forced to travel to other metropolitan areas to obtain appropriate medical care.

In the words of a prominent physician within the region, "It all really starts with EVMS. EVMS supplies us with the M.D.s and other skilled health professionals we need, provides thousands of patients with excellent health care, and is involved in some terrific applied research that we can use in our everyday practices." A hospital administrator put it this way: "The quality of life in Hampton Roads would fall substantially if we did not have EVMS."

The presence of EVMS continues to attract highly qualified medical personnel who provide a menu of high-quality medical care that otherwise would be beyond our regional grasp. **The regional economic impact of EVMS alumni (M.D.s and health professionals) approximates \$222 million annually.**

Many EVMS faculty are involved in cutting-edge translational research that immediately is reflected in improved patient care. EVMS has become a leader in medical modeling and simulation, a field that bodes to become increasingly important in the future.

Because EVMS is a not-for-profit institution dedicated to serving human needs, it provides very large amounts of charitable service and care to individuals and

organizations unable to pay for these services. **In 2011, the estimated value of the uncompensated health services provided by EVMS Health Services (where M.D. faculty pursue EVMS-sponsored medical practices) exceeded \$51 million.** In addition, EVMS annually provides approximately 100,000 young people with unbilled medical services that include counseling, vaccinations and prevention. EVMS also supplies approximately 7,500 adults (parents, teachers) with similar gratis services each year.

EVMS is an excellent employer. In 2011, it paid its employees more than \$108.9 million in wages and salaries and \$21.2 million in fringe benefits. **EVMS's average salary per employee (\$78,989) was 90.6 percent above the Hampton Roads regional average of \$41,440, reported by the Bureau of Labor Statistics.**

EVMS's economic activities have a ripple effect upon the region. Along with its students, residents and alumni, the medical school spent \$428 million in 2011. Its total economic impact, however, approximates \$824 million per year as these dollars are spent and re-spent. The incremental \$396 million of annual economic impact generates an estimated 3,752 additional jobs throughout Hampton Roads.

EVMS As An Employer

Eastern Virginia Medical School is one of the largest private-sector employers in the region. In 2010, it was the 20th largest nongovernmental employer in Hampton Roads. Table 1 reports these data.

EVMS, however, is no ordinary employer. As Graph 1 illustrates, the medical school pays its employees an average of \$78,989 annually, which is more than 90 percent higher than the regional average, according to the U.S. Department of Labor's Bureau of Labor Statistics.¹ However, as Graph 2 reveals, EVMS also pays its employees more than the national and regional averages for health care employees. For example, EVMS's average salary of \$78,989 is about 10 percent higher than the national average of \$71,280 and about 16 percent higher than the Hampton Roads average of \$67,780.²

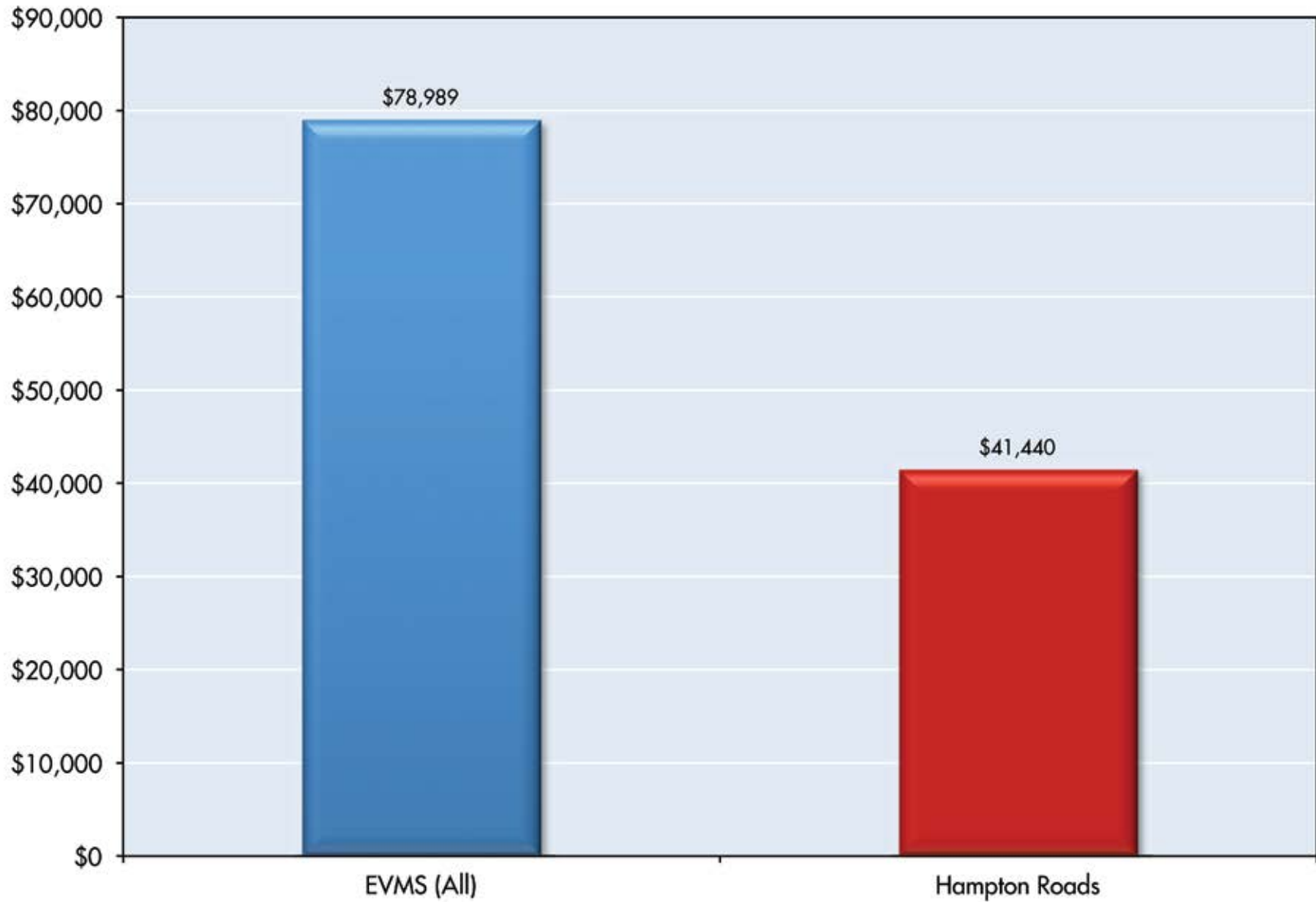
TABLE 1 LARGEST NONGOVERNMENTAL EMPLOYERS IN HAMPTON ROADS, 2010		
Rank	Employer	2010 Employees
1	Huntington Ingalls	20,000
2	Sentara	17,000
3	Riverside Health	7,050
4	Colonial Williamsburg	4,000
5	Bank of America	3,600
6	Bon Secours Hampton Roads	3,000
7	Smithfield Foods	2,700
8	Chesapeake Regional Medical Center	2,400
9	GEICO	2,300
10	BAE Systems	2,200
11	Measurement Specialties	2,184
12	Gwaltney of Smithfield	2,100
13	PRA	2,093
14	Stihl	2,016
15	Children's Hospital of The King's Daughters	1,905
16	LTD Management	1,810
17	Amerigroup	1,700
18	FHC Health	1,500
19	Canon Virginia	1,460
20	EVMS	1,379

¹ "Metropolitan and Nonmetropolitan Area Occupational Employment and Wage Estimates, May 2010," www.bls.gov/oes/current/oesrcma.htm

² Note, however, that this particular health care comparison does not control for the proportion of physicians and surgeons relative to nurses and other health professionals. EVMS could be more "physician heavy" than the region and the nation.

GRAPH 1

AVERAGE SALARY OF AN EVMS EMPLOYEE VERSUS AVERAGE SALARY OF AN EMPLOYEE IN HAMPTON ROADS



Computing The Economic Impact Of EVMS

Eastern Virginia Medical School's economic impact can usefully be divided into 10 parts:

- Salaries and wages paid to employees
- Fringe benefits paid to employees
- Purchases of supplies
- Contractual services
- Operating expenses
- Capital expenditures
- Student expenditures, net of tuition
- Medical residents' expenditures
- Alumni expenditures
- Value of charitable care provided

The analysis presented here is based on estimates that rely upon a variety of economic models, including the U.S. Department of Commerce's RIMS II economic model. RIMS II is the most frequently used model where economic impact studies are concerned and in essence supplies regional input-output multipliers that show how economic activity is distributed in industries across a geographic area and how those industries are interrelated, economically speaking.

After wages and salaries, the next-largest category of expenditures by EVMS is general operating expenses, which include a myriad of different items ranging from electricity to insurance. In 2011, EVMS spent an estimated \$30.7 million on operating expenses and \$29 million on contractual services, the next-largest

category. Table 2 reports these numbers as well as EVMS's expenditures in the other categories noted previously.

The \$26.66 million capital expenditures number in Table 2 is EVMS's three-year average capital expenditure, 2009-11. Student enrollment approached 1,000 in fall 2011 and the estimate of student expenditures in Table 2 is based upon the projected budget for each student in his/her course of study according to established U.S. government financial aid guidelines. However, that estimate does not include the tuition students paid to EVMS, as those tuition payments

TABLE 2			
ECONOMIC IMPACT OF EASTERN VIRGINIA MEDICAL SCHOOL IN HAMPTON ROADS, 2011			
(1)	(2)	(3)	(4)
Expenditure Category	Estimated Expenditures	Net of Leakages Outside Hampton Roads	Economic Impact Including Ripple Effect
Salaries and Wages	\$108,925,511	\$96,943,705	\$225,878,832
Fringe Benefits	\$ 21,268,341	\$19,354,190	\$ 45,095,263
Supplies	\$ 7,822,250	\$ 7,118,248	\$ 16,443,152
Contractual Services	\$ 29,005,143	\$26,394,680	\$ 61,499,605
Operating Expenses	\$ 30,794,579	\$25,559,501	\$ 53,930,546
Capital Expenditures	\$ 26,666,667	\$21,600,000	\$ 44,712,000
Students	\$ 32,627,135	\$30,343,236	\$ 70,699,739
Residents	\$ 7,000,000	\$ 6,510,000	\$ 15,168,300
Alumni	\$109,951,720	\$95,657,996	\$222,883,132
Charity	\$ 54,000,000	\$49,140,000	\$ 67,321,800
Totals	\$428,061,346	\$378,621,555	\$823,632,369

are revenue to EVMS and hence already are reflected in the other expenditure columns. The annual expenditure of each of an estimated 350 medical residents is assumed conservatively to be \$20,000.

EVMS alumni impact the Hampton Roads region in many different ways as citizens and health professionals. These alumni have a computable economic impact. As Table 3 illustrates, if one simply multiplies the number of EVMS alumni in a typical Hampton Roads city times their estimated annual salary, one emerges with a very impressive contribution to the economic development of the region. **EVMS alumni in the largest seven cities (but not including alumni elsewhere in the region) earned more than \$109 million in wages and salaries in 2011. Graph 3 illustrates these data, which demonstrate the significant economic impact EVMS has upon the region, even after its students graduate.**

TABLE 3

DISTRIBUTION OF EVMS PHYSICIAN AND HEALTH PROFESSIONAL ALUMNI IN THE SEVEN MAJOR CITIES OF HAMPTON ROADS AND THEIR ESTIMATED EARNINGS

City	M.D. Alumni	Other Health Professional Alumni	Estimated Annual Wages and Salaries
Chesapeake	63	98	\$16,964,360
Hampton	15	16	\$ 3,542,080
Newport News	23	17	\$ 4,920,580
Norfolk	146	120	\$32,054,240
Portsmouth	12	21	\$ 3,389,460
Suffolk	41	39	\$ 9,360,860
Virginia Beach	175	163	\$39,720,140
Totals	475	474	\$109,951,720

Note: An average annual salary of \$163,840 is assumed for an M.D. and \$67,780 for all other health care professionals. These are the regional averages, according to the Bureau of Labor Statistics, www.bls.gov. City averages are not available.

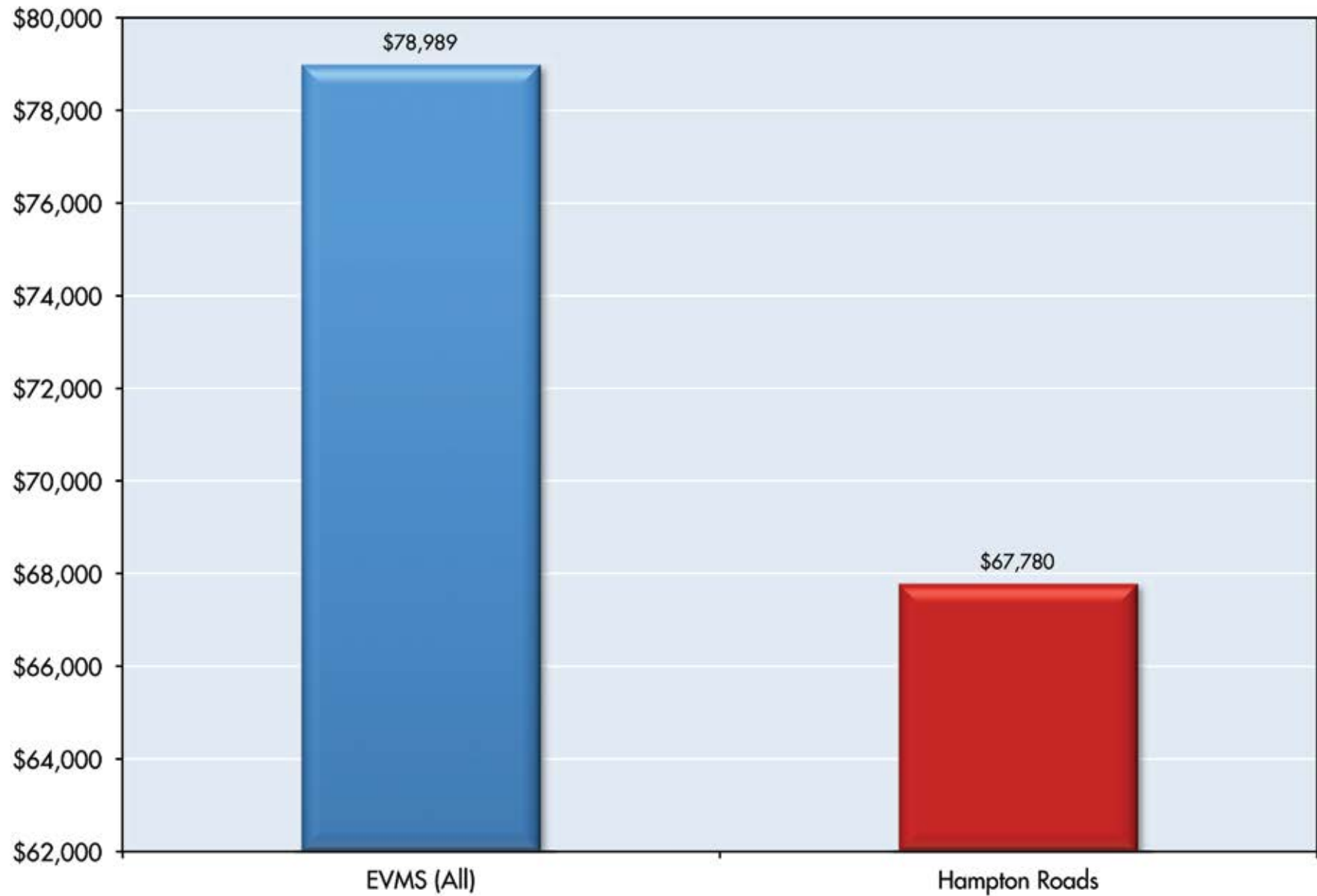
The estimated value of the charitable resources and services supplied by EVMS in 2011 – \$54 million – consists of two parts: (1) the uncollected value of health care services provided by EVMS Clinical Enterprises in the amount of \$51,122,439; and (2) the estimated value of the numerous uncompensated public services ventures that EVMS provides the region in the amount of \$2,877,561. These included tens of thousands of K-12 students counseled and served annually in schools in Hampton Roads, enrolling as many as 20,000 youth in children’s insurance programs, immunizations, obesity and diabetes information sessions, pregnancy counseling and assistance, etc. Based primarily on the value of the time of the EVMS personnel involved, each contact with youth has been valued at \$21 and each contact with adults at \$50. While these values are rough approximations, they do correspond to the values assumed in a variety of studies performed by the U.S. government.

Regardless, \$54 million is a large number and one that almost reflects the less than ideal economic conditions that have diminished the ability of many people to pay for the health care that EVMS provides them. EVMS nearly always does so without any firm prospect of payment. EVMS, then, is a good citizen in a fashion rarely matched in Hampton Roads.

The total expenditure number at the bottom of the first column in Table 2 (\$428,061,346) is the sum of the dollars actually expended by EVMS (for example, for wages and salaries) plus student and resident expenditures, plus the salaries earned by EVMS alumni in Hampton Roads, plus the estimated value of the charitable health care services supplied by EVMS. All numbers represent the EVMS 2012 fiscal year except for alumni salaries, which represent a 2011 calendar year estimate.

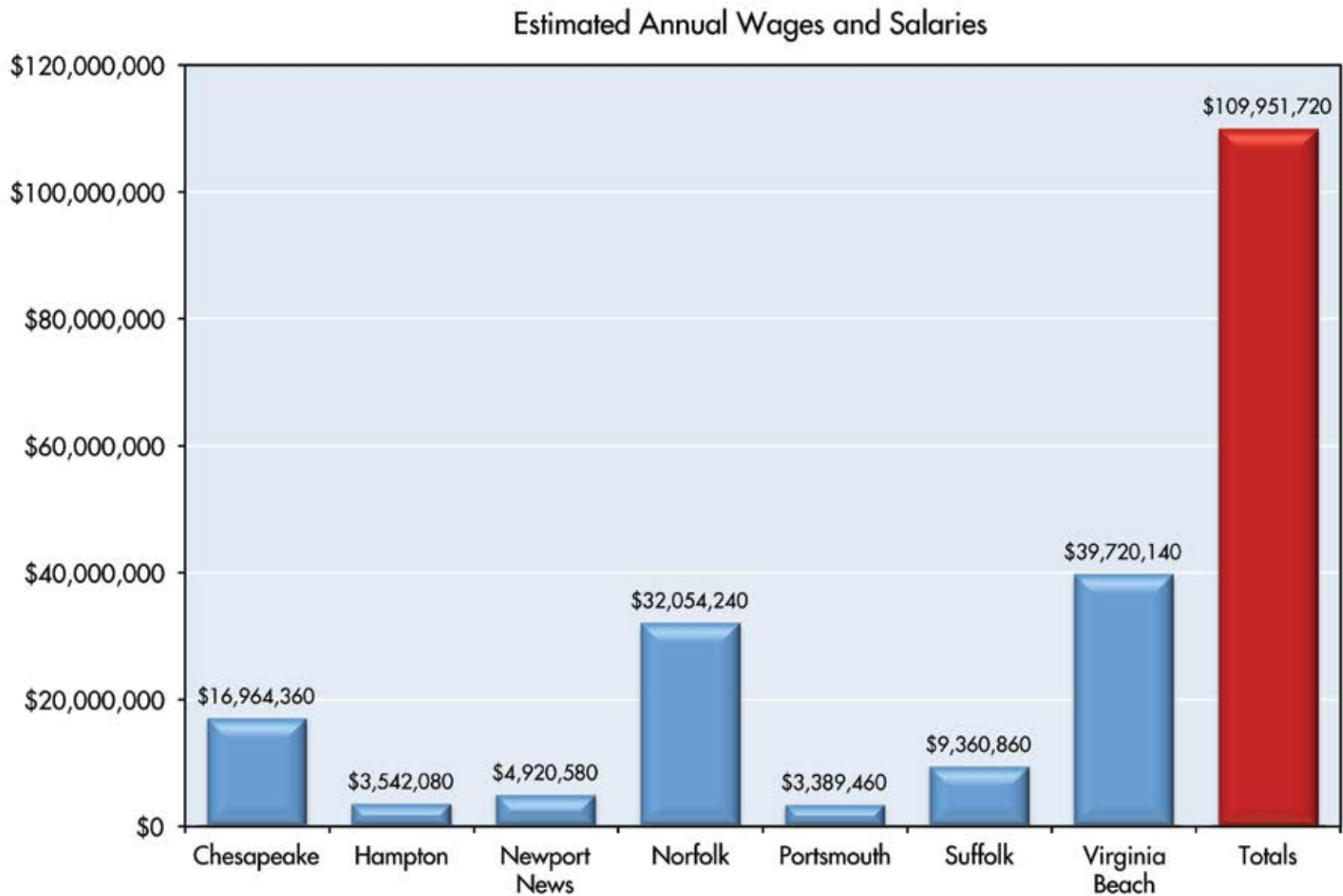
GRAPH 2

AVERAGE SALARIES OF HEALTH CARE EMPLOYEES AT EVMS COMPARED TO THE HAMPTON ROADS AVERAGE



GRAPH 3

DISTRIBUTION OF EVMS PHYSICIAN AND HEALTH PROFESSIONAL ALUMNI IN THE SEVEN MAJOR CITIES OF HAMPTON ROADS AND THEIR ESTIMATED EARNINGS





LEAKAGES OUTSIDE THE REGION

When Eastern Virginia Medical School compensates its employees, or purchases any item, some of those expenditures are made to hire employees, or to patronize companies, located outside of the region. Column 3 in Table 2 reduces EVMS's expenditures by these "leakages." Some EVMS activities have higher rates of leakage than others. For example, larger proportions of expenditures on capital construction end up not being spent inside the region compared to expenditures on wages and salaries. **The EVMS community's estimated 2011 gross expenditures of \$428,061,346 reduced to \$378,621,555 after all leakages outside the region were taken into account.**

ECONOMIC RIPPLE EFFECTS

When Eastern Virginia Medical School purchases necessary items such as food, furniture, gasoline and computers within the region, the dollars spent on these items initiate an economic ripple process as the money is spent and re-spent throughout Hampton Roads. This process gradually diminishes to zero as additional leakages occur. Column 4 of Table 2 applies a variety of multipliers to the estimated 2011 expenditures in Column 3. It is well to bear in mind that these multipliers reflect averages based upon RIMS II and national economic studies, and they will not hold true for specific expenditures initiated by EVMS.

Thus, the ultimate economic impact of the original \$378,621,555 of expenditures upon employees, goods and services by the EVMS community in the region expands to \$823,632,369. These multiplier effects combine what usually are referred to as the *indirect* and *induced* economic effects (see a section below for a discussion of these two effects). **Note that this is \$125 million (18 percent) higher than a 2007 estimate of EVMS's regional economic impact.** Graph 4 illustrates this growth.

In a time period when the regional economy has been stagnant or even contracting, the economic impact of EVMS has been expanding. **The medical school's economic impact grew almost three times as rapidly as the region's economy from 2007 to 2011. EVMS has become**

an economic growth engine within Hampton Roads and today is one of the region's most reliable and important sources of economic growth. This should not be lost on our elected officials and decision makers. Investments in the medical school pay rich economic dividends, in addition to the more obvious elements of health care-enhanced quality of life so often associated with medical schools.

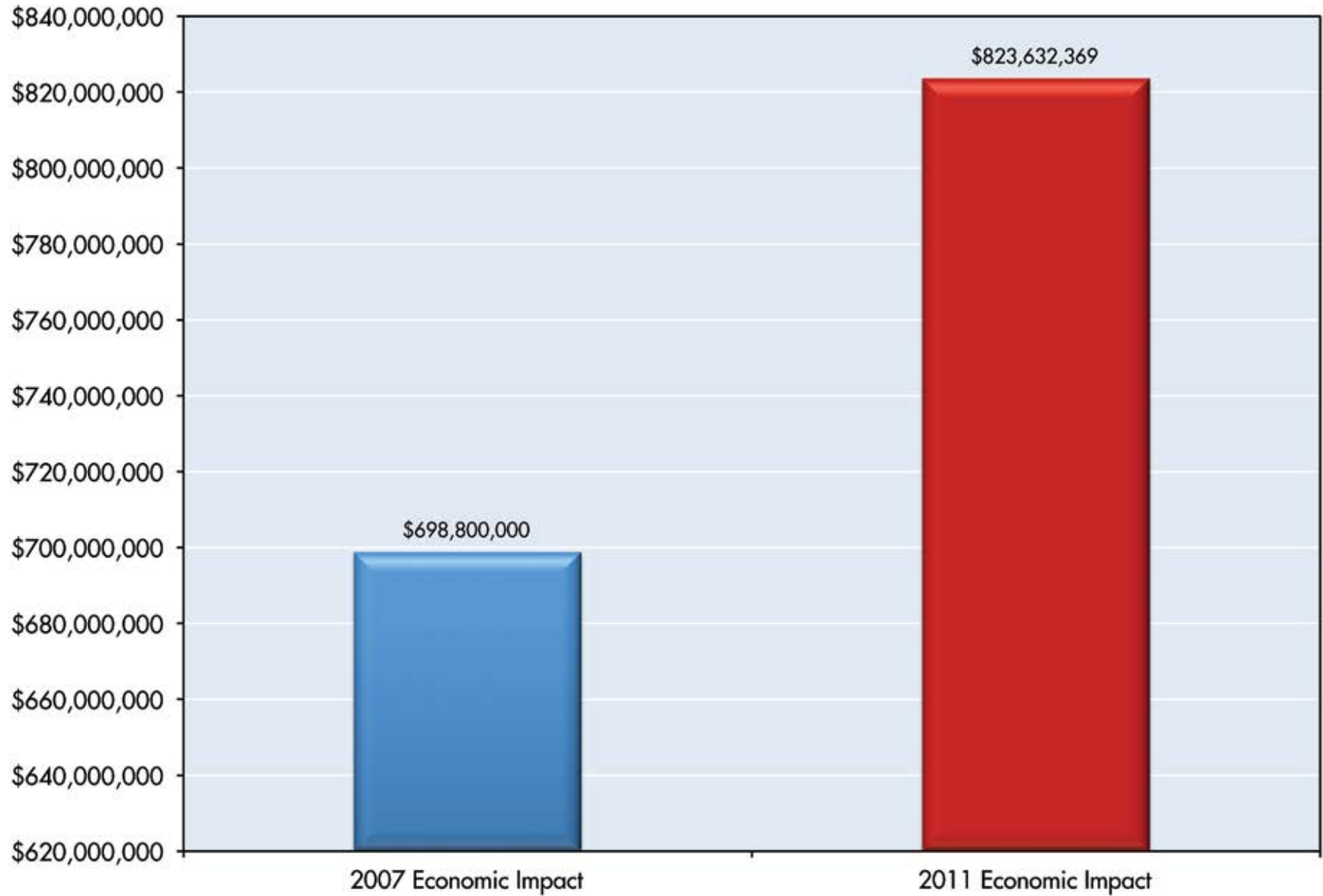
JOB GENERATION

Eastern Virginia Medical School employs almost 1,400 people, and these employees are well compensated. Less well understood, but perhaps just as important, is the job-generation thrust that EVMS provides elsewhere within Hampton Roads.

The economic ripple effect from EVMS's activities is almost \$500 million within the region and this is a magnificent job creator. Hampton Roads businesses supply EVMS, and sell houses, automobiles, pizzas, higher education and food to EVMS employees and those same suppliers. **On average, each \$113,250 of EVMS's economic ripple effect results in one new full-time job within Hampton Roads. Thus, the medical school's economic ripple effect generates an additional 3,752 jobs inside the region. This is yet another reason why EVMS is one of the most important economic engines in Hampton Roads. Graph 5 illustrates this job-generation effect.**

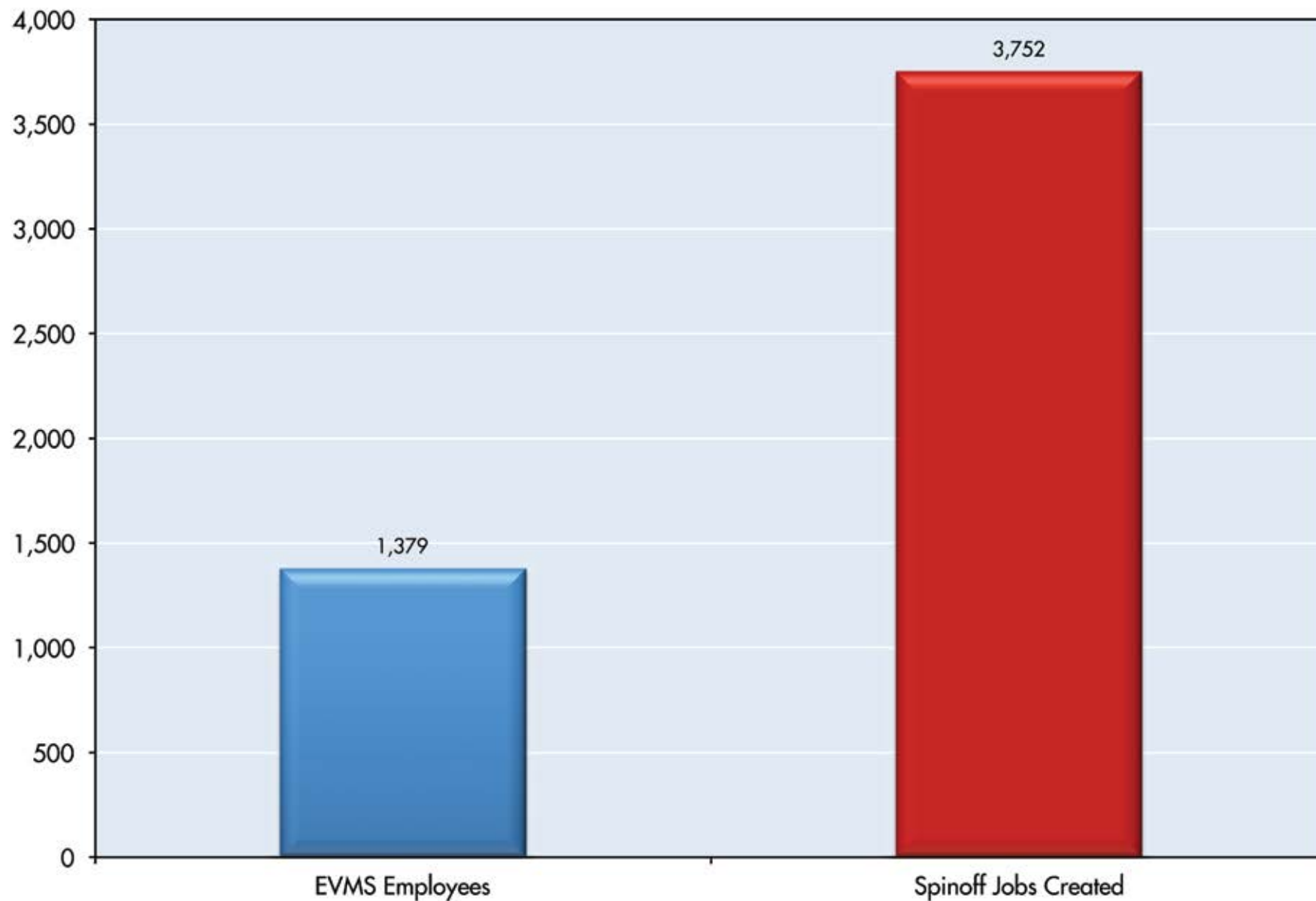
GRAPH 4

GROWTH IN THE ECONOMIC IMPACT OF EVMS, 2007-2011



GRAPH 5

REGIONAL JOB GENERATION BY EASTERN VIRGINIA MEDICAL SCHOOL



The Cost To Hampton Roads If EVMS Did Not Exist

It is worth considering what costs our region would incur if EVMS did not exist. Because the medical school is the centerpiece of Hampton Roads' health care system, the costs would be significant and both the quantity and the quality of health care would deteriorate.

Table 4 explores some of the specific economic costs that likely would be incurred by the residents of Hampton Roads if EVMS did not exist.

TABLE 4	
ECONOMIC COSTS THAT WOULD BE INCURRED BY HAMPTON ROADS IF EVMS DID NOT EXIST (INCLUDES ECONOMIC RIPPLE EFFECT)	
Cost of Indigent Care Borne by Other Medical Providers in Hampton Roads	\$ 82.30 million
Lost Medical Revenue from Paying Patients at EVMS Health Services	\$ 51.60 million
Patient Migration Costs Incurred by Patients Forced to Travel to Health Providers in Other Metropolitan Areas	\$ 86.54 million
Total	\$220.44 million

The estimated financial cost that would be incurred by citizens of our region if EVMS did not exist, \$220.44 million, is a lot of money by any standard – more than \$132 annually per person living in Hampton Roads. Nevertheless, it is fair to say that many, perhaps most, of the region's citizens are unaware of the costs they would incur if EVMS were to disappear.

How would citizens be affected if EVMS did not exist? First, those desiring medical care would find it increasingly difficult to obtain an appointment because physicians would be in

scarce supply. The reality is that without EVMS, Hampton Roads would be the most populous metropolitan area in the United States not to be served by a local medical school. Further, because the presence of a medical school frequently is used as an indicator of the quality of health care in a region, we would find it all the more difficult to attract physicians because some prospects would view us as a medical backwater.

Without EVMS, the 23 percent of local physicians who have graduated from the medical school would not be available and there can be little doubt that it would be expensive to attract replacements. According to the American Association of Medical Schools, a national shortage of 150,000 physicians looms in 2025. The absence of EVMS would transform this shortage into disastrous proportions in Hampton Roads.

As it stands, EVMS Health Services provides access to its physicians throughout the region. In addition to the wide range of services provided in Norfolk, EVMS Health Services provides obstetrics and gynecology, maternal and fetal medicine, dermatology, cosmetic plastic surgery, hearing and balance services, and Jones Institute services in Virginia Beach; family medicine in Portsmouth; surgery in Suffolk; maternal and fetal medicine and Jones Institute services in Newport News; and diabetes medicine in Hampton. In the words of a Virginia Beach physician, "EVMS comes to us."

Second, without EVMS, the quality of medical care would decline because many of the people who provide that care would not be present. The personnel likely to be absent would include the physicians produced or attracted by EVMS, but also medical residents, physician assistants, nurses, physical therapists, etc., who are produced or attracted by the medical school. This does not mean that Hampton Roads would not eventually be able to attract many of these essential professionals from other regions if EVMS did not exist. It does mean that it would be expensive to do so.

Third, the absence of EVMS researchers would mean that patients would not have access to cutting-edge medical knowledge and techniques. Currently, the path from laboratory to hospital room for an innovation frequently is remarkably short because EVMS researchers (within the provisions of law and regulatory practice) have the ability

to implement new developments quickly. The laboratory-to-practice time frame is shorter within Hampton Roads because of EVMS.

Fourth, the absence of EVMS would require many patients to leave the region and travel to other metropolitan areas such as Richmond, Washington, D.C., or Raleigh-Durham in order to receive treatment. Some Hampton Roads patients would find such travel impossible. Others would find it too expensive. Unfortunately, still others would not survive such travel and relocation.

Fifth, EVMS faculty and EVMS Health Services personnel are heavily involved in the region's provision of trauma care.

Thousands of Hampton Roads residents utilize the region's trauma care facilities annually as a result of automobile accidents, gunshot wounds, heart attacks and strokes, allergic attacks, poisonings and the like. EVMS is significantly involved both in applied research and practice in trauma care, and were EVMS to disappear, "Our cutting-edge advantage also would soon disappear" (the comment of a senior physician).

Sixth, EVMS research often proceeds to the development stage and later to commercialization. Arguably the most well-known research connected to the medical school has been generated by the Jones Institute for Reproductive Medicine. Since its founding in 1978, the Jones Institute has focused on fertility problems. Pioneering scientists Drs. Georgeanna and Howard Jones guided the first in vitro fertilization resulting in birth in the United States in 1981. Jones Institute research was the foundation for the patented oral contraceptive Seasonale, which has generated significant revenue for the institute and the medical school. **EVMS professionals generate approximately \$40 million of external funding annually.**

Modeling and simulation additionally provides a superb example of a very promising current arena for EVMS research, development and commercialization. The National Center for Collaboration in Medical Modeling and Simulation was established in 2001 with EVMS and Old Dominion University as the major partners. Improving the quality of medical care being provided to American military forces is an important goal of the center. EVMS

is a key player in the burgeoning regional modeling and simulation activities that have centered in Suffolk. The judgment of knowledgeable individuals is that the modeling and simulation activities of EVMS are among those most likely to survive the demise of the U.S. Joint Forces Command headquarters.

Methodological Notes On Economic Impact

These estimates of Eastern Virginia Medical School's economic impact on Hampton Roads rely primarily upon source data supplied by EVMS. The data were plugged into several models, such as the U.S. Department of Commerce's RIMS II model, in order to translate the information into actual economic impact. In essence, RIMS II and similar models supply regional input-output multipliers that show how economic activity is distributed in economic industries across a geographic area and how those industries are interrelated, economically speaking. Since the match between models such as RIMS II and EVMS activities is not exact, adjustments were made as necessary to enable the estimates to reflect the reality of EVMS.

The estimates presented here combine what usually are referred to as *indirect* economic impacts and *induced* economic impacts into one multiplier effect. Indirect economic impacts relate to increased activity by firms and industries that supply EVMS (e.g., food and fuel suppliers). Induced economic impacts reflect households spending the increased money that appears in their paychecks because of the original direct expenditures and the indirect impact upon suppliers.

Finally, it is impossible to place an economic value upon many additional things that occur in and around EVMS, up to and including saving lives. The medical school is a caring organization dedicated to doing good deeds and improving the human condition. When EVMS restores faith, reduces pain, makes people more productive and, yes, saves lives, indisputably this has a positive impact not only on the affected individuals, but also on the entire region.



K-12 Private Education: Southside Hampton Roads



K-12 PRIVATE EDUCATION: SOUTHSIDE HAMPTON ROADS

This chapter is the second in a two-part look at K-12 private education in Hampton Roads. In the 2011 State of the Region report, we presented brief portraits of 35 independent schools on the Hampton Roads Peninsula. This year we turn our attention to the region's Southside and the 86 independent institutions that educate K-12 students in Chesapeake, Franklin, Norfolk, Portsmouth, Suffolk, Virginia Beach and Isle of Wight County. We begin by taking a closer look at the state policies that guide and regulate our region's independent schools.

The Commonwealth of Virginia's relationship to the independent schools within its boundaries was one of several topics of vigorous debate at this year's General Assembly. A proposal to award tax credits to individuals or businesses that fund private school scholarships for low- and middle-income students ultimately passed in both the House of Delegates and the Senate on largely party-line votes. Republican Gov. Bob McDonnell applauded the legislation as a "common-sense measure that will spur private support in educating the leaders of tomorrow,"¹ while Democratic legislators questioned the law's constitutionality and warned that it will decrease the overall pool of state funds available for public education.

Let's look at how this new measure, which is slated to take effect in 2014, fits into the existing legal framework for K-12 private education in Virginia.

State Regulation Of Private Schools

The legal foundation for U.S. private schools today is a 1925 Supreme Court decision, *Pierce v. Society of Sisters of the Holy Names of Jesus and Mary*. This landmark decision struck down an Oregon law that required all children between the ages of 8-16 to attend a public school. The court ruled that all parents have the right to direct the education of their children, and that "the fundamental theory of liberty upon which all governments in this Union repose

¹ <http://www.governor.virginia.gov/News/viewRelease.cfm?id=1138>

excludes any general power of the state to standardize its children by forcing them to accept instruction from public teachers only."

Pierce v. Society of Sisters affirmed private schools' right to educate students, but simultaneously upheld states' responsibility to oversee this education. States have the authority to regulate both private and public schools, but this authority has limits – most notably, with respect to the individual freedoms guaranteed by the First Amendment. States may not interfere with the free exercise of religion and they may not discriminate against a unique cultural or religious heritage. The use of public funds to subsidize religious or other private schools is likewise proscribed.

Thus (as nicely summarized in a recent report from the U.S. Department of Education), the challenge for state policymakers is "to draft legislation that: 1) respects the fundamental right of parents to direct the education of their children; 2) protects the state's interest in an informed citizenry, but avoids interference with religious beliefs unless compelling interests are at issue; and, 3) avoids comprehensive regulation of private education that would deprive parents of any choice in education."²

This is a delicate balance to achieve. The years since 1925 have produced a steady stream of new laws and court rulings that have sought to clarify the appropriate relationship of private schools to public authority. In Virginia, the tax credit proposal is the latest manifestation of this ongoing discussion.

Proponents of "school choice" tend to seek greater freedoms for private schools and usually advocate lesser state

² U.S. Department of Education, "State Regulation of Private Schools" (2009), p. 336, at: <http://www2.ed.gov/admins/comm/choice/regprivschl/index.html>

interference. Nevertheless, others argue that a greater degree of state oversight is necessary to uphold basic academic, health and safety standards. School-choice advocates do, however, generally support policies that allow private school students to access state-subsidized services like transportation – or (as seen this year in Virginia) state programs that provide financial assistance to students attending private school. Those who disagree believe that such policies wrongly weaken the distinctions between church and state, as well as between public and private education.

Each of the 50 states has come to terms with this tangle of competing interests in its own unique way. **Private school regulations vary widely from state to state.** Two recent publications – “State Regulation of Private Schools”

(U.S. Department of Education, 2009) and “Fifty Educational Markets: A Playbook of State Laws and Regulations Governing Private Schools” (Friedman Foundation for Educational Choice, 2008) – summarize and present these regulations side by side. Table 1 relies on these data to demonstrate how Virginia’s policies concerning independent K-12 education compare with those of neighboring states.

The Friedman Foundation, named in honor of Nobel Prize-winning economist Milton Friedman, is an influential advocate for school choice and is not a disinterested observer of state policy. Christopher Hammons, the author of the foundation’s report, assigns each state a letter grade to illustrate the degree to which each embraces “a free-market conception of education” and protects

TABLE 1

REGULATION OF INDEPENDENT K-12 EDUCATION BY VIRGINIA AND NEIGHBORING STATES

State	Accreditation	Registration	Licensing	Approval	Teacher Certification	Curriculum Requirements	Reporting Requirements	Friedman Foundation Score	Friedman Foundation Grade
Virginia			X (*)	X (**)	X (*)		X	-1	B
Delaware		X				X	X	+1	A
Kentucky						X	X	-1	B
Maryland		X (*)	X (*)	X (*)	X (*)	X	X	-6	F
North Carolina	X (**)	X					X	-4	D
South Carolina	X (**)			X (**)			X	-5.5	F
Tennessee	X (**)			X (**)	X (*)	X (*)	X	-6	F
West Virginia		X (**)		X (**)		X	X	-3	C-

X – indicates that state law mandates all private schools meet the requirement

X (*) – indicates that state law mandates specified private schools must meet the requirement

X (**) – indicates that state law allows this practice as one option to comply with a state mandate or requirement

Sources: U.S. Department of Education, State Regulation of Private Schools (July 2009), at: <http://www2.ed.gov/admsn/comm/choice/regprivschl/index.html>
The Friedman Foundation for Educational Choice, “Fifty Educational Markets: A Playbook of State Laws and Regulations Governing Private Schools” (April, 2008), www.edchoice.org/CMSModules/EdChoice/FileLibrary/295/private_schools_laws®s.pdf

private schools from “excessive government intrusion.”³ Whether or not one shares the report’s normative assumptions, the grading scale is a useful tool to compare the varying degrees of private school regulation throughout the 50 states. The Commonwealth of Virginia earned a “B” grade, placing it among the states with the fewest restrictions on private schools (see Table 1). **Virginia is comparatively laissez-faire in its regulation of independent schools, which are free to admit students, hire staff and develop curricula without significant state intervention.**

Most states have some legal mechanism for recognizing private schools within their boundaries. These procedures of recognition may be optional or mandatory, and they may apply only to certain private schools (for example, religious schools are sometimes exempt). **The U.S. Department of Education identifies four basic types of state recognition: accreditation, registration, licensing and approval.** Registration is the least stringent of the four options, generally requiring only that private schools notify the state of their existence; this is, for example, the practice in Delaware. Accreditation (if mandatory) is the most involved procedure, usually involving established criteria for a school’s staff, curriculum and facilities. Among Virginia’s neighbors, Tennessee and South Carolina uphold comparatively demanding accreditation requirements. Licensing and approval fall somewhere in between the two extremes, although both procedures give states authority to assess the performance of private schools.

With respect to school recognition, Virginia is something of a hybrid. Licensing and approval procedures concern only those schools serving students with disabilities. Other private schools may, however, seek “state-approved” accreditation through one of the 14 independent organizations that are members of the Virginia Council for Private Education (VCPE).⁴

Table 2 summarizes the numerous accrediting agencies that deal with Southside Hampton Roads independent K-12 schools. The accreditation process is voluntary, and schools are free to decide which organization, if any, they

³ The Friedman Foundation for Educational Choice, “Fifty Educational Markets: A Playbook of State Laws and Regulations Governing Private Schools” (2008), Executive Summary, <http://www.edchoice.org/Research/Reports/Fifty-Educational-Markets-A-Playbook-of-State-Laws-and-Regulations-Governing-Private-Schools.aspx>

⁴ For more about private school accreditation in Virginia, see the 2011 State of the Region report, <http://bpa.odu.edu/forecasting/sor/sor2011.shtml>.

affiliate with. **Forty-one of the 86 private schools in Southside Hampton Roads possess state-approved accreditation. AdvancED, the Association of Christian Schools International (ACSI), the Virginia Association of Independent Schools (VAIS) and Virginia Catholic Education Association (VCEA) are the region’s most represented associations, accrediting 35 of 41 schools.**

Beyond accreditation, states enforce an array of other laws and regulations that affect these institutions’ operations. Some laws are broadly phrased; others are quite specific. For example, Virginia Code §22.1-275 states that “the governing board of a private school must furnish protective eye devices, free or at cost, for students, teachers, and visitors participating in specified vocational or industrial arts shop or laboratories.”⁵ **Many regulations fall into one of the three broad categories that are identified on the accompanying table: teacher certification, curriculum requirements and reporting requirements. With respect to all three types of regulation, Virginia adopts a minimalist stance. Non-accredited private schools in Virginia are free to determine their teachers’ credentials; private school teachers need not possess a college degree or state certification. Recordkeeping requirements are limited to student attendance and immunization. Attendance records are not reported to the state, but must be available for inspection in case of a suspected violation of compulsory school attendance laws.**

Virginia’s laissez-faire approach toward its private schools’ curricula differs from the policies of its neighboring states, most of which stipulate certain curricular standards for some or all private schools. Some of these standards concern specific issues, like the use of English as the primary language of instruction (mandated in Kentucky and West Virginia); others emphasize instruction in key subject areas like history and civics. **Only North Carolina, South Carolina and Virginia in the South are identified by the U.S. Department of Education as having no mandatory curriculum requirements.** North Carolina, however, requires private schools to demonstrate a minimum level of student

⁵ “State Regulation of Private Schools,” p. 290

TABLE 2

ACCREDITING ASSOCIATIONS RECOGNIZED BY THE VIRGINIA COUNCIL FOR PRIVATE EDUCATION (VCPE)

AdvancED/Southern Association of Colleges and Schools (AdvancED/SACS) http://www.advanc-ed.org (formerly identified as Southern Association of Colleges and Schools – Council on Accreditation and School Improvement, or SACS-CASI)	State-approved accrediting associations adhere to a core set of standards that is delineated by the VCPE and available upon request. The VCPE's standards ensure that its member associations are nonprofit entities in financial good standing, that they are non-discriminatory in membership, and that their processes of accreditation are themselves informed by clear standards and criteria. State-approved accrediting associations must engage in thorough on-site school visits approximately once every five years, and their member schools must in turn submit self-study reports and plans for improvement. State-approved accrediting associations are required to have had a presence in Virginia for a minimum of five years, and an accrediting process in use for a minimum of three years. As explained to us last year by VCPE President George McVey, state-approved accreditation ensures that there is an informed, impartial observer "looking over a school's shoulder," monitoring its adherence to quality standards and its commitment to continuous improvement. The VCPE does not specify any minimum academic standards for independent schools; these are monitored independently by each accrediting association. The 14 associations recognized by the VCPE are quite diverse – in size, in educational philosophy and in the information that they publicly disclose about their accrediting procedures. AdvancED (according to its website) is "the world's largest education community," serving more than 30,000 public and private schools and districts in the United States alone. The smallest member association appears to be the Virginia Independent Schools Association (VISA), which accredits eight institutions throughout the Commonwealth; its website is located within that of one of its member schools, the Isle of Wight Academy.
American Montessori Society (AMS) http://www.amshq.org	
Association of Christian Schools International (ACSI) http://www.acsi.org	
Association of Christian Teachers and Schools (ACTS) http://www.actsschools.org	
Association of Classical & Christian Schools (ACCS) http://www.accsedu.org	
International Christian Accrediting Association (ICAA) http://icaa.us	
North American Christian School Accrediting Agency (NACSAA) http://www.nacsaa.org	
Seventh Day Adventist Schools of the Potomac Conference (SDASPC) http://www.pcsda.org/Education/education-welcome.html	
Southeastern District, Lutheran Church – Missouri Synod (SED-LCMS) http://se.lcms.org/school-ministry/accreditation.php (newly added in 2011)	
Southern Association of Independent Schools (SAIS) http://www.sais.org	
Virginia Association of Independent Schools (VAIS) http://www.vais.org	
Virginia Association of Independent Specialized Education Facilities (VAISEF) http://www.vaisef.org	
Virginia Catholic Education Association (VCEA) http://www2.richmonddiocese.org/ocs/about_schools/schoolaccred.htm	
Virginia Independent Schools Association (VISA) http://www.iwacademy.com/visa.html	

achievement through regular standardized testing. South Carolina maintains a specific set of curricular standards for private schools that opt for accreditation from the South Carolina Independent School Association. Among its neighbors, Virginia appears to be unique in its arrangement with 14 different accrediting bodies – a significant indicator of Virginia's embrace of the principle of school choice.

The introduction of tax credits for individuals or businesses that contribute to private school scholarships moves Virginia further in this direction. With this new legislation, the Commonwealth joins a group of 14 U.S. states (as of 2008) that provide some financial assistance to K-12 students attending private school (see Table 3). Seven states offer tax credits similar to those proposed in Virginia; others offer tax credits or deductions to parents for education expenses.

Still others provide scholarships or “scholarship-like tuition assistance” directly to private school students. The overwhelming majority of these programs were introduced in the last 15 years, although not without some controversy. Beyond concerns that such programs may violate the separation of church and state, or that they unfairly circumvent the prohibition of public funding for private schools, in Virginia such proposals have faced additional opposition from those who recall the private school tuition grants once given to white Virginians as a means of circumventing the integration of public schools.⁶ Moreover, other observers have questioned the appropriateness of subsidizing private school tuition at a time when public school districts throughout Virginia have faced painful budget cuts. Only through Republican Lt. Gov. Bill Bolling’s tie-breaking vote in the Senate did the tax credit legislation pass in 2012.

Residents of Hampton Roads enjoy access to a diverse marketplace of independent schools that operate with considerable autonomy. School-choice advocates like the Friedman Foundation argue that this is the proper state of things, and that the quality of all schools will improve when K-12 education operates as a free market. **It is also true, however, that free markets function best when there is an open flow of information that allows consumers to make educated choices. This is not always evident with private education in Virginia.** Independent schools are not compelled to report information about academic performance or the makeup of their student bodies, and the amount and kinds of information that they choose to disclose about themselves varies widely. The same is true of the associations that accredit them. Many parents are unaware of the state regulations, or lack thereof, that govern Virginia’s private schools.

All this notwithstanding, the size and number of private schools in our region suggest that families are mostly satisfied with the service they provide. The burden of finding out more about these schools and how they operate, however, rests squarely on the consumer.



⁶ See the 2011 State of the Region report, <http://bpa.odu.edu/forecasting/sor/sor2011.shtml>, and Frederick Kunkle, “Va. African Americans split in battle for school choice,” *The Washington Post* (Feb. 26, 2011), at: <http://www.washingtonpost.com/wp-dyn/content/article/2011/02/24/AR2011022403688.html>.

TABLE 3

STATE PROGRAMS PROVIDING FINANCIAL ASSISTANCE FOR STUDENT ATTENDANCE AT PRIVATE ELEMENTARY AND SECONDARY SCHOOLS, JANUARY 2009

State	Program Type	Type of Program	Year Signed Into Law
Arizona	Tax Credits	Tax credits for individuals for contributions to scholarship organizations	1997
Arizona	Tax Credits	Tax credits for corporations for contributions to scholarship organizations	2006
Arizona	Scholarships	Scholarships for students with disabilities	2006
Arizona	Scholarships	Scholarships for foster care children	2006
Florida	Scholarships	Scholarships for students in failing schools (a)	1999
Florida	Scholarships	Scholarships for students with disabilities	1999
Florida	Tax Credits	Tax credits for corporations for contributions to scholarship organizations	2001
Georgia	Scholarships	Scholarships for students with disabilities	2007
Georgia	Tax Credits	Tax credits for individuals and corporations for contributions to scholarship organizations	2008
Illinois	Tax Credits	Tax credits for parents for education expenses	1999
Iowa	Tax Credits	Tax credits for parents for education expenses	1987
Iowa	Tax Credits	Tax credits for individuals for contributions to school tuition organizations	2006
Louisiana	Scholarships	Scholarships for students from low-income families in New Orleans	2008
Louisiana	Tax Deduction	Tax deduction to individuals for tuition and qualified educational expenses	2008
Maine	Tuition Assistance	Scholarship-like tuition assistance for students in small towns and rural areas	1873
Minnesota	Tax Credits and Tax Deductions	Tax credits and tax deductions for parents for education expenses	1955/1997
Ohio	Vouchers	Vouchers for students in Cleveland	1995
Ohio	Scholarships	Scholarships for students in Cleveland	1995
Ohio	Scholarships	Scholarships for students with autism	2003
Ohio	Scholarships	Scholarships for students in underperforming schools	2006
Pennsylvania	Tax Credits	Tax credits for corporations for contributions to scholarship organizations	2001
Rhode Island	Tax Credits	Tax credits for corporations for contributions to scholarship organizations	2006
Utah	Scholarships	Scholarships for students with disabilities	2005
Utah	Scholarships	Scholarships for all students (b)	2007
Vermont	Tuition Assistance	Scholarship-like tuition assistance for students in small towns and rural areas	1869

TABLE 3

STATE PROGRAMS PROVIDING FINANCIAL ASSISTANCE FOR STUDENT ATTENDANCE AT PRIVATE ELEMENTARY AND SECONDARY SCHOOLS, JANUARY 2009

State	Program Type	Type of Program	Year Signed Into Law
Wisconsin	Scholarships	Scholarships for students from low-income families in Milwaukee	1990
District of Columbia	Scholarships	Scholarships for students from low-income families (c)	2004
a This program was terminated at the end of the 2005-06 school year.			
b This program was not implemented because it was voted down in a statewide referendum in November 2007.			
c This program is federally funded.			
Source: U.S. Department of Education, Education Options in the States (February 2009), www2.ed.gov/parents/schools/choice/educationoptions/educationoptions.pdf			



Private Schools In Southside Hampton Roads

GENERAL OBSERVATIONS

Using data from the VCPE and the National Center for Education Statistics (NCES), we identified 86 independent schools in Southside Hampton Roads (see Table 4). This is more than double the 35 independent schools we found on the Peninsula in 2011. This reflects a school-age population in Southside Hampton Roads (231,749 in 2010) that is likewise more than double that on the Peninsula (106,558 in 2008). Although we do not have enrollment figures for all of our region's private schools, it is apparent that Southside Hampton Roads is home to a substantially larger proportion of schools with 500-plus students. Atlantic Shores Christian School (Chesapeake), Cape Henry Collegiate School (Virginia Beach), Greenbrier Christian Academy (Chesapeake), Isle of Wight Academy, Nansemond-Suffolk Academy, Norfolk Academy, Norfolk Christian Schools, Norfolk Collegiate School, Portsmouth Christian Schools and St. Gregory the Great School (Virginia Beach) all meet this definition. Table 5 reports the largest 10 and the smallest 10 independent K-12 schools in Southside Hampton Roads in fall 2012.

Of the 86 independent schools in Southside Hampton Roads, 35 responded earlier this year to our request for supporting information through a mailed survey. When asked to update their schools' enrollment figures found in the 2009-10 Private School Universe Survey, nearly all respondents adjusted their enrollments downward, or they indicated there had been no change. The same was true in our 2011 survey of Peninsula independent schools, which asked schools to update their 2007-08 enrollment figures. Independent K-12 school enrollment declined 13.4 percent from 2007-08 to 2009-10 (see Table 6). **Thus, it appears that private schools throughout Hampton Roads are facing the same recent downward trends in enrollment that have affected private schools all around the country. This is a likely consequence of the economic downturn that began in 2008.**



TABLE 4

PRIVATE SCHOOL STATISTICS IN THE U.S. AND HAMPTON ROADS

	United States (2007-08)				United States (2009-10)				Hampton Roads Schools (2009-10)	
	Schools		Students		Schools		Students			
Selected Characteristic	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	33,740	100.0	5,072,451	100.0	33,366	100.0	4,700,119	100.0	86	100.0%
Catholic	7,507	22.2	2,156,173	42.5	7,115	21.3	2,009,640	42.8	10	11.6%
Other religious	15,403	45.7	1,930,707	38.1	15,616	46.8	1,752,011	37.3	54	62.8%
Conservative Christian	5,106	15.1	772,951	15.2	4,614	13.8	637,416	13.6	28	32.6%
Other affiliated	2,741	8.1	452,787	8.9	2,882	8.6	445,536	9.5	11	12.8%
Unaffiliated	7,555	22.4	704,969	13.9	8,120	24.3	669,060	14.2	15	17.4%
Nonsectarian	10,830	32.1	985,571	19.4	10,635	31.9	938,467	20.0	22	25.6%
Regular	5,603	16.6	670,057	13.2	5,231	15.7	629,983	13.4	11	12.8%
Special emphasis	3,691	10.9	209,094	4.1	3,821	11.5	207,483	4.4	7	8.1%
Special education	1,536	4.6	106,420	2.1	1,582	4.7	101,002	2.1	4	4.7%
School level										
Elementary	21,870	64.8	2,513,099	49.5	21,425	64.2	2,269,301	48.3	49	57.0%
Secondary	2,932	8.7	826,905	16.3	2,776	8.3	785,500	16.7	5	5.8%
Combined	8,938	26.5	1,732,447	34.2	9,165	27.5	1,645,318	35.0	28	32.6%

Sources: Characteristics of Private Schools in the United States: Results from the 2007-08 Private School Universe Survey (March 2009), <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid2009313>.
 Characteristics of Private Schools in the United States: Results from the 2009-10 Private School Universe Survey (May 2011), <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid2011339>.
 2007-08 and 2009-10 Private School Universe Survey, at: <http://nces.ed.gov/surveys/pss/privateschoolsearch/>
 Triennial School Census (2008), at: http://www.doe.virginia.gov/statistics_reports/enrollment/triennial_school_census/2008.pdf
 School-Age Population Estimate (2010), at: http://www.coopercenter.org/sites/default/files/shared/SCAPE_Divisions_July_1_2010Estimates_UVAcooperCtr.xls
 Virginia Council for Private Education, at: <http://www.vcpe.org/>
 Private schools of Hampton Roads

In May 2012, Norfolk Academy announced it was the recipient of a \$2 million grant from the Malone Family Foundation to support scholarships to the Academy for middle school and high school students. About 20 percent of the Academy's 1,220 students receive financial aid and the funds will enable it to maintain and increase the diversity of its student body.

TABLE 5

**LARGEST AND SMALLEST INDEPENDENT K-12 SCHOOLS IN
SOUTHSIDE HAMPTON ROADS
(FALL 2011 SELF-REPORTED ENROLLMENTS)**

Ten Largest		Ten Smallest	
1) Norfolk Academy, N	1,249	1) Mclea School, N	3
2) Cape Henry Collegiate, VB	819	2) Pleasant Grove Christian School of Excellence, VB	5
3) Nansemond-Suffolk Academy, S	765	3) Open Door Christian School, VB	10
4) Portsmouth Christian School, P	713	4) Back Bay Christian Academy, VB	20
5) Norfolk Christian School, N	711	5) McDonald Montessori Academy, N	22
6) Atlantic Shores Christian School, C	672	5) Cathedral of Faith School, C	22
7) Norfolk Collegiate School, N	659	7) Montessori Academy of Virginia, VB	25
8) St. Gregory the Great School, VB	623	7) Yeshivas Aish Kodesh Talmudical Academy, N	25
9) Isle of Wight Academy, IW	562	9) Tidewater Classical Academy, VB	26
10) Greenbrier Christian Academy, C	541	10) Ocean View Christian Academy, N	32

Although schools typically offer some degree of financial assistance to low-income families, the cost of a K-12 private education remains beyond the reach of many families in our region. This is particularly true in the current economic climate. Annual tuition and fee charges at the independent schools in Southside Hampton Roads range between \$3,000 and \$23,000 per year. The annual cost of an elementary education most often falls within the \$4,000 to \$8,000 range, with the middle and high school years being more expensive. **The most expensive independent schools in our region are Norfolk**

TABLE 6

**CHANGES IN K-12 STUDENT ENROLLMENTS IN VIRGINIA,
2007-08 TO 2009-10**

	2007-08		2009-10	
	Number	Percent	Number	Percent
Public School	1,202,350	89.7%	1,214,176	90.6%
Private School	116,934	8.7%	103,076	7.7%
Homeschool	20,694	1.5%	23,290	1.7%
Totals	1,339,978	100.0%	1,340,542	100.0%

Sources: Virginia Department of Education, at: http://www.doe.virginia.gov/statistics_reports/enrollment/index.shtml
 Characteristics of Private Schools in the United States: Results from the 2009-10 Private School Universe Survey (May 2011), at: <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2011339>
 Characteristics of Private Schools in the United States: Results from the 2007-08 Private School Universe Survey (March 2009), at: <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2009313>

Academy (\$21,000 per year for grades 7-12) and Chesapeake Bay Academy (\$22,900 for grades 9-12). Founded in 1728, Norfolk Academy is our region's oldest independent school, boasting an attractive 64-acre campus, the region's largest independent school student body, an academically rigorous curriculum and outstanding extracurricular opportunities. Chesapeake Bay Academy in Virginia Beach touts a low student/teacher ratio and individualized instruction for high-achieving, special-needs students.

Last year's State of the Region report explored the issues of racial diversity and the history of racial segregation in Virginia's independent schools. We noted that all accredited schools in Virginia must possess racially nondiscriminatory admission policies, and that many independent schools advertise these policies prominently. Nonetheless, the available statistics indicate that nearly all of our region's independent schools are somewhat segregated, both on the Southside and Peninsula (see Table 7). According to data from the Private School Universe Survey and from our communications with the schools themselves, **the majority of independent schools have student bodies that either are overwhelmingly white, or overwhelmingly black. The predominantly black institutions tend to be small**

elementary schools affiliated with a particular church. The broad cross-section of independent schools – including nearly all high schools – have student bodies that are predominantly white.

As with last year's report, a few words of caution are merited in interpreting the numbers reported in Table 7. **Independent schools are not required to report the racial or ethnic backgrounds of their students to the NCES.** Indeed, 11 of 86 Southside schools did not supply this information on the most recent Private School Universe Survey. The 2009-10 survey provided a choice of seven racial/ethnic categories for identifying students – American Indian/Alaskan, Asian, Black, Hispanic, White, Hawaiian/Pacific

Islander, and Two or More Races. (The latter two categories were added in 2009-10.) Norfolk Academy and Norfolk Collegiate School responded to our request for updated enrollment information with the additional categories of Middle Eastern and Foreign National (represented in Table 7 as "Two or More Races.") Other Southside independent schools also may have students who could be represented in this way, although this was not reflected in the Private School Universe Survey.



TABLE 7

PRIVATE SCHOOLS IN SOUTHSIDE HAMPTON ROADS: ENROLLMENT BY RACE/ETHNICITY

	School	City	ZIP Code	American Indian/Alaskan	Asian	Black	Hispanic	White	Hawaii/Pacific Island	Two or More Races	Total Students
1	Christ the King Catholic School	N	23509	0	7	32	7	185	0	11	242
2	St. Patrick Catholic School	N	23508	0	15	11	5	311	0	17	359
3	St. Pius X School	N	23518	1	59	10	32	168	0	9	279
4	Barry Robinson Center	N	23502	0	0	23	1	30	0	0	54
5	Portsmouth Catholic Regional School	P	23701	2	7	11	1	119	0	0	140
6	Bishop Sullivan Catholic High School	VB	23462	0	57	14	20	353	0	8	452
7	Saint Gregory the Great School	VB	23462	2	48	24	45	412	58	44	633
8	Saint John the Apostle Catholic School	VB	23456	0	0	4	10	187	7	6	214
9	Saint Matthew's School	VB	23464	2	69	20	18	372	0	6	487
10	Star of the Sea School	VB	23451	1	8	0	9	203	2	5	228
11	Atlantic Shores Christian School	C	23320	5	35	114	11	498	0	9	672
12	Cathedral of Faith Christian School	C	23324	0	0	21	0	0	0	1	22
13	Cedar Road Christian Academy	C	23322	1	1	19	4	61	0	0	86
14	Cornerstone Christian School	C	23325	0	6	12	1	71	0	3	93
15	Faith Diamond Christian Academy	C	23323	0	0	63	0	1	0	0	64
16	Great Hope Baptist School	C	23328	0	1	5	3	86	1	0	96
17	Greenbrier Christian Academy	C	23320	0	0	40	0	494	0	7	541
18	Indian Creek Welcome Baptist Church School	C	23320	0	4	4	3	41	2	0	54
19	Mount Lebanon Christian Academy	C	23322	0	0	37	1	2	0	0	40
20	Mount Pleasant Christian School	C	23322	0	3	1	1	88	0	0	93
21	StoneBridge School	C	23321	0	4	28	2	242	0	0	276
22	Rock Church School	F	23851	0	0	0	1	35	0	0	36
23	Calvary Christian Elementary School	N	23518	0	0	53	0	4	0	1	58
24	Faith Academy School of Excellence	N	23504	0	0	60	1	0	0	3	64
25	Greenhill Farms Christian Academy	N	23513	0	0	46	0	0	0	0	46

TABLE 7

PRIVATE SCHOOLS IN SOUTHSIDE HAMPTON ROADS: ENROLLMENT BY RACE/ETHNICITY

	School	City	ZIP Code	American Indian/Alaskan	Asian	Black	Hispanic	White	Hawaii/Pacific Island	Two or More Races	Total Students
26	Ocean View Christian Academy	N	23503	0	1	5	10	15	1	0	32
27	READY Academy Christian School	N	23510	0	0	69	0	0	0	2	71
28	Alliance Christian Academy	P	23701	0	3	28	5	188	0	3	227
29	Central Christian Academy	P	23701	0	3	21	2	29	2	3	65
30	Portsmouth Christian School	P	23702	0	7	127	12	565	2	0	713
31	Saint Mark Christian Academy	P	23704	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
32	Sweethaven Christian Academy	P	23703	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
33	First Baptist Christian School	S	23434	0	1	9	0	200	0	1	211
34	Coastal Christian Academy	VB	23464	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
35	King's Grant Day School	VB	23452	0	0	19	0	28	0	9	56
36	New Light Baptist School of Excellence	VB	23464	0	0	66	0	0	0	0	66
37	Open Door Christian Academy	VB	23452	0	0	2	0	8	0	0	10
38	Tabernacle Baptist Academy	VB	23464	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
39	Tidewater Adventist Academy	C	23320	0	6	28	8	5	0	9	56
40	Veritas Christian Academy	C	23320	0	6	2	3	131	0	0	142
41	BINA High School	N	23517	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
42	Norfolk Christian Schools	N	23505	4	16	60	16	615	0	0	711
43	Trinity Lutheran Church School	N	23505	0	2	1	1	73	0	1	78
44	Yeshivas Aish Kodesh Talmudical Academy	N	23507	0	0	0	0	25	0	0	25
45	Toras Chaim	P	23703	0	0	0	0	64	0	0	64
46	Hebrew Academy of Tidewater	VB	23462	1	0	2	0	86	0	15	104
47	Oaktree Academy	VB	23464	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
48	Tidewater Classical Academy	VB	23453	0	0	9	2	15	0	0	26
49	Virginia Beach Friends School	VB	23451	0	6	13	5	127	0	4	155
50	Greenbrier Enrichment Center & School	C	23320	0	5	10	1	40	0	7	63

TABLE 7

PRIVATE SCHOOLS IN SOUTHSIDE HAMPTON ROADS: ENROLLMENT BY RACE/ETHNICITY

	School	City	ZIP Code	American Indian/Alaskan	Asian	Black	Hispanic	White	Hawaii/Pacific Island	Two or More Races	Total Students
51	Providence Christian School	C	23325	0	1	37	3	33	0	0	74
52	Alpha Beta Cappa Christian Academy	N	23513	0	0	45	10	20	0	5	80
53	Azalea Garden Christian School	N	23513	0	0	27	19	48	0	3	97
54	Tabernacle of Prayer Christian School	N	23508	0	75	0	0	0	0	0	75
55	Court Street Academy	P	23704	0	0	21	0	77	0	0	98
56	Joyous Sound Education & Enrichment Center	P	23701	0	0	20	0	1	0	0	21
57	Anchor Christian School	VB	23455	0	0	15	0	7	0	0	22
58	Back Bay Christian Academy	VB	23457	0	0	0	1	18	1	0	20
59	Beach Montessori Christian Academy	VB	23454	0	2	3	4	30	0	0	39
60	Gateway Christian School	VB	23462	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
61	Ivy League Academy	VB	23462	0	3	21	3	17	1	3	48
62	Pleasant Grove Christian Academy of Excellence	VB	23464	0	0	5	0	0	0	0	5
63	Victory Innovative Christian Academy	VB	23452	0	0	14	2	4	0	3	23
64	Galilee Montessori School	VB	23451	0	0	3	0	29	0	0	32
65	McLea School	N	23518	0	0	0	0	3	0	0	3
66	Norfolk Academy	N	23502	1	73	98	11	937	0	99	1,219
67	Norfolk Collegiate School	N	23505	3	39	81	25	491	0	20	659
68	Ryan Academy of Norfolk	N	23518	0	0	6	4	68	0	3	81
69	The Williams School	N	23507	157	7	10	2	1	1	2	180
70	Town & Country Day School	N	23502	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
71	Christopher Academy	P	23703	0	4	0	0	94	0	10	108
72	Nansemond-Suffolk Academy	S	23434	4	39	28	10	664	0	20	765
73	Baylake Pines School	VB	23455	0	14	16	3	204	0	0	237
74	Cape Henry Collegiate School	VB	23454	1	25	46	6	724	2	15	819

TABLE 7

PRIVATE SCHOOLS IN SOUTHSIDE HAMPTON ROADS: ENROLLMENT BY RACE/ETHNICITY

	School	City	ZIP Code	American Indian/Alaskan	Asian	Black	Hispanic	White	Hawaii/Pacific Island	Two or More Races	Total Students
75	Isle of Wight Academy	IW	23397	3	8	4	6	534	0	7	562
76	Chesapeake Montessori School	C	23322	0	3	5	2	42	2	10	64
77	Greenbrier Montessori School	C	23320	0	0	2	1	28	0	2	33
78	Montessori Academy of Virginia (Chesapeake)	C	23320	0	4	3	2	26	1	0	36
79	Ghent Montessori School	N	23507	0	21	22	5	120	0	0	168
80	McDonald Montessori	N	23504	0	0	1	1	20	0	0	22
81	Courthouse Montessori School	VB	23453	0	1	10	4	16	0	1	32
82	Montessori Academy of Virginia (Virginia Beach)	VB	23462	1	2	5	2	15	0	0	25
83	Kempsville Center for Behavioral Health	N	23502	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
84	Brighton Behavioral Health Center	P	23704	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
85	Harbor Point Behavioral Health Center	P	23704	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
86	Chesapeake Bay Academy	VB	23462	2	0	15	4	112	1	1	135

Sources: 2009-10 Private School Universe Survey, <http://nces.ed.gov/surveys/pss/privateschoolsearch/>
Private schools of southern Hampton Roads

TYPES OF INDEPENDENT SCHOOLS

The NCES identifies three main categories of independent schools: Catholic, Other Religious and Non-Sectarian. All three types are present in Southside Hampton Roads. The 2011 State of the Region report provided background information about the kinds of schools and accrediting associations found in each category. This year, we'll present the categories more briefly, instead highlighting some of the differences and similarities between the independent schools in Southside Hampton Roads and those on the Peninsula.

Category One: Roman Catholic Schools

Southside Hampton Roads is home to 10 Roman Catholic institutions of elementary and secondary education, representing nearly 12 percent of the region's independent schools. This resembles the proportion of Catholic schools on the Peninsula. Seven of the 10 Southside schools were founded between 1950 and 1970 in the cities of Norfolk, Portsmouth and Virginia Beach. Bishop Sullivan Catholic High School, formerly Norfolk Catholic High School, relocated to the Kempsville area of Virginia Beach in 1993. In the last decade, two new schools were established (St. Patrick in Norfolk and St. John the Apostle in the Sandbridge area of Virginia Beach), while the region's oldest Catholic school, Holy Trinity in Norfolk, closed its doors in 2010 due to declining enrollment. The Barry Robinson Center, founded as an orphanage and school in 1933, now serves as a day and residential treatment center for emotionally disturbed youth.

With the exception of the Barry Robinson Center (which is accredited by VAISEF), all of the Southside Catholic schools are accredited by AdvancED, and as well either by the Virginia Catholic Education Association (VCEA) or the Southern Association of Independent Schools (SAIS). These schools tout an academically rigorous, disciplined learning environment that is grounded upon church tradition. Eight of the schools enroll students from pre-kindergarten through grade 8. With the exception of St. Patrick, all are administered by the Diocese of Richmond or by a local parish; these schools offer significant tuition discounts for practicing Catholics and for families with more than one child attending school. St. Patrick is an independent

Catholic school with a distinct educational philosophy grounded upon the nurturing and development of five "domains": The Life of Mind, The Life of Spirit, The Life of Relationship, The Life of Vocation and The Physical Life.

Category Two: Other Religious Schools

The second NCES category is "other" religious schools – a diverse group that encompasses nearly 63 percent of Southside independent schools. Hampton Roads is home to a higher percentage of schools in this category than elsewhere in the United States, chiefly because of our region's many conservative Christian schools.

The NCES identifies conservative Christian schools through their membership in at least one of four associations: Accelerated Christian Education (ACE), American Association of Christian Schools (AACS), Association of Christian Schools International (ACSI) or Oral Roberts University Education Fellowship (ORUEF). Together, these associations represent 28 institutions in Southside Hampton Roads, comprising just over half of the region's "other" religious schools. ACSI has the strongest presence, with 17 member schools, including seven institutions that possess ACSI accreditation. Eleven schools in this subgroup also participate in the Hampton Roads Association of Christian Schools (HRACS), which promotes regional cooperation through shared teacher training and other events. Baptist, Mennonite, Pentecostal and nondenominational Christian traditions are among those included in this subgroup. **Of particular note is the geographical concentration of the Southside conservative Christian schools: 11 of 28 institutions are located in Chesapeake.**

The NCES distinguishes the remaining 26 religious schools in this category as affiliated or nonaffiliated, depending upon their membership in organizations such as the General Conference of the Seventh-Day Adventist Church (GCSDAC) or the Friends Council on Education (FCE). Some additional observations about the schools in this subgroup:

Four Southside independent schools represent the Jewish faith, a significant contrast to the religious school community of the Peninsula, which is entirely Christian. Hebrew Academy of Tidewater

(Virginia Beach) educates students from Pre-K through grade 8 and is a founding member of RAVSAK, a pluralistic association of Jewish Day Schools. The region's other three Jewish schools represent Orthodox tradition and are affiliated with Torah Umesorah, the National Society for Hebrew Day Schools. Toras Chaim (Portsmouth) educates students from Pre-K through grade 8. BINA High School and Yeshivas Aish Kodesh Talmudical Academy are single-sex high schools in Norfolk that serve day and boarding students.

Three independent schools in Southside Hampton Roads promote classical Christian education, emphasizing the study of Latin and classical literature, as well as the Bible: StoneBridge School and Veritas Christian Academy (both in Chesapeake) and Tidewater Classical Academy (Virginia Beach). StoneBridge School is affiliated with ACSI; the other two institutions belong to the Association of Classical & Christian Schools (ACCS).

Tidewater Classical Academy, a ministry of Green Run Baptist Church, is noteworthy for its half-day attendance model that is intended to supplement home education. The school day is 8:25 a.m. to 12:45 p.m.; afterward, parents are expected to review and expand upon the day's material with their children. Oaktree Academy, also in Virginia Beach, adopts a similar approach. As a "University Model School" that patterns some of its instructional programs after modern university academic programs, its students enroll in single-subject courses that do not meet every day. High school juniors and seniors at Oaktree Academy may take college courses online through Regent University's Early College Program. Both institutions emphasize that they allow families to combine "the best of both worlds" – the individualized attention of homeschooling with the discipline and professionalism of a traditional classroom setting. No comparable parallel to these two institutions currently exists on the Peninsula.

Norfolk Christian Schools, which serves elementary and secondary students at three locations in Norfolk and Virginia Beach, is one of the region's largest and oldest Christian independent schools. It is also an affiliate member of the recently established Council on Educational Standards & Accountability (CESA). According to the association's website, CESA "insists that academic rigor

and programmatic excellence in all areas are inherent to discipleship, not contradictory." CESA's mission is "to motivate, support, and hold accountable Christian schools that aspire to superlative academic standards, institutional best practices, and collaboration with like-minded schools."

Category Three: Nonsectarian Schools

Nonsectarian schools comprise the remaining 26 percent of Southside independent schools. The NCES divides this category into three subgroups: special emphasis, special education and regular nonsectarian independent schools. **Schools with a Montessori emphasis and regular nonsectarian schools are particularly well represented in Southside Hampton Roads, both relative to the Peninsula and to the nation as a whole.**

- Nine independent schools in Chesapeake, Norfolk and Virginia Beach promote the hands-on, student-directed teaching methods of Maria Montessori. (This includes two Christian institutions, Beach Montessori Christian Academy and Galilee Montessori School, both in Virginia Beach). All are elementary schools; Ghent Montessori School in Norfolk educates students through the eighth grade. None of the institutions possesses state-approved accreditation, although several are affiliated with either the American Montessori Society (AMS) or the International Montessori Council (IMC).
- Four institutions in Norfolk and Portsmouth possess VAISEF accreditation to provide residential treatment for emotionally troubled youth. (This includes the Catholic Barry Robinson Center.) Kempsville Center for Behavioral Health, Brighton Behavioral Health Center and Harbor Point Behavioral Health Center are owned by Universal Health Services Inc., a large operator of hospitals and psychiatric facilities throughout the United States.
- There are 11 "regular" nonsectarian schools in Southside Hampton Roads, half of which are located in Norfolk. A significant contingent of these institutions consists of large and well-established college preparatory schools; **these schools emphasize academic rigor, values such as honor and integrity, and a well-rounded curriculum. Norfolk Academy, Norfolk Collegiate School, Nansemond-Suffolk Academy,**

Cape Henry Collegiate School and Isle of Wight Academy are combined elementary and secondary schools that meet this definition. All are accredited by AdvancED and at least one other state-recognized association. **Cape Henry Collegiate School offers a distinctive Global Scholars Program for high-achieving Upper School students with an interest in international relations.**

Final Observations

First, the diversity in mission and educational philosophy of the 86 independent K-12 schools located in Southside Hampton Roads is significant. There is an independent K-12 school to satisfy nearly anyone's educational preferences.

Second, Virginia is a laissez-faire state with respect to the regulation of its independent K-12 schools. Inside the Commonwealth, independent schools are essentially free to admit students, hire staff and develop curricula without significant state intervention. Only 41 of the 86 independent schools in Southside Hampton Roads possess state-approved accreditation, which obviously is not necessary for operation in Virginia.

Third, proponents of independent K-12 schools frequently state that superior educational results are generated when parents have the ability to choose the schools that they feel are best for their children. Competition among schools is an important part of this philosophy and advocates usually contend that the existence of independent schools pushes public schools to higher levels of performance. The theory behind this assertion is clear, though empirical evidence relating to it is limited because it is very difficult to take account of the many different factors that influence educational performance.

Fourth, some Southside independent schools readily provide information concerning their curricula, the credentials of their faculty, the makeup of their student bodies and the educational performances of their students. Others provide none of these things. Thus, it is virtually impossible to say if some independent schools are succeeding with the students who attend. This means that one of the assumptions underpinning the theory of competitive markets –

relatively easy access by consumers to accurate information – holds only in some segments of the K-12 educational market.

Fifth, the small sizes and unusual facilities of some independent schools (usually conservative religious schools) often make it difficult to infer the quality of education offered at these schools. Few would be inclined to doubt the rigor of instruction and standards at a small, 25-student school such as Yeshivas Aish Kodesh Talmudical Academy. Other situations are less clear. Does the small size of a school provide abundant opportunities for one-on-one instruction and individual attention and hence yield superior results? Or, instead, is it indicative of faculty (whose credentials are unknown) finding it difficult to stretch their instructional talents over a potentially diverse K-8 student population while operating in facilities not actually designed for such purposes?

We don't know the answers to these questions, and neither the Commonwealth nor the cities and counties in Hampton Roads know. This is because virtually no rigorous credentialing, reporting or testing is required of independent schools in Virginia. This is ironic in light of the strong emphasis on credentialing, curriculum requirements and SOL (Standards of Learning) testing that is required in Virginia's public schools. It is as if these two educational approaches live in different universes.

Sixth, just as there are some strong public K-12 schools and some weak ones, our study of independent K-12 schools in Hampton Roads suggests that there are many strong independent schools, but even more cases where it is impossible to divine quality. The evidence often does not exist, though in Table 8 we summarize much of what is publicly known about the 86 independent K-12 schools in Hampton Roads. That said, those in the best possible position to judge (the parents of independent school students) give these schools a strong vote of confidence by sending their children to them and paying the tuition. This is a market test that should not be ignored by critics of independent school education.



FIGURE 1
PRIVATE SCHOOLS IN SOUTHSIDE HAMPTON ROADS

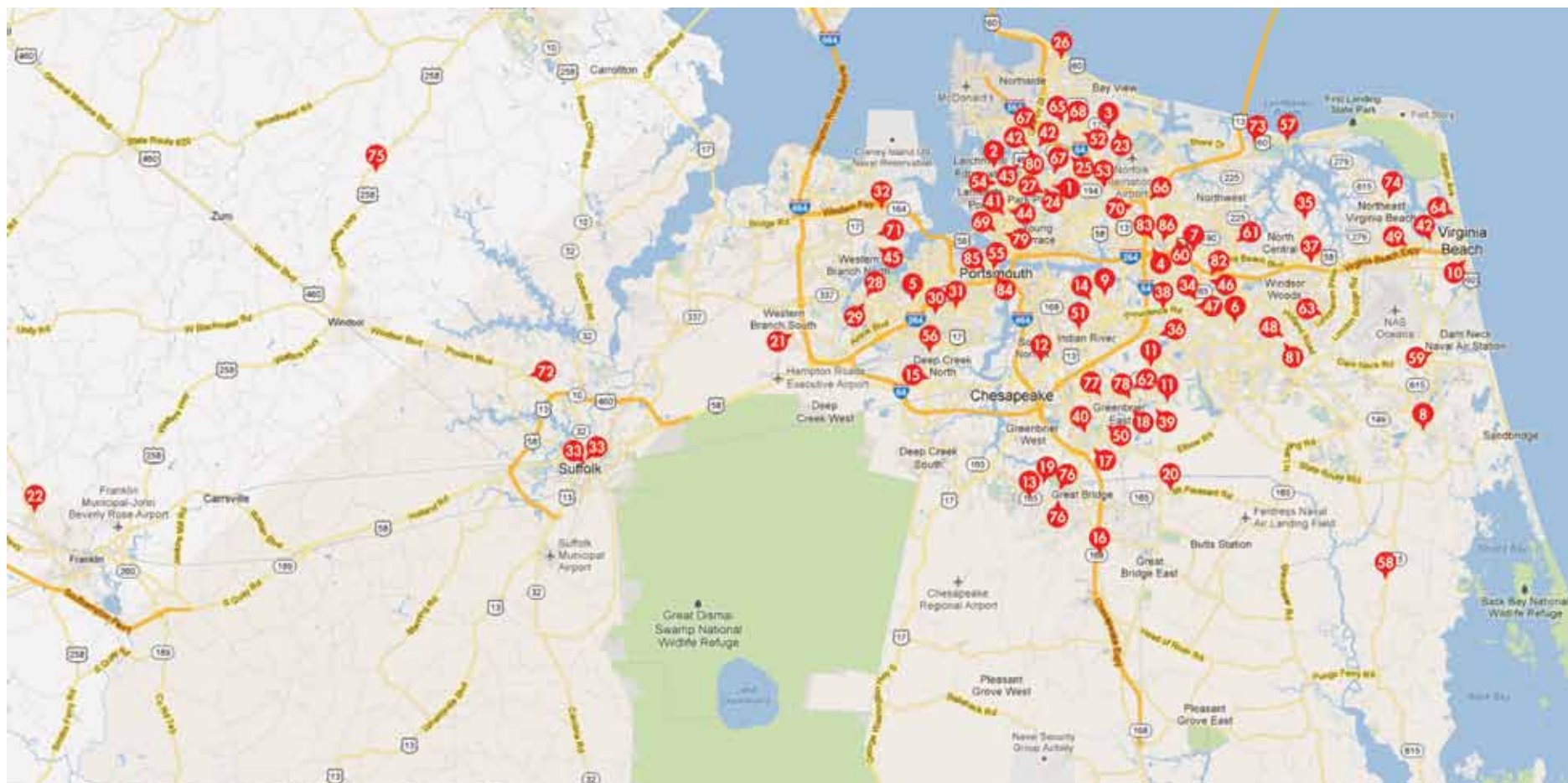


TABLE 8

INDEPENDENT K-12 SCHOOLS IN SOUTHSIDE HAMPTON ROADS

School	City	ZIP Code	Mailing Address and Website	Established	Grade Span	Typology	State-Approved Accreditation	Other Memberships	Student / Teacher Ratio	Total Students (non-pre K)	K Tuition + Fees	Grades 1-5 Tuition + Fees	Grades 6-8 Tuition + Fees	Grades 9-12 Tuition + Fees	
	Costs are approximations, based upon the available information from each school. The actual cost of tuition and fees can depend on variables such as church membership, financial need, the type of payment plan selected, or how many students from one family are in attendance. Services such as transportation and extended care are generally offered at additional expense.														
1	Christ the King Catholic School	N	23509	3401 Tidewater Dr. www.ctkparish.org	1954	PK - 8 (Elementary)	Catholic	VCEA, AdvancED		9.4	242	\$5,725 - \$7,125	\$5,725 - \$7,125	\$5,725 - \$7,125	N/A
2	St. Patrick Catholic School	N	23508	1000 Bolling Ave. www.stpcs.org	2005	PK - 8 (Elementary)	Catholic	SAIS, AdvancED	VCEA, William Glasser Institute	8.5	359	\$7,735	\$7,735 - \$8,390	\$8,390	N/A
3	St. Pius X School	N	23518	7800 Halprin Dr. www.stpiusxschoolva.org	1956	PK - 8 (Elementary)	Catholic	VCEA, AdvancED		15.0	326	\$5,215 - \$6,955	\$5,240 - \$6,980	\$5,240 - \$6,980	N/A
4	Barry Robinson Center	N	23502	443 Kempsville Road www.barryrobinson.org	1933	1 - 12 (Combined)	Catholic (Special Education)	VAISEF		9.0	54				
5	Portsmouth Catholic Regional School	P	23701	2301 Oregon Ave. www.portsmouthcatholic.net	1970	PK - 8 (Elementary)	Catholic	VCEA, AdvancED		11.1	140	\$6,240 - \$7,310	\$6,240 - \$7,310	\$6,240 - \$7,310	N/A
6	Bishop Sullivan Catholic High School	VB	23462	4552 Princess Anne Road www.chsvb.org	1950	9 - 12 (Secondary)	Catholic	VCEA, AdvancED		14.3	452	N/A	N/A	N/A	\$11,230 - \$12,330
7	Saint Gregory the Great School	VB	23462	5343 Virginia Beach Blvd. www.stgregory.pvt.k12.va.us	1965	PK - 8 (Elementary)	Catholic	VCEA, AdvancED		15.6	633	\$5,105 - \$7,145	\$5,105 - \$7,145	\$5,105 - \$7,145	N/A

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8	Saint John the Apostle Catholic School	VB	23456	1968 Sandbridge Road www.stjohnsandbridge.com	2002	PK - 8 (Elementary)	Catholic	VCEA, AdvancED		14.0	214	\$5,920 - \$6,950	\$5,920 - \$6,950	\$5,920 - \$6,950	N/A
9	Saint Matthew's School	VB	23464	3316 Sandra Lane www.smsvb.net	1963	PK - 8 (Elementary)	Catholic	VCEA, AdvancED		17.0	487	\$5,050 - \$6,075	\$5,050 - \$6,075	\$5,050 - \$6,075	N/A
10	Star of the Sea School	VB	23451	309 15th St. www.sosschool.org	1958	PK - 8 (Elementary)	Catholic	VCEA, AdvancED		18.0	228	\$6,027 - \$7,349	\$6,027 - \$7,349	\$6,027 - \$7,349	N/A
11	Atlantic Shores Christian School	C	23320	2 campuses: 1217 N. Centerville Turnpike (Secondary); 1861 Kempsville Rd., Virginia Beach 23464 (Elementary) www.shoreschristian.org	1985	PK - 12 (Combined)	Other Religious (Conservative Christian)	ACSI, AdvancED	HRACS	8.0 / 10.0	672	\$4,375 - \$6,875	\$7,745	\$8,375	\$8,575
12	Cathedral of Faith Christian School	C	23324	2020 Portlock Road www.cathedraloffaithcs.org	1987	PK - 2 (Elementary)	Other Religious (Conservative Christian)	No	ACSI	5.5	22	\$5,123	\$5,270 - \$5,295	N/A	N/A
13	Cedar Road Christian Academy	C	23322	916 Cedar Road www.cedarroadchristianacademy.com	1980	PK - 5 (Elementary)	Other Religious (Conservative Christian)	No	ACSI, ACTS, HRACS	11.0	86	\$4,660	\$6,078 - \$6,125	N/A	N/A
14	Cornerstone Christian School	C	23325	1212 Willow Ave. www.cornerstonechristianschool.us	1972	PK - 6 (Elementary)	Other Religious (Conservative Christian)	No	ACSI, HRACS	8.8	93	\$4,625	\$4,625	\$4,625	N/A

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15	Faith Diamond Christian Academy	C	23323	1023 Deep Creek Blvd. www.faithdiamond.org/newacademy.html		PK - 7 (Elementary)	Other Religious (Conservative Christian)	No	ACSI	6.2	64			
16	Great Hope Baptist School	C	23328	P.O. Box 15106 www.greathopebaptist.org/school	1969	PK - 12 (Combined)	Other Religious (Conservative Christian)	No	AACS, ODACS	8.3	96	\$3,675	\$4,275	\$4,275 - \$4,575
17	Greenbrier Christian Academy	C	23320	311 Kempsville Road www.gcagators.org		PK - 12 (Combined)	Other Religious (Conservative Christian)	ACSI, AdvancED	HRACS	10.6	541	\$4,400 - \$7,075	\$7,500	\$8,100
18	Indian Creek Welcome Baptist Church School	C	23320	1200 Kempsville Road	1980	K - 12 (Combined)	Other Religious (Conservative Christian)	No	AACS, ODACS	6.1	54	\$2,500	\$2,800 - \$3,000	\$3,000 - \$3,100
19	Mount Lebanon Christian Academy	C	23322	884 Bells Mill Road www.themountleads.org	1997	PK - 3 (Elementary)	Other Religious (Conservative Christian)	No	ACSI	10.0	40	\$4,171	\$4,318 - \$4,345	N/A
20	Mount Pleasant Christian School	C	23322	1613 Mt. Pleasant Road www.mtpleasantchristian.org	1941	K - 8 (Elementary)	Other Religious (Conservative Christian)	No	ACSI, HRACS	10.0	93	\$4,475	\$4,475 - \$4,525	\$4,525
21	StoneBridge School	C	23321	P.O. Box 9247 (1629-A Jolliff Road) www.stonebridgeschool.com	1980	PK - 12 (Combined)	Other Religious (Conservative Christian)	ACSI	HRACS	9.0	276	\$7,875	\$8,200	\$9,200

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22	Rock Church School	F	23851	130 Lakeview Road www.rockfranklin.com	1978	K - 12 (Combined)	Other Religious (Conservative Christian)	No	ACE	9.2	36				
23	Calvary Christian Elementary School	N	23518	2331 E. Little Creek Rd. www.ccesnorfolk.org	1993	PK - 6 (Elementary)	Other Religious (Conservative Christian)	ACSI, AdvancED	HRACS	8.2	58	\$5,000	\$5,000	\$5,000	N/A
24	Faith Academy School of Excellence	N	23504	1010 E. 26th St. www.faseeagles.org	1993	PK - 8 (Elementary)	Other Religious (Conservative Christian)	ACSI, AdvancED		7.4	64				
25	Greenhill Farms Christian Academy	N	23513	969 Philpotts Road	1982	PK - 5 (Elementary)	Other Religious (Conservative Christian)	ICAA	ORUEF	7.7	46				
26	Ocean View Christian Academy	N	23503	9504 Selby Place www.ovcademy.com	1993	PK - 8 (Elementary)	Other Religious (Conservative Christian)	No	ACSI, SBACS	4.0	32	\$4,550	\$4,600	N/A	N/A
27	READY Academy Christian School	N	23510	418 E. Bute St. www.readyacademy.org	2004	PK - 3 (Elementary)	Other Religious (Conservative Christian)	No	ACSI	N/A	71				
28	Alliance Christian Academy	P	23701	5809 Portsmouth Blvd. www.alliancechristianacademy.net	1971	PK - 12 (Combined)	Other Religious (Conservative Christian)	ACSI	HRACS	14.0	227	\$5,265	\$5,265 - \$5.575	\$6,050	\$6,400

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29	Central Christian Academy	P	23701	1200 Hodges Ferry Road www.centralchristianacademy.com	1969	PK - 6 (Elementary)	Other Religious (Conservative Christian)	ACSI	HRACS	10.0	60	\$5,100	\$5,100	N/A	N/A
30	Portsmouth Christian Schools	P	23702	3214 Elliott Ave. www.portsmouthchristian.org	1965	PK - 12 (Combined)	Other Religious (Conservative Christian)	ACSI	HRACS	15.7	713				
31	Saint Mark Christian Academy	P	23704	2714 Frederick Blvd. www.stmarkva.org/smca		PK - 3 (Elementary)	Other Religious (Conservative Christian)	No	ACSI	N/A	N/A				
32	Sweethaven Christian Academy	P	23703	5100 W. Norfolk Road www.sweethavenchristian.org		PK - 12 (Combined)	Other religious (Conservative Christian)	No	AACS, ODACS	N/A	N/A	\$4,040	\$4,340	\$4,340 - \$4,540	\$4,340 - \$4,540
33	First Baptist Christian School	S	23434	2 campuses: 237 N. Main St. (Lower School), 3488 Godwin Blvd. (Middle and Upper Schools) www.firstbaptistchristian.org	1988	K -12 (Combined)	Other Religious (Conservative Christian)	ACSI, AdvancED	HRACS	11.3	211	\$3,995 - \$5,550	\$5,550	\$6,050	\$6,300
34	Coastal Christian Academy	VB	23464	640 Kempsville Road www.rockchurchinternational.com	1974	K - 12 (Combined)	Other Religious (Conservative Christian)	No	ACSI	N/A	N/A				
35	King’s Grant Day School	VB	23452	873 Little Neck Road www.kingsgrantdayschool.com		PK - 5 (Elementary)	Other Religious (Affiliated)	ICAA	ORUEF	9.3	56	\$150/wk	\$150/wk	N/A	N/A
36	New Light Baptist School of Excellence	VB	23464	5549 Indian River Road www.newlightfgbc.org	1989	PK - 5 (Elementary)	Other Religious (Conservative Christian)	No	ACSI	11.0	66				

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37	Open Door Christian Academy	VB	23452	3177 Virginia Beach Blvd. www.opendoorchapel.org		PK - 12 (Combined)	Other Religious (Conservative Christian)	No	ACE	4.8	10			
38	Tabernacle Baptist Academy	VB	23464	717 Whitehurst Landing Road www.tabernacle-vb.org/index.html	1969	PK - 12 (Combined)	Other Religious (Conservative Christian)		AACS, ODACS	N/A	N/A	\$4,150	\$4,150	\$4,700
39	Tidewater Adventist Academy	C	23320	1136 Centerville Tpke. N. www.adventisteducation.com		PK - 12 (Combined)	Other Religious (Affiliated)	SDASPC	GCSDAC	10.2	56			
40	Veritas Christian Academy	C	23320	700 Oak Grove Road www.veritasca.com		K - 12 (Combined)	Other Religious (Affiliated)	No	ACCS	6.9	142	\$8,002	\$8,112	\$8,112
41	BINA High School	N	23517	425 Washington Park www.binahighschool.com	2007	9 - 12 (Secondary)	Other Religious (Affiliated)	AdvancED	Torah Umesorah	7.0		N/A	N/A	\$12,500 - \$12,600
42	Norfolk Christian Schools	N	23505	3 campuses: 255 Thole St. (Upper School), 7000 Granby St. (Lower School - Norfolk), 1265 Laskin Road (Lower School - Va Beach 23451) www.norfolkchristian.org	1952	PK - 12 (Combined)	Other Religious (Affiliated)	VAIS, AdvancED	CESA, HRACS	10.9	711	\$6,710	\$7,605	\$9,320 - \$10,575
43	Trinity Lutheran School	N	23505	6001 Granby St. www.trinitylutherschoolnorfolk.org	1946	PK - 5 (Elementary)	Other Religious (Affiliated)	AdvancED, SED-LCMS	NLSA	12.0	78	\$5,325	\$5,325	N/A

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44	Yeshivas Aish Kodesh Talmudical Academy of Norfolk	N	23507	612 Colonial Ave. www.yeshivasaishkodesh.com	2003	9 - 12 (Secondary)	Other Religious (Affiliated)	AdvancED	Torah Umesorah	4.5	25			
45	Toras Chaim	P	23703	3110 Sterling Point Drive www.toraschaim.net		PK - 8 (Elementary)	Other Religious (Affiliated)	AdvancED	Torah Umesorah	6.5	64			
46	Hebrew Academy of Tidewater	VB	23462	5000 Corporate Woods Dr., Suite 180 www.hebrewacademy.net	1955	PK - 5 (Elementary)	Other Religious (Affiliated)	VAIS	RAVSAK, PEJE	6.3	104	\$12,900	\$13,700 - \$15,200	N/A
47	Oaktree Academy	VB	23464	817 Kempsville Road www.oaktreeacademy.org	1994	K - 12 (Combined)	Other Religious (Affiliated)	AdvancED	HRACS, CSI, NAUMS	N/A	N/A	\$3,865	\$3,865 - \$4,145	\$4,145 - \$5,145
48	Tidewater Classical Academy	VB	23453	1201 Rosemont Road www.tidewaterclassical.com		K - 8 (Elementary)	Other Religious (Affiliated)		ACCS, HRACS	7.4	26	\$2,800	\$4,100	\$4,100
49	Virginia Beach Friends School	VB	23451	1537 Laskin Road www.friends-school.org	1955	PK - 12 (Combined)	Other Religious (Affiliated)	VAIS	FCE	6.1	155	\$6,772 - \$9,424	\$10,557 - \$11,615	\$11,615 - \$13,010
50	Greenbrier Enrichment Center & School	C	23320	825 Greenbrier Parkway www.gecschool.org	1994	PK - 5 (Elementary)	Other Religious (Unaffiliated)	No		10.0 / 16.0	63	\$110/wk	\$115-\$120/wk	N/A

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51	Providence Christian School	C	23325	501 Providence Road www.pcschesapeake.org	1981	PK - 6 (Elementary)	Other Religious (Unaffiliated)	No		4.3	74			
52	Alpha Beta Cappa Christian Academy	N	23513	7425 Chesapeake Blvd.	1901	PK - 4 (Elementary)	Other Religious (Unaffiliated)	No		10.0	80	\$140/wk	\$140/wk	N/A
53	Azalea Garden Christian School	N	23513	5160 Beamon Road www.azaleagardenchristian.com		K - 12 (Combined)	Other Religious (Unaffiliated)	No		12.8	97			
54	Tabernacle of Prayer Christian School	N	23508	3611 Colley Ave. 625-1875		PK - 12 (Combined)	Other Religious (Unaffiliated)	No	HRACS	8.5	75			
55	Court Street Academy	P	23704	447 Court Street www.courtstreetacademy.com	1965	PK - 8 (Elementary)	Other Religious (Unaffiliated)	No		7.5	98	\$3,150	\$3,490 - \$3,540	\$3,540
56	Joyous Sound Education & Enrichment Center	P	23701	205 Gust Lane www.jseec.org	1995	PK - 3 (Elementary)	Other Religious (Unaffiliated)	No		5.8	21			
57	Anchor Christian School	VB	23455	3624 Dupont Circle		PK - 5 (Elementary)	Other Religious (Unaffiliated)	No		7.3	22			

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58	Back Bay Christian Academy	VB 23457	1212 Princess Anne Road www.backbaychristianacademy.org	2000	PK, 6 - 12 (Combined)	Other Religious (Unaffiliated)	No		7.7	20				
59	Beach Montessori Christian Academy	VB 23454	1101 Eaglewood Drive www.beachmontessoritech.com	2002	PK - 8 (Elementary)	Other Religious (Unaffiliated)	No		8.0	39				
60	Gateway Christian School	VB 23462	5473 Virginia Beach Blvd. www.gatewaycrusaders.com		PK - 12 (Combined)	Other Religious (Unaffiliated)	No		12.6	253	\$5,390	\$5,390	\$5,390	\$5,420
61	Ivy League Academy	VB 23462	520 Constitution Dr. www.ivyleagueacademy.net	1986	PK - 5 (Elementary)	Other Religious (Unaffiliated)	No		12.0	48				
62	Pleasant Grove Christian Academy of Excellence	VB 23464	2153 Kempsville Road www.pgcae.org		PK - 2 (Elementary)	Other Religious (Unaffiliated)	No		1.6	5				
63	Victory Innovative Christian Academy	VB 23452	902 S. Lynnhaven Road v-innovativechristianacademy.org	2004	1 - 12 (Combined)	Other Religious (Unaffiliated)	No	NAPS	7.2	23	N/A	\$5,700	\$5,700	\$5,700
64	Galilee Montessori School	VB 23451	3928 Pacific Ave. www.galileemontessorischool.net	1988	PK - 3 (Elementary)	Other Religious (Unaffiliated) (Special Emphasis)	No	IMC	15.0	32	\$6,205	\$8,085	N/A	N/A

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65	McLea School	N	23518	745 Bancker Road		PK - 5 (Elementary)	Nonsectarian (Regular)	No		1.5	3				
66	Norfolk Academy	N	23502	1585 Wesleyan Dr. www.norfolkacademy.org	1728	1 - 12 (Combined)	Nonsectarian (Regular)	VAIS, SAIS, AdvancED		12.0	1,228	N/A	\$17,750	\$17,750 - \$21,000	\$21,000
67	Norfolk Collegiate School	N	23505	7336 Granby St. (Middle and Upper Schools), 5429 Tidewater Drive (Lower School) www.norfolkcollegiate.org	1948	K - 12 (Combined)	Nonsectarian (Regular)	VAIS, AdvancED		11.3	692	\$13,675	\$14,135 - \$14,989	\$15,947	\$16,592
68	Ryan Academy of Norfolk	N	23518	844 Jerome Ave. www.ryanacademy.org	1950	1 - 12 (Combined)	Nonsectarian (Regular)	No		9.2	81	N/A	\$6,135 - \$7,185	\$7,185	\$7,705
69	The Williams School	N	23507	419 Colonial Ave. www.thewilliamsschool.org	1927	K - 8 (Elementary)	Nonsectarian (Regular)	VAIS		4.7	180	\$13,050	\$13,050	\$13,050	N/A
70	Town & Country Day School	N	23502	1421 Kempsville Road www.townandcountrydayschool.com		PK - 6 (Elementary)	Nonsectarian (Regular)	No		15.1	106	\$80/wk	\$80/wk	\$80/wk	N/A
71	Christopher Academy	P	23703	3300 Cedar Lane www.christopher-academy.org	1970	PK - 5 (Elementary)	Nonsectarian (Regular)	VAIS		9.2	108	\$5,575 - \$7,075	\$7,175	N/A	N/A
72	Nansemond-Suffolk Academy	S	23434	3373 Pruden Blvd. www.nsacademy.org	1966	PK - 12 (Elementary)	Nonsectarian (Regular)	VAIS, AdvancED		6.8	765	\$11,580	\$11,580	\$12,640	\$14,140

TABLE 8

INDEPENDENT K-12 SCHOOLS IN SOUTHSIDE HAMPTON ROADS

School	City	ZIP Code	Mailing Address and Website	Established	Grade Span	Typology	State-Approved Accreditation	Other Memberships	Student / Teacher Ratio	Total Students (non-pre K)	K Tuition + Fees	Grades 1-5 Tuition + Fees	Grades 6-8 Tuition + Fees	Grades 9-12 Tuition + Fees
Costs are approximations, based upon the available information from each school. The actual cost of tuition and fees can depend on variables such as church membership, financial need, the type of payment plan selected, or how many students from one family are in attendance. Services such as transportation and extended care are generally offered at additional expense.														
73	Baylake Pines School	VB 23455	4444 Shore Drive www.baylakepines.com		PK - 8 (Elementary)	Nonsectarian (Regular)	No		7.2	237	\$7,288 - \$9,169	\$9,169 - \$9,590	\$10,646	N/A
74	Cape Henry Collegiate School	VB 23454	1320 Mill Dam Road www.capehenrycollegiate.org	1924	PK - 12 (Combined)	Nonsectarian (Regular)	VAIS, SAIS, AdvancED		10.0	819	\$11,230 - \$14,400	\$15,315 - \$15,995	\$17,595	\$17,995
75	Isle of Wight Academy	IW 23397	P.O. Box 105 www.iwacademy.com	1967	PK - 12 (Combined)	Nonsectarian (Regular)	VISA, AdvancED	SAIS	15.6	562	\$5,250	\$5,950 - \$6,050	\$6,100 - \$6,200	\$6,200
76	Chesapeake Montessori School	C 23322	2 campuses: 516 Albemarle Dr., Ste. C (23322); 2013 Scenic Parkway (23323) www.chesapeakemontessorischool.org	1991	PK - 6 (Elementary)	Nonsectarian (Special Emphasis)	No	AMS	4.1	64	\$4,636 - \$7,327	\$8,397		
77	Greenbrier Montessori School	C 23320	1100 Greenbrier Parkway www.greenbriermontessori.com	1999	PK - 6 (Elementary)	Nonsectarian (Special Emphasis)	No	AMS	8.2	33	\$6,315 - \$7,620	\$7,730 - \$8,335	\$8,335	N/A
78	Montessori Academy of Virginia (Chesapeake)	C 23320	1468 Kempsville Road www.montessoriva.com	1997	PK - 5 (Elementary)	Nonsectarian (Special Emphasis)	No		5.5	36	\$6,150	\$6,400 - \$6,500	\$6,500	N/A
79	Ghent Montessori School	N 23507	610 Mowbray Arch www.ghentmontessorischool.com	1978	PK - 8 (Elementary)	Nonsectarian (Special Emphasis)	No	IMC	5.0	168	\$6,250 - \$9,130	\$6,250 - \$9,250	\$9,700	N/A

TABLE 8

INDEPENDENT K-12 SCHOOLS IN SOUTHSIDE HAMPTON ROADS

School	City	ZIP Code	Mailing Address and Website	Established	Grade Span	Typology	State-Approved Accreditation	Other Memberships	Student / Teacher Ratio	Total Students (non-pre K)	K Tuition + Fees	Grades 1-5 Tuition + Fees	Grades 6-8 Tuition + Fees	Grades 9-12 Tuition + Fees	
	Costs are approximations, based upon the available information from each school. The actual cost of tuition and fees can depend on variables such as church membership, financial need, the type of payment plan selected, or how many students from one family are in attendance. Services such as transportation and extended care are generally offered at additional expense.														
80	McDonald Montessori	N	23504	4200 Granby St. www.mcdonaldmontessori.com		PK - 3 (Elementary)	Nonsectarian (Special Emphasis)	No	AMS	7.3	22	\$6,450	\$6,850	N/A	N/A
81	Courthouse Montessori School	VB	23453	1305 Windmill Point Crescent www.courthousemontessorischool.com		PK - 5 (Elementary)	Nonsectarian (Special Emphasis)	No		16.0	32	\$675/mo	\$675/mo	N/A	N/A
82	Montessori Academy of Virginia (Virginia Beach)	VB	23462	4774 Alicia Dr. www.montessoriva.com	1997	PK - 5 (Elementary)	Nonsectarian (Special Emphasis)	No		8.3	25				
83	Kempsville Center for Behavioral Health	N	23502	860 Kempsville Road www.kempsvillecbh.com		K - 12 (Combined)	Nonsectarian (Special Education)	VAISEF							
84	Brighton Behavioral Health Center	P	23704	301 Fort Lane www.brightonbhc.com		7 - 12 (Secondary)	Nonsectarian (Special Education)	VAISEF							
85	Harbor Point Behavioral Health Center	P	23704	301 Fort Lane www.harborpointbhc.com		7 - 12 (Secondary)	Nonsectarian (Special Education)	VAISEF							

TABLE 8

INDEPENDENT K-12 SCHOOLS IN SOUTHSIDE HAMPTON ROADS

School	City	ZIP Code	Mailing Address and Website	Established	Grade Span	Typology	State-Approved Accreditation	Other Memberships	Student / Teacher Ratio	Total Students (non-pre K)	K Tuition + Fees	Grades 1-5 Tuition + Fees	Grades 6-8 Tuition + Fees	Grades 9-12 Tuition + Fees	
Costs are approximations, based upon the available information from each school. The actual cost of tuition and fees can depend on variables such as church membership, financial need, the type of payment plan selected, or how many students from one family are in attendance. Services such as transportation and extended care are generally offered at additional expense.															
86	Chesapeake Bay Academy	VB	23462	821 Baker Road www.cba-va.org	1989	K - 12 (Combined)	Nonsectarian (Special Education)	VAIS	5.0	135 (Middle and Upper Schools Only)	\$20,200	\$20,200	\$20,800	\$22,900	
Acronyms	AACS	American Association of Christian Schools						NAUMS	National Association of University-Model Schools						
	ACE	Accelerated Christian Education						NLSA	National Lutheran School Accreditation						
	ACCS	Association of Classical & Christian Schools						ODACS	Old Dominion Association of Church Schools						
	ACSI	Association of Christian Schools International						ORUEF	Oral Roberts University Educational Fellowship						
	ACTS	Association of Christian Teachers and Schools						PEJE	Partnership for Excellence in Jewish Education						
	AMS	American Montessori Society						SAIS	Southern Association of Independent Schools						
	CESA	Council on Educational Standards & Accountability						SBACS	Southern Baptist Association of Christian Schools						
	FCE	Friends Council on Education						SED-LCMS	Southeastern District, Lutheran Church - Missouri Synod						
	GSDAC	General Conference of the Seventh-Day Adventist Church						SDASPC	Seventh-Day Adventist Schools of the Potomac Conference						
	HRACS	Hampton Roads Association of Christian Schools						VAIS	Virginia Association of Independent Schools						
	ICAA	International Christian Accrediting Association						VAISEF	Virginia Association of Independent Specialized Education Facilities						
	IMC	International Montessori Council						VISA	Virginia Independent Schools Association						
	NAPS	National Association of Private Schools													
Sources: 2009-10 Private School Universe Survey, at: http://nces.ed.gov/surveys/pss/privateschoolsearch/ Virginia Council for Private Education, at: http://www.vcpe.org/ Private schools of southern Hampton Roads															



Homeschooling: Our Fastest-Growing Alternative in K-12 Education



HOMESCHOOLING: OUR FASTEST-GROWING ALTERNATIVE IN K-12 EDUCATION

In a homeschooling environment, the teacher need not be certified, but the child MUST learn. In a public school environment, the teacher MUST be certified, but the child need NOT learn.

– Gene Royer, educational consultant

A

s recently as one generation ago, most parents considered just two main options when planning for their children's education – public or private school. For all but a very few students, primary and secondary education was synonymous with enrolling in a school outside the home. Compulsory school attendance laws in most states discouraged homeschooling, and "distance learning" was limited to written correspondence courses.

This situation began to change in the early 1980s, as a growing number of parents, encouraged by the work of educational theorists like John Holt and Raymond and Dorothy Moore, asserted their rights to direct the education of their children. The first magazine for American homeschoolers, *Growing Without Schooling*, appeared in 1977. Six years later, the Homeschool Legal Defense Association (HSLDA) was established to protect homeschoolers against legal challenges and to lobby for the formal recognition of homeschooling in all 50 states.

The Home Educators Association of Virginia (HEAV) likewise coalesced in 1983, providing a first unified voice for homeschoolers throughout the Commonwealth of Virginia. HEAV lobbied successfully for the passage of Virginia's homeschool statute in 1984, and the association is still active today. Homeschooling is now legal throughout the United States, although policies and procedures vary considerably from place to place. Today's legal controversies do not concern the basic right of parents to educate their children at home (that is now settled law and practice), but rather the degree to which homeschooled children ought have access to public school services or be able to participate on public school sports teams.

The rise of the homeschooling movement has many contributing factors. Author Milton Gaither points to the influence of countercultural movements on both the left and right side of the ideological spectrum, suburbanization and the American "cult of the child" ("*Homeschool: An American History*," Palgrave Macmillan, 2008).

In the last 15 years, the Internet has given homeschooling a significant boost. Innumerable resources are now freely available online to home educators and students – lesson plans, curricula and informational websites of all kinds, as well as discussion forums and support groups that help connect homeschoolers over long or short distances. As a supplement to their parent-directed education, a growing number of homeschooled students now enroll directly in courses that are offered by a wide array of virtual academies. Upper-level students regularly complete advanced coursework or earn early college credits online while learning from home.

In this chapter, we'll take a closer look at homeschooling throughout Hampton Roads. We'll examine why homeschooling has become the fastest-growing segment of K-12 education and we'll explore the legal framework for home education in the Commonwealth. We'll identify the institutions and other

groups in our region that support home education. Finally, we'll see how well homeschoolers fare compared to students at traditional K-12 schools.

Who Homeschools And Why?

The homeschooling movement has taken off by leaps and bounds in the past generation. **The National Center for Education Statistics estimates that about 1.5 million, or 2.9 percent, of all school-age children were homeschooled in 2007 – a 36 percent increase since 2003 and a 74 percent increase since 1999 (National Center for Education Statistics, “The Condition of Education 2009”).**

As reporting requirements vary widely from state to state, however, the precise number of homeschooled students is difficult to determine and Virginia reported only 2 percent of school-aged children as being homeschooled in 2010-11 (see Graph 2). Some homeschool advocates suggest that official statistics underestimate the true number of homeschoolers, some of whom may decline to represent themselves as such to public authorities. The Commonwealth of Virginia requires all homeschool families, with the exception of those who have obtained religious exemption, to submit an annual notice of intent.

Statistics from the Virginia Department of Education reveal a consistent pattern of growth in the number of homeschooled students, at both the state and regional level. **As Table 1 indicates, the Virginia Department of Education identified 31,978 homeschooled students throughout the Commonwealth and 5,245 in Hampton Roads in the 2010-11 school year.** These figures represent approximately 2 percent of the school-age population (see Graph 2). In real numbers, Chesapeake and Virginia Beach boast the greatest number of homeschoolers in our region (see Graph 1). As a percentage of the total school-age population, rural localities like Gloucester, Surry and Southampton Counties stand out for their comparatively high proportion of students educated at home (see Graph 2).

National survey data suggest that the “typical” homeschool family is a white, two-parent household with three or more children (see Table 2). However, as the number of homeschool families has grown, so too has their diversity. Conservative

Christians were a key constituency of the homeschool movement from the very beginning, and “a desire to provide religious or moral instruction” remains the single most important motivation cited by parents who homeschool, according to the National Center for Education Statistics (see Table 3). Many of the oldest homeschool organizations (including both HLSDA and HEAV) are Christian-based. Since the 1990s, more secular groups, like the Organization of Virginia Homeschoolers, have coalesced in order to represent homeschoolers from different cultural and religious backgrounds.

The changing face of home education received some attention earlier this year when a Newsweek cover story (“Why Urban, Educated Parents Are Turning to DIY Education,” Jan. 30, 2012) depicted homeschooling as a newly fashionable trend among urban elites. **Motivations for these new homeschoolers include frustration with public schools’ emphasis on standardized testing and perceptions of a narrow definition of academic achievement, as well as parents’ “desire to craft an education just right for each child.”¹ Still other parents have turned to homeschooling as a means of addressing their children’s autism, ADHD or other special needs.** Cherrie Moore, owner of the Virginia Beach homeschool bookstore Moore Expressions, told us that she has seen an uptick in parents who have begun homeschooling their middle school- and high school-aged children in response to problems with bullying and other negative social influences at local schools.

The breadth of Hampton Roads’ homeschool community is immediately evident through the regional listings on the websites of the Home Educators Association of Virginia (www.heav.org) and the Organization of Virginia Homeschoolers (www.vahomeschoolers.org). There are homeschool support groups of all kinds, including specialized groups for African Americans, military families,

¹ <http://www.thedailybeast.com/newsweek/2012/01/29/why-urban-educated-parents-are-turning-to-diy-education.html>

radical unschoolers (those who do not believe in any kind of formal, group education) and practitioners of classical Christian education. The consistency offered by home education is particularly appealing to a number of members of our region's military community. Given their families' frequent moves and deployments, several military spouses we spoke with found the role of teaching parent a natural fit.

To sum up: There is no single dominant profile of a homeschooling family in Hampton Roads. The reasons that families in our region choose to homeschool are as diverse as the families themselves. **Many of the teaching parents we spoke with did not necessarily come to homeschooling through firm philosophical or pedagogical convictions, but rather as an option that happened best to fit their family's needs at a particular time.** It's not uncommon for parents to educate one or two of their children at home, while enrolling siblings in a traditional school. Other parents plan to homeschool only for a few years of their children's education. The one commonality we did encounter among our region's homeschoolers is that mothers are almost always the primary teaching parent, with fathers participating in home education in a more supplemental way.



TABLE 1

HOMESCHOOLED STUDENTS AND RELIGIOUS EXEMPTIONS, 2010-2011

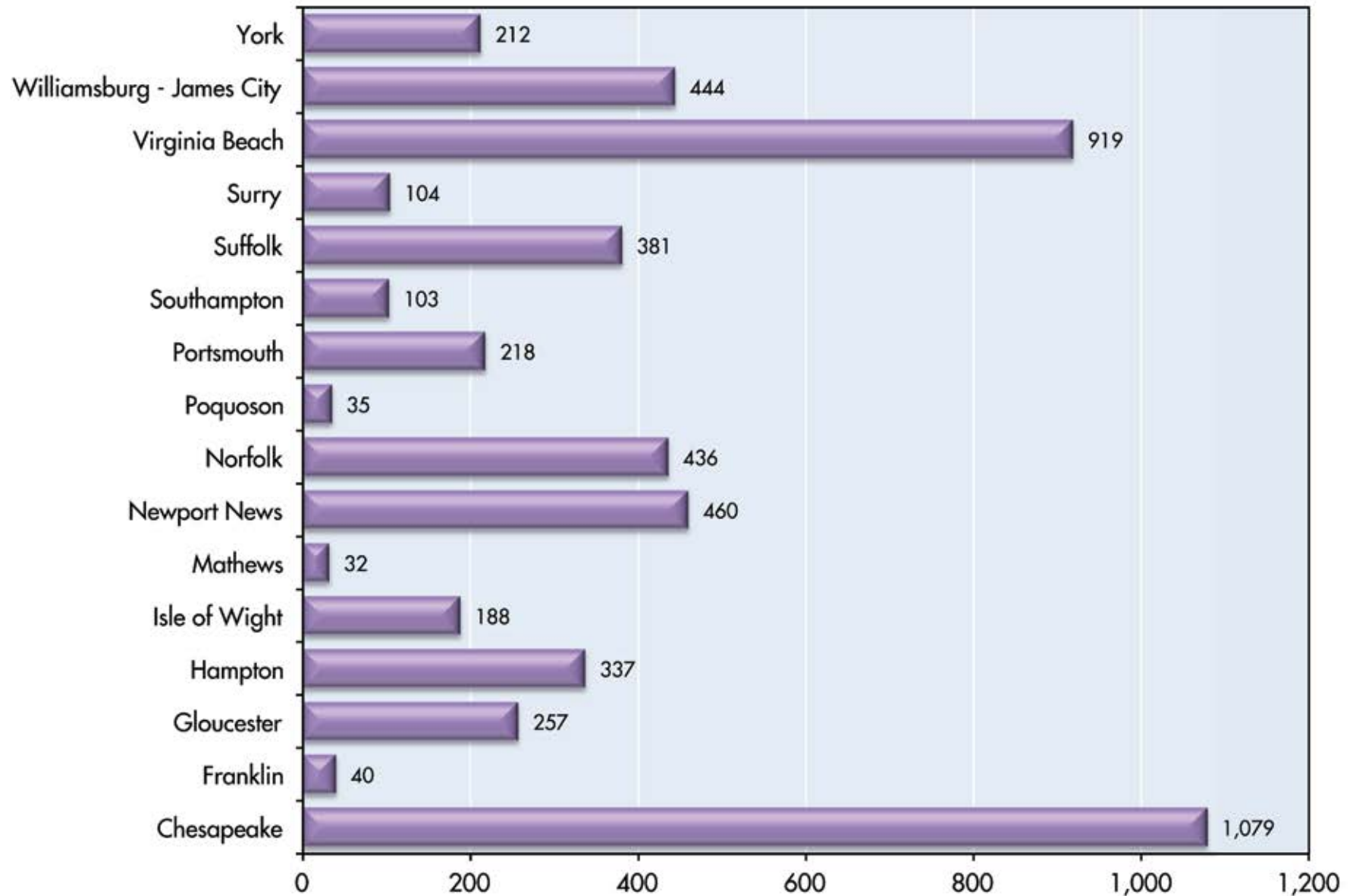
	Home Instruction K-5	Home Instruction 6-8	Home Instruction 9-12	Home Instruction Other	Total Home Instruction	Religious Exemptions K-5	Religious Exemptions 6-8	Religious Exemptions 9-12	Religious Exemptions Other	Total Religious Exemptions
Chesapeake	462	242	218	0	922	122	35	0	0	157
Franklin	14	12	10	0	36	2	1	1	0	4
Gloucester	45	24	61	0	130	32	30	65	0	127
Hampton	135	71	71	2	279	13	22	23	0	58
Isle of Wight	81	31	34	0	146	22	9	11	0	42
Mathews	13	5	9	0	27	4	0	1	0	5
Newport News	246	87	99	0	432	20	4	4	0	28
Norfolk	219	98	101	0	418	10	5	3	0	18
Poquoson	13	11	7	0	31	0	1	3	0	4
Portsmouth	93	51	46	12	202	7	2	7	0	16
Southampton	22	24	33	0	79	6	5	13	0	24
Suffolk	181	75	56	0	312	48	16	5	0	69
Surry	23	26	41	2	92	0	2	9	1	12
Virginia Beach	469	211	221	0	901	13	2	3	0	18
Williamsburg/ James City	172	96	101	0	369	0	0	0	75	75
York	111	55	36	0	202	5	2	3	0	10
Hampton Roads	2,299	1,119	1,234	16	4,578	304	136	151	76	667
Virginia	12,157	5,869	6,008	648	24,682	2,412	1,571	1,997	1,316	7,296

Source: Virginia Department of Education

*Students with a religious exemption are in addition to those students counted as being involved in home instruction.

GRAPH 1

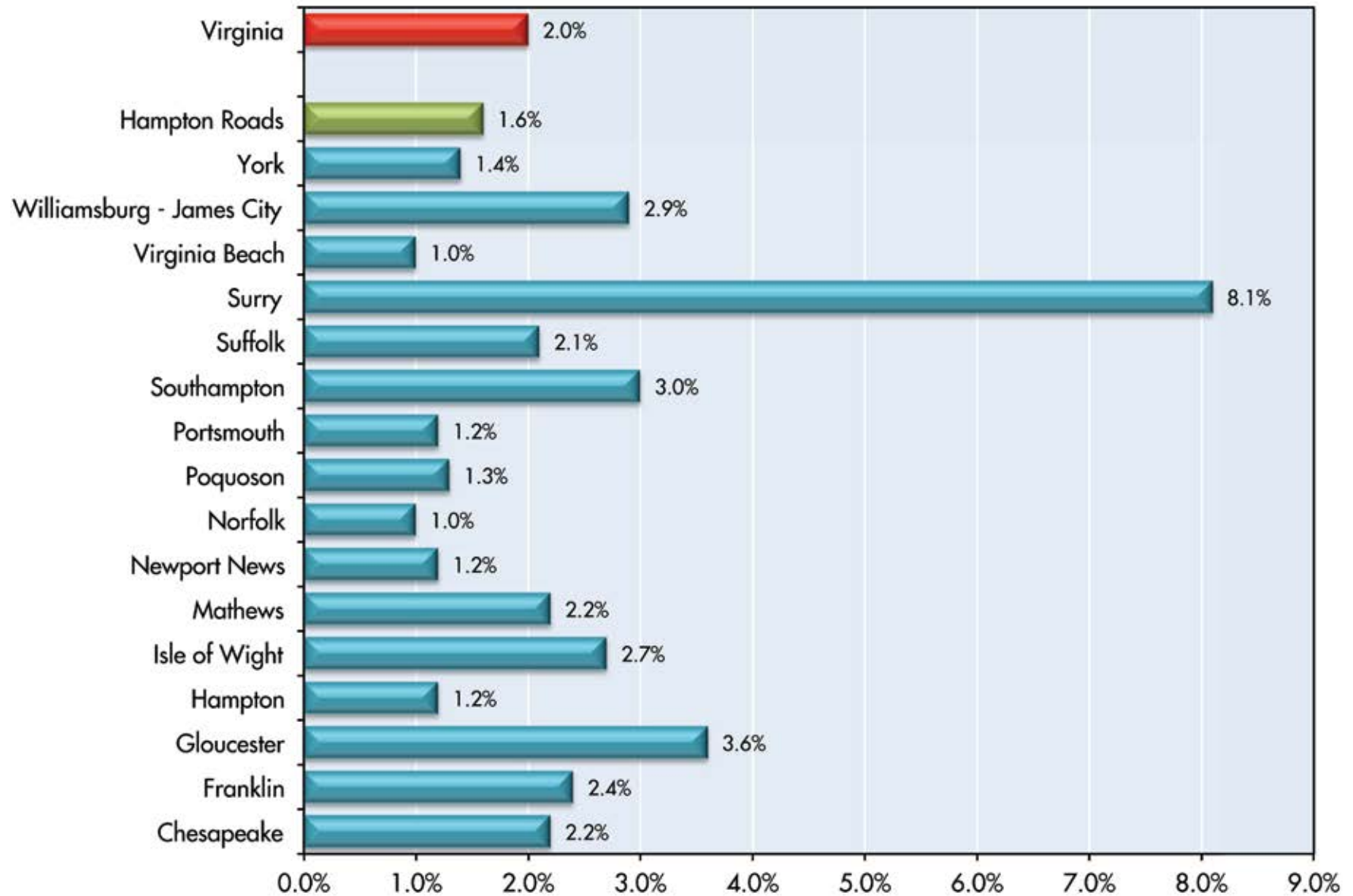
NUMBER OF HOMESCHOOLED STUDENTS IN HAMPTON ROADS BY CITY OR COUNTY, 2010-2011



Source: Virginia Department of Education

GRAPH 2

PERCENTAGE OF HOMESCHOOLED STUDENTS IN HAMPTON ROADS BY CITY OR COUNTY, 2010-2011



Source: Virginia Department of Education

TABLE 2

**NUMBER AND PERCENTAGE DISTRIBUTION OF ALL SCHOOL-AGE CHILDREN IN THE U.S. WHO WERE
HOMESCHOOLED AND HOMESCHOOLING RATE, BY SELECTED CHARACTERISTICS (2007)**

Characteristic	Number	Percentage Distribution	Homeschooling Rate*
Total	1,508,000	100.0%	2.9%
Homeschooled entirely	1,266,000	84.0%	100.0%
Homeschooled and enrolled in school part time	242,000	16.0%	100.0%
Race/ethnicity			
White	1,159,000	76.8%	3.9%
Black	61,000	4.0%	0.8%
Hispanic	147,000	9.8%	1.5%
Other	141,000	9.3%	3.4%
Number of children in the household			
One child	187,000	12.4%	2.2%
Two children	412,000	27.3%	2.0%
Three or more children	909,000	60.3%	4.1%
Number of parents in the household			
Two parents	1,348,000	89.4%	3.6%
One parent	115,000	7.6%	1.0%
Nonparental guardians	45,000	3.0%	2.1%
Parents' participation in the labor force			
Two parents, one in labor force	808,000	53.6%	7.5%
Two parents, both in labor force	509,000	33.8%	2.0%
One parent, in labor force	127,000	8.4%	1.3%
No parent in labor force	64,000	4.3%	1.5%
Household income			
\$25,000 or less	239,000	15.9%	2.1%
\$25,001 - 50,000	364,000	24.1%	3.4%
\$50,001 - 75,000	405,000	26.8%	3.9%

TABLE 2

**NUMBER AND PERCENTAGE DISTRIBUTION OF ALL SCHOOL-AGE CHILDREN IN THE U.S. WHO WERE
HOMESCHOOLED AND HOMESCHOOLING RATE, BY SELECTED CHARACTERISTICS (2007)**

Characteristic	Number	Percentage Distribution	Homeschooling Rate*
\$75,001 or more	501,000	33.2%	2.7%
Parents' education			
High school diploma or less	206,000	13.7%	1.4%
Some college or vocational/technical	549,000	36.4%	3.8%
Bachelor's degree	444,000	29.4%	3.9%
Graduate/professional degree	309,000	20.5%	2.9%
* The homeschooling rate is the percentage of the total subgroup that is homeschooled. For example, some 3.6% of all school-age children in two-parent families were homeschooled.			
Source: National Center for Education Statistics, at http://nces.ed.gov/programs/coe/tables/table-hsc-1.asp			

TABLE 3

**PERCENTAGE OF SCHOOL-AGE CHILDREN WHO WERE HOMESCHOOLED IN THE U.S.,
BY REASONS PARENTS GAVE AS IMPORTANT AND MOST IMPORTANT
FOR HOMESCHOOLING (2007)**

Reason	Important*	Most Important
A desire to provide religious or moral instruction	83.3%	35.8%
A concern about environment of other schools (such as safety, drugs or negative peer pressure)	87.6%	20.5%
A dissatisfaction with academic instruction at other schools	72.7%	17.1%
Other reasons (including family time, finances, travel and distance)	32.2%	14.3%
A desire to provide a nontraditional approach to child's education	65.2%	6.5%
Child has other special needs	20.9%	3.6%
Child has a physical or mental health problem	11.2%	2.1%
* Respondents could choose more than one reason. Percentages are based on a population of 1,508,000 homeschoolers.		
Source: National Center for Education Statistics, at: http://nces.ed.gov/programs/coe/tables/table-hsc-2.asp		

Homeschool Regulations In Virginia

Who is eligible to homeschool in Virginia? The answer is, nearly all parents, as long as they submit a small amount of paperwork to their local school divisions each year. The Commonwealth provides four options for parents who wish to educate their children at home:

- The teaching parent holds a high school diploma. (Option 1)
- The teaching parent meets the qualifications for a teacher prescribed by the Board of Education. (Option 2)
- The teaching parent provides a program of study or curriculum which may be delivered through a correspondence course or distance learning program, or in any other manner. (Option 3)
- The teaching parent provides evidence that the parent is able to provide an adequate education for the child. (Option 4)

All four options require parents to submit accompanying documentation to their local school division superintendents each year by Aug. 15. The notice of intent to homeschool must also include a description of the curriculum that will be followed in the coming school year, “for information purposes only.” Superintendents are not asked to evaluate or judge the submitted curricula.²

One remaining legal stipulation for Virginia homeschoolers is that teaching parents must follow up with evidence of their children’s academic achievement by Aug. 1 of the following year. This can be demonstrated through a satisfactory score on “any nationally normed standardized achievement test,” or through “an evaluation or assessment which the school division superintendent determines to indicate that the child is achieving an adequate level of educational growth and progress.” Failure to comply can result in a one-year probationary period, followed by an order to cease home instruction (if requirements remain unfulfilled). By all accounts, this contingency is rarely invoked.

² All of the guidelines cited here can be found in the handbook “Home Instruction in Virginia,” available at: http://www.doe.virginia.gov/students_parents/private_home/home_instruction/home_instruction_handbook.pdf.

The majority of homeschool families in Virginia adhere to the guidelines summarized above. **However, a family that is conscientiously opposed to attendance at school by reason of “bona fide religious training or belief,” which “does not include essentially political, sociological, or philosophical views or a merely personal code,” may seek religious exemption through a petition to their local school board. Families receiving religious exemption are not required to submit the documentation listed above.** In 2010-11, 7,296 school-age children in Virginia, including 667 in Hampton Roads, were subject to this exemption (see Graph 3). This is a small, but not insignificant, proportion of all homeschooled students.

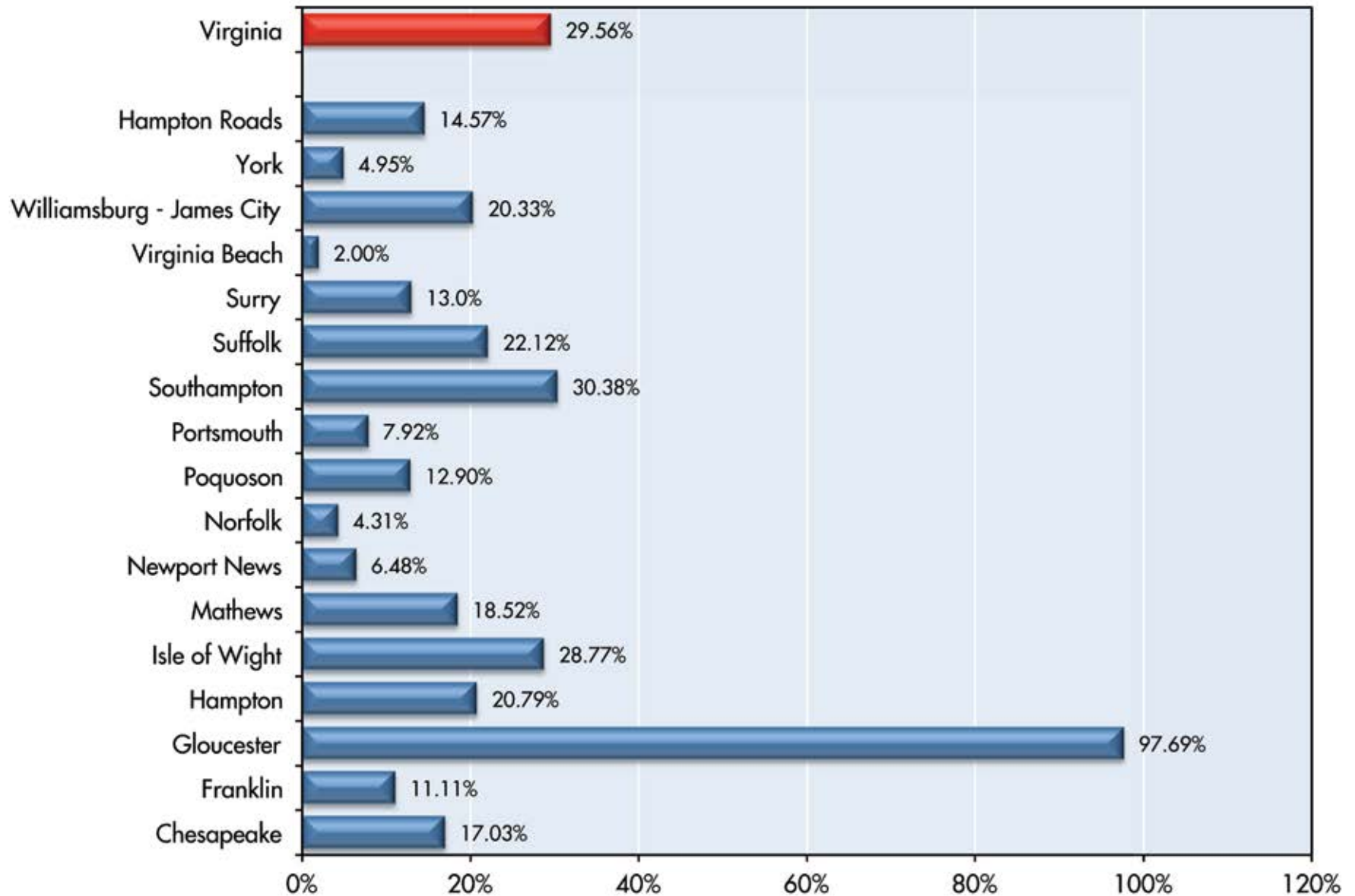
State policies toward homeschooling vary as widely as the state policies governing private schools (as pointed out in another chapter of this report). The Homeschool Legal Defense Association categorizes Virginia among the 20 states with “moderate” homeschool regulation, which is to say that teaching parents are required to submit notification, test scores and/or professional evaluation of student progress to public authorities. Six “high-regulation” states have more stringent requirements, while 14 “low-regulation” states require parental notification only. The remaining 10 states do not require homeschooling parents to initiate any contact with public authorities.³

The families with whom we spoke believe that Virginia’s homeschool policies are fair and straightforward. In fact, several indicated to us that they welcomed Virginia’s annual testing requirement as an opportunity to gain additional feedback about their children’s academic performance. Few families had encountered any difficulties in their interactions with public authorities. The most common grievance we heard concerned school districts’ varying expectations of the curriculum description that Virginia homeschoolers must submit each year. While some districts have been content with a brief list, others have asked for more extensive documentation. The discrepancy has been acknowledged by the General Assembly, which this year passed legislation clarifying that the required curriculum description need *only* include a list of subjects to be studied.

³ <http://www.hsllda.org/laws/>

GRAPH 3

PERCENTAGE OF RELIGIOUS EXEMPTIONS FOR HOME STUDY BY CITY OR COUNTY IN HAMPTON ROADS, 2010-2011



Source: Virginia Department of Education

Resources For Hampton Roads Homeschoolers

A common concern voiced by those pondering the pros and cons of home education has to do with socialization. How will homeschooled children make friends, learn to interact with peers and gain exposure to a sufficiently broad spectrum of ideas and experiences? If you mention the word “socialization” to Hampton Roads homeschoolers, however, they’re apt to roll their eyes impatiently. An impressive network of support groups and other initiatives serve our region’s homeschool community. Many of the groups are cooperative and depend on parent volunteers. Some are small and informal; others started with the participation of just a few families and have since grown into larger institutions. Hampton Roads is home to homeschool sports leagues, scout troops, proms, music and drama programs, speech and debate clubs, and numerous other extracurricular opportunities. Several homeschool organizations offer academic classes as well. In sum, there is no shortage of opportunities for area homeschoolers to learn from and interact with peers.

While the following list is by no means exhaustive, the organizations named below represent some of the most prominent institutions run by and for Hampton Roads homeschoolers. Many, though not all, of the organizations identify themselves as Christian:

- Christian Military Homeschoolers: Activities and enrichment classes for military families in Virginia Beach (<http://www.militaryhomeschooler.com>)
- Classical Conversations: A nationwide organization that promotes a structured model of classical Christian education. Local communities, each led by trained parent-tutors, meet once a week in several sites across Hampton Roads. (<http://www.classicalconversations.com/>)
- Hampton Roads Generals Homeschool Football Team: Christian football team for homeschooled and private-schooled young men, ages 13-18 – practices in Newport News (<http://www.leaguelineup.com/welcome.asp?url=hrg>)
- HERE (Home Educators Recreation & Enrichment Group): Extracurricular opportunities for Peninsula homeschoolers, including weekly physical education, monthly field trips, holiday parties and other educational events (<https://www.homeschool-life.com/va/here>)
- Homeschool Out of the Box: Norfolk co-op committed to high-level secular instruction (<http://www.hsobx.org>)
- Homeschool Plus: A long-standing ministry of Ingleside Church in Norfolk that offers a broad menu of academic courses, extracurricular activities and other resources for Christian homeschoolers (<http://www.homeschoolplusinc.org>)
- Kingdom Education for Young Scholars (KEYS): Academic courses, extracurricular activities and other resources for Christian homeschoolers, located at the Community Church of Chesapeake (<https://www.keysofva.org/index.html>)
- Moore Expressions: This homeschool bookstore, one of the largest on the East Coast, has been a center of the Hampton Roads homeschool community for more than two decades. (<http://www.mooreexpressions.com/>)
- Renaissance School of the Arts: Provides homeschool students from diverse backgrounds with education in the visual and performing arts – located in Suffolk (<https://sites.google.com/site/rsatidewaterva>)
- SAGE and PAGE (Southside and Peninsula Academies for Godly Education): Enrichment classes reflecting a Christian viewpoint, offered in Suffolk and Hampton (<http://www.sageandpage.com>)
- SEE (Southside Educational Escapades) Homeschool Co-Op: Inclusive homeschool co-op in Norfolk with a classical education flavor (<http://seecoop.org>)
- Shanan Home Education: Nonprofit organization in Chesapeake that provides Christian-based support to homeschooling families (<http://www.shanan-online.org>)

- TEACH (Tidewater Educators Association for Christian Homeschooling): Long-standing support group based in Virginia Beach that sponsors numerous sports programs, a junior/senior prom and a senior graduation (<http://www.teachhomeschool.com>)
- Young Musicians of Virginia: Music and other academic classes, offered in Virginia Beach (<http://ymv.org>)
- Williamsburg Classical Community Academy: Inclusive homeschool co-op based on a traditional classical educational model (https://www.homeschool-life.com/sysfiles/member/index_public.cfm?memberid=521).

In addition to these dedicated homeschool organizations, numerous museums and other cultural institutions in our region have developed special programs that attract homeschool families. Nauticus, Colonial Williamsburg, the Virginia Living Museum and the Mariners' Museum are among the entities that sponsor occasional "homeschool days" with special educational programming. The Portsmouth museums, Norfolk Botanical Garden and the YMCA of South Hampton Roads likewise promote classes and other opportunities that are geared specifically toward homeschoolers. For these and other institutions, homeschoolers represent a growing and lucrative niche market. Targeted educational programs provide valuable enrichment opportunities for Hampton Roads homeschoolers, while boosting membership and weekday attendance figures for the institutions and organizations that offer them.

A Hot Issue: Should Homeschooled Students Be Able To Participate In Public School Athletics?

The General Assembly this year considered a proposal that would have allowed Virginia school districts to open up their high school sports teams to homeschooled students (provided they met certain academic and other

qualifications). Advocates such as the Organization of Virginia Homeschoolers argued that homeschoolers, as public taxpayers and members of their local communities, should be eligible to participate in interschool athletics. The bill's detractors – including the editorial boards of the Daily Press and The Virginian-Pilot – held that school teams ought to be reserved for students fully participating in their school community, including adherence to the community's specific standards for classroom attendance and academic achievement. Homeschooled students, they argued, should not be allowed to cherry-pick public school activities.

The so-called "Tim Tebow bill," nicknamed after the NFL quarterback who played public high school football in Florida while being homeschooled, passed in the Virginia House of Delegates, but was rejected 8-7 by the Senate Health and Education Committee. The sponsor of the legislation, Delegate Rob Bell (R - Charlottesville), intends to reintroduce the proposal next year.

Interest in homeschoolers' eligibility for public school sports extends well beyond Virginia. This spring, Time magazine reported that legislation similar to Virginia's was pending in 10 other states, and 29 additional states, including Florida, already allow homeschoolers access to public school sports (Andrew J. Rotherham, "The Home Team," April 2, 2012).

Not all homeschoolers, however, think alike on this issue. The Organization of Virginia Homeschoolers lobbied actively for the passage of this year's proposal, while the Home Educators Association of Virginia remained neutral. In our discussions with area homeschoolers, we encountered both enthusiastic supporters of the bill, as well as others who preferred to avoid any interactions with the public school system.

Some homeschoolers were more interested in non-athletic opportunities that are currently limited to public school students, such as the Governor's School for the Arts. Given Hampton Roads' well-developed network of homeschool sports and other extracurricular programs, sports eligibility appears to be a less urgent issue for homeschoolers here than for those in more rural areas of the Commonwealth.

Outcomes

The enthusiasm of dedicated homeschoolers is infectious. The teaching parents with whom we spoke clearly enjoy guiding and participating in the education of their children. Homeschool students told us they appreciate the opportunity to learn at their own pace, and to dig in deeply to the subjects that interest them most. Many families praised the flexibility of their schedules, and the ability to incorporate real-world experiences – including travel to foreign countries, as well as regular outings to nearby state parks and wildlife refuges – into the learning process. Other parents emphasized the importance of supervising their children’s moral upbringing, and were pleased to provide their children with a Christian education without private-school expense.

But do homeschooled children thrive academically and in the “real world” of adulthood? For thousands of homeschool families, and the organizations that support them, the answer is a resounding yes. Homeschoolers tend to be passionate about their way of life, and anecdotal stories of high-achieving, confident and successful students abound.

Academic studies consistently show that homeschooled students fare as well as, or better than, their traditionally schooled counterparts – in standardized test scores, in college performance and even in the demonstration of less tangible virtues such as leadership and civic engagement. Much of this scholarship is available through the National Home Education Research Institute (www.nheri.org); the compilation “Homeschooling in Full View: A Reader” (Information Age Publishing, 2005) is another useful source. Most serious scholars, however, do not purport to prove that homeschooling actually causes higher achievement. It is difficult to assess the degree to which homeschooled students’ success is directly attributable to their education at home, or whether in light of factors common to many homeschool families, such as socioeconomic stability and high parental interest in education, these students would have thrived equally in another academic setting. Likewise, studies have difficulty accounting for families that may have tried, but stopped, homeschooling for any number of different reasons.

Old Dominion University’s Office of Admissions reported that homeschooled students achieve higher grade point averages than conventionally schooled students. Of course, there is a possible selection bias here as well because homeschooled students are not a precise replication of the conventional collegiate population. Nevertheless, such evidence encourages the view that homeschooled students not only learn, but also acquire readiness to further their education later in conventional classrooms.

Few observers suggest that homeschooling is a cure-all for academic performance. Nearly all of the homeschoolers we interviewed told us that homeschooling is probably not the right choice for everyone. We heard that a successful homeschooling relationship depends on the personalities and receptiveness of both parent and child, and that the role of a teaching parent requires organization, dedication, a serious commitment of time and hard work. Homeschooling need not be expensive, but some parents found that the cost of educational materials and extracurricular opportunities added up to more than initially expected. In sum, not all families may have the interest or resources to take up homeschooling – although as persuasively put to us by longtime homeschooling advocate Cherrie Moore, “Where there’s a will, there’s a way” to make the arrangement work. Hampton Roads provides a particularly supportive environment for families that homeschool.

The State of the Region report thanks the following individuals and their families for their participation and insights:

Norma Andes and the Renaissance School of the Arts

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Melisa Herum

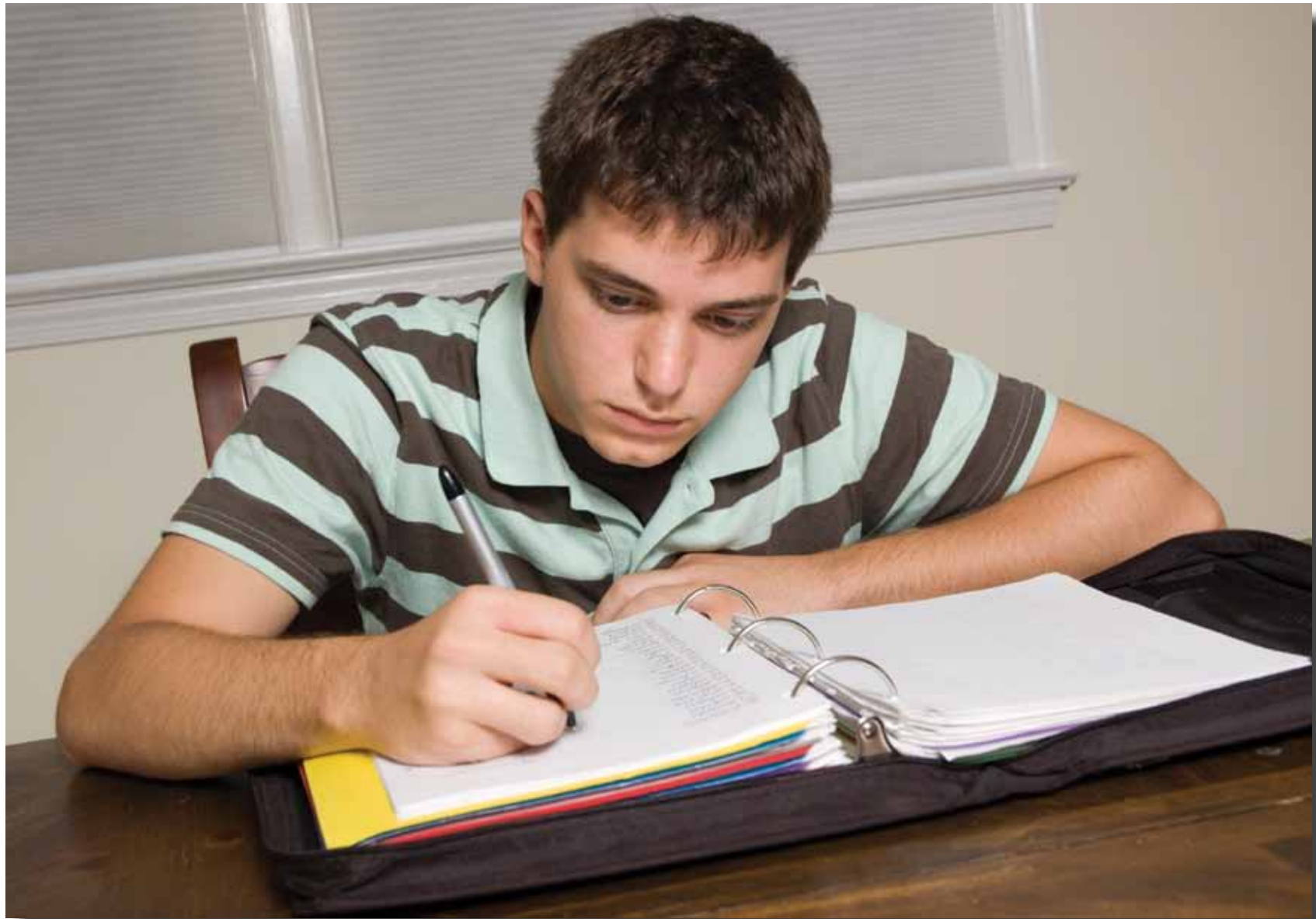
Marissa Hornbrook

Cherrie Moore and Moore Expressions

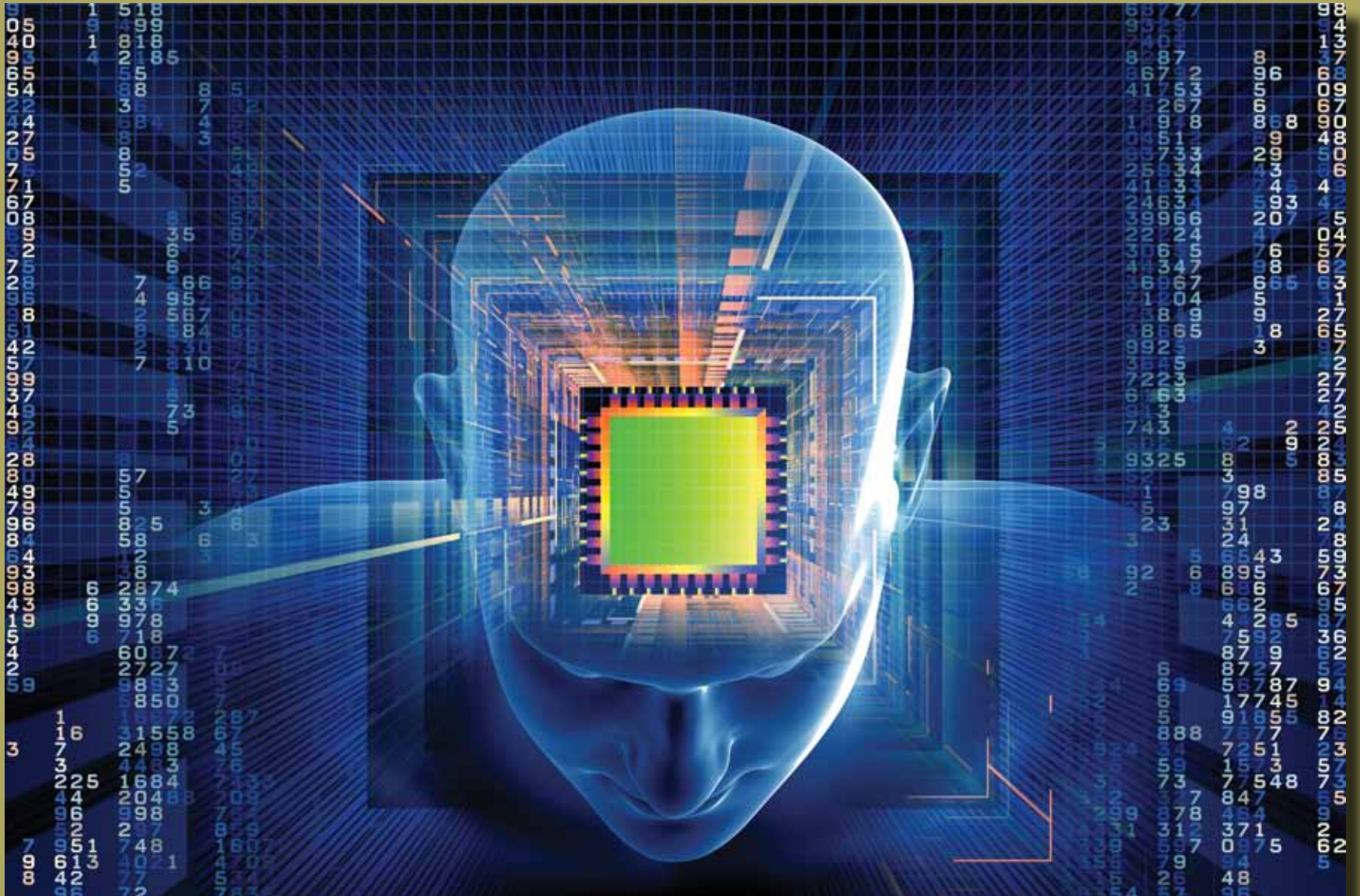
Sheri Payne

Carmel Rietveld

Kim Willett



Modeling and Simulation in Hampton Roads



MODELING AND SIMULATION IN HAMPTON ROADS

This is one of the industries of the 21st century for Hampton Roads.
– CEO of a Fortune 500 firm in Northern Virginia

How big is the modeling and simulation industry in the United States and, more important, how big is it inside Hampton Roads? These are not easy questions to answer. The U.S. government, which relies upon the North American Industry Classification System (NAICS) to classify business activity in the nation, has never designated an NAICS code to represent the modeling and simulation (M&S) industry. Hence, M&S activities always are recorded as occurring as parts of activities in other industries.

Nevertheless, it appears that the U.S. Department of Defense (DOD) spends almost \$9 billion annually on modeling and simulation activities. Many Americans (and not just teenagers) spend almost \$16 billion annually on recreationally oriented games and simulations that range from fantasy games to World War II simulations. Business firms, state and local governments, universities, medical schools and nonprofit organizations may spend as much as \$25 billion annually on M&S activities. Thus, approximately \$50 billion in direct expenditures may be made annually in the United States on M&S products and activities.

The Virginia Economic Development Partnership (VEDP) estimates that the Commonwealth's M&S industry employs 11,300 people in the private sector and about 2,800 in the government and military. It reports a direct economic impact of \$1.7 billion on an annual basis.

Virginia M&S is concentrated in two locations – Northern Virginia (6,300 employees) and Hampton Roads (4,800). According to the VEDP, these two regions are home to 107 and 139 companies, respectively, that offer modeling and simulation capabilities in addition to other products and services. Much of this activity is defense oriented. Virginia is home to some of the largest defense contractors and thus has a significant share of the DOD's modeling and simulation budget. Most defense-oriented work involves the use of M&S tools

for training and analysis purposes. Figures 1 and 2 reveal the distribution of modeling and simulation companies by region.

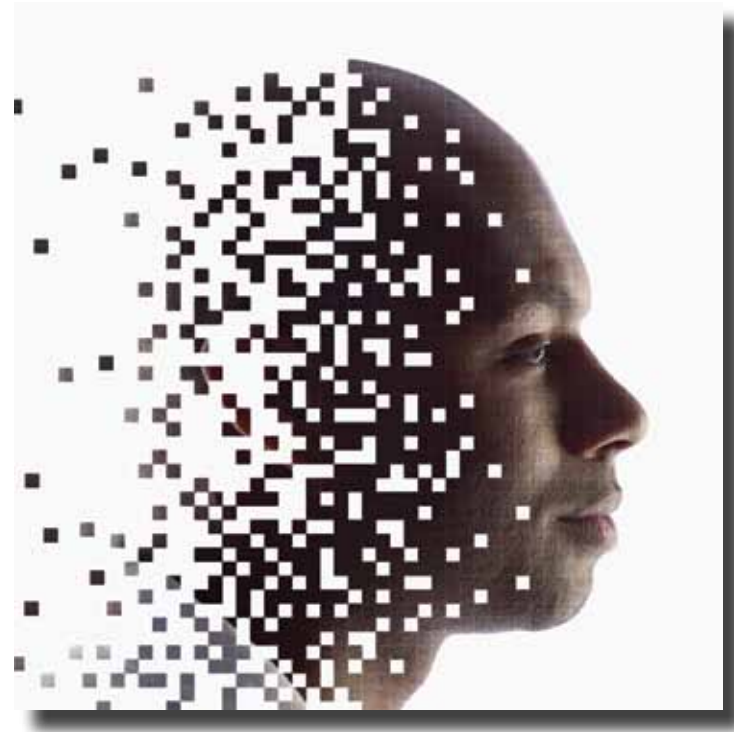


FIGURE 1
LOCATION OF MODELING AND SIMULATION FIRMS IN HAMPTON ROADS

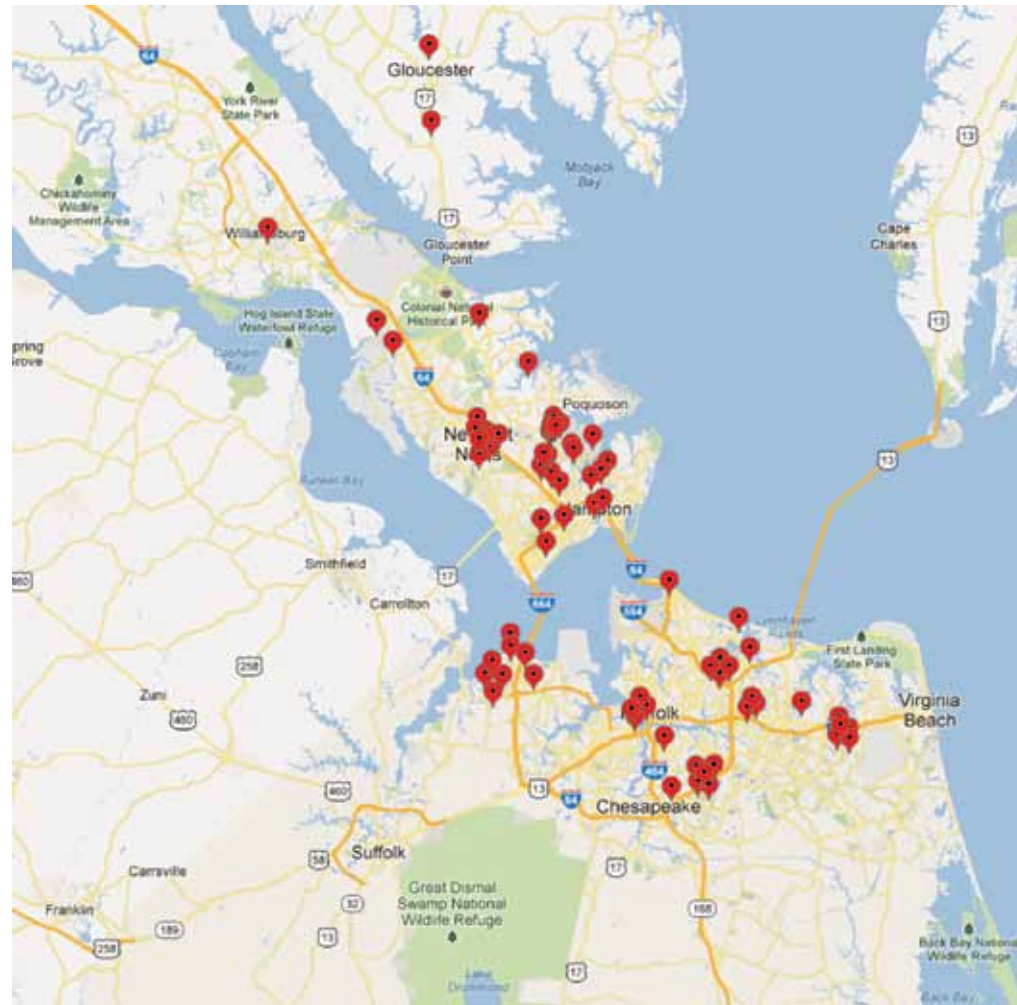
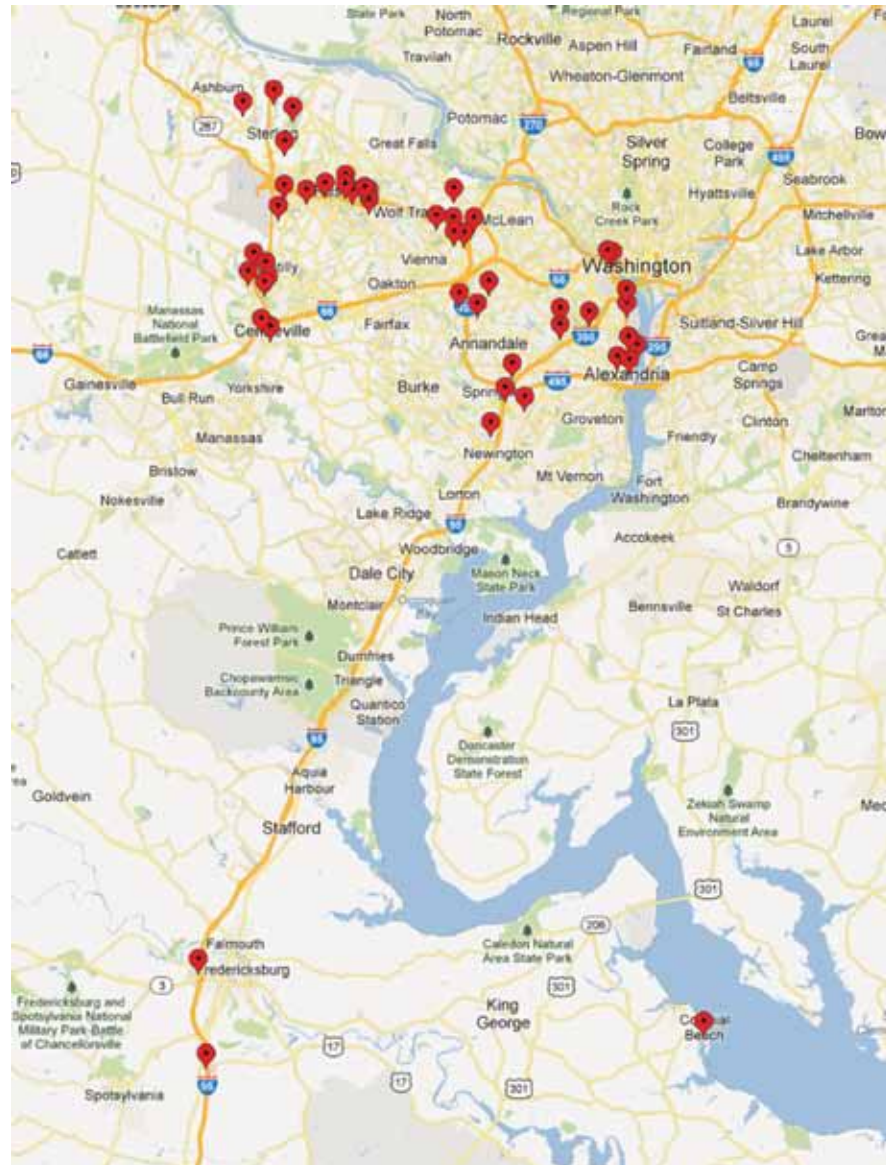


FIGURE 2

LOCATION OF MODELING AND SIMULATION FIRMS IN NORTHERN VIRGINIA



Modeling And Simulation As A Critical U.S. Industry

In a July 14, 2010, statement to the Subcommittee on Commerce, Trade and Consumer Protection of the Committee on Energy and Commerce, U.S. House of Representatives, Aneesh Chopra, the chief technology officer and associate director of the Office of Science and Technology Policy, Executive Office of the President, asserted that modeling and simulation can significantly reduce the need for physical prototypes in the manufacturing sector of the U.S. economy. This, he said, would shorten product development time, reduce costs and improve quality. Chopra, who previously was Virginia's secretary of technology, believes that M&S is capable of providing the country with a crucial manufacturing edge that will lead its manufacturing renaissance.

Previously, in June 2007, the U.S. House of Representatives approved House Resolution 487, which identified M&S as a National Critical Technology. This resolution was a result of the work of the M&S Congressional Caucus, which is headed by Hampton Roads congressman J. Randy Forbes. The resolution establishes that M&S is important to the national security. In fall 2011, the National Modeling and Simulation Coalition (NMSC) was formed. This organization grew out of the Modeling and Simulation Leadership Summit sponsored by Forbes. It focuses on bringing national attention to modeling and simulation and on helping to shape a national M&S agenda. More than 300 people attended NMSC's inaugural meeting in February 2012. There is little doubt that a variety of powerful private and public organizations are interested in the M&S field, not the least because it is seen as important to future progress by some and the source of profits by others.

A Closer Look At Modeling And Simulation In Hampton Roads

Here in Hampton Roads, the majority of modeling and simulation work is related to the military. Primary customers for this work include the Army's Training and Doctrine Command (TRADOC) at Fort Eustis, the Naval Warfare Development Command at Naval Base Norfolk and the Joint Coalition and Warfighting (JCW) arm of the Joint Staff in Suffolk. JCW embodies the now defunct Joint Forces Command (JFCOM), which used to be the primary funder of M&S-related capabilities in Hampton Roads.

A 2007 study asserted that the regional economic impact of the M&S industry on the region was \$364 million. While this estimate may have been high-end, no one has argued that the economic impact of M&S on Hampton Roads is not large. The effect of M&S on cities such as Suffolk and on institutions such as Old Dominion University undeniably has been significant. As many as 10,000 jobs in our region are connected to modeling and simulation.

While military commands have been the primary M&S customers, private-sector firms have been the chief developers and providers of M&S technology. For example, the JCW and its industry partners have developed a distributed simulation system that supports the training of thousands of military personnel around the world in theater-level warfare, humanitarian missions and special-operations missions. This system is unsurpassed by any nation or military force in scale and capability and is designed to provide participants with realistic experiences and training that surely would be prohibitively expensive if participants were to be plunged into live situations around the globe. Of course, JFCOM was disestablished in 2011; however, its core M&S functions continue under JCW.

TRADOC contains a special M&S unit – the Training Brain Operations Center (TBOC). The Army describes this center as follows: "The TBOC

Systems Integration, Modeling and Simulation (SIMS) directorate is an award-winning standard bearer for innovative uses for modeling, simulation and gaming (MS&G). The SIMS team produces 3D visualizations, gaming scenarios, correlated terrain, and 3D models for operational, institutional, and self-development training domains, allowing multiple participants to train simultaneously in an environment based on lessons learned today. Taking serious gaming one step further, the TBOC, in association with the U.S. Army Research and Development Command (RDECOM), is developing a massive multiplayer online trainer that will allow soldiers and leaders to interact and collaborate using common scenarios in a virtual environment with other soldiers within their units and across the Army." Once again, the goal is to provide Army personnel with invaluable experiences that do not require formal "boots on the ground" in actual deployments around the world.

THE LOSS OF JFCOM

The closing of JFCOM has had a negative impact on the modeling and simulation industry in Hampton Roads. The Department of Defense claimed it would save \$450 million annually by doing away with this command. It also predicted the demise of JFCOM would reduce DOD employment in Hampton Roads by about 3,000 workers.

It is difficult to tell if a reduction of this magnitude actually has occurred, though it is apparent that many M&S personnel have left the region. The core M&S functions of the DOD in Hampton Roads continue under the umbrella of the JCW. Nevertheless, it is indisputable that some private employers have disappeared as well as some DOD employees. Nevertheless, many Hampton Roads companies responded in a February 2012 survey that they are still performing various aspects of modeling and simulation work. The responding companies reported annual M&S payrolls of \$94.8 million and average salaries of \$85,000 for their employees. Thus, **M&S continues to provide many jobs in Hampton Roads that are attractive in terms of compensation and working conditions. Nevertheless, it remains to be seen if private-sector employers will be in it for the long run within our region.**

VMASC

Hampton Roads hosts one of the premier university research centers for modeling and simulation – the Virginia Modeling, Analysis and Simulation Center at Old Dominion University. VMASC has played a significant role in the advancement of M&S, regionally, nationally and internationally. **In many ways, VMASC has become the center node of modeling and simulation in the region. It hosts the Hampton Roads M&S consortium of industry members, whose goal is to promote the economic development of M&S in the region. VMASC generates about \$8 million of annual research expenditures, which represents a four-fold return on investment in funds provided by the Commonwealth for its operation and a very gratifying return on the approximate \$500,000 that ODU originally invested in M&S activities in the late 1990s.**

VMASC prefers a multidisciplinary approach to modeling and simulation and hence has the ability to address complex problems in many different economic sectors. It has major M&S research programs in defense-oriented activities, homeland security, transportation and medical/health care.

It is instructive that the medical/health care industry has begun to embrace M&S as a productivity-enhancing, cost-reducing approach to medical education, patient care and medical facility operations. An estimated \$2.6 trillion is spent on health care in the United States annually, and thus the potential for productivity increases and savings is immense. **In truth, the medical/health care industry potentially is a much larger market for M&S than defense-oriented activities.**

Fortunately, the region is positioning itself to take advantage of several of its key resources in order to provide modeling and simulation capability in the medical/health care area. Old Dominion University and Eastern Virginia Medical School have partnered to develop medical/health care M&S. This partnership has existed since 2002 under the auspices of the National Center for Collaboration in Medical Modeling and Simulation (NCCMMS), a congressionally designated center for the advancement of the medical M&S field. NCCMMS recently received a \$600,000 grant from the Commonwealth

to spur the transition of military M&S capability into the medical/health care field. The NCCMMS vision is attractive, namely, to make the Hampton Roads region nationally recognized as a center for medical/health care M&S innovation.

VMASC and EVMS have developed several simulations in this category. “The Virtual Operating Room” (see photo) is one such simulation. It involves the use of a surgical-skills trainer within a simulated operating room. The simulation immerses surgeons in a computer-generated operating room that includes avatars representing the attending physician, circulating nurse, anesthesiologist and others. This provides the capability for surgeons to train in a realistic environment without tying up a real operating room. It also gives users the opportunity to perform unusual surgeries that may arise only rarely, but must be familiar and practiced in order to ensure they will be capably handled in a real situation. The Virtual Operating Room provides medical schools with a greater ability to offer a consistent curriculum to all of their students. Without simulation, medical schools must rely on a variety of real patients that “walk through the door,” and this seldom presents the variety or predictability of necessary patient cases that generate true medical proficiency.

Patient blood management simulation (see Figure 3) represents a second significant medical M&S application. It was developed to help train practicing surgeons and anesthesiologists in blood management techniques, but to do so more flexibly and less expensively. Blood management is an area of medicine receiving increased attention because of patient safety concerns and rising hospital operating costs.

Blood management simulation allows medical professionals to experience a series of real patient case studies, make decisions about blood management and receive feedback on those decisions per published guidelines. It exposes them to a wide variety of situations and fosters rapid learning of new and improved techniques, even while minimizing their time away from actual patient care. Efforts are under way to license this simulation and it provides a useful example of how M&S innovation has the potential not only to improve the quality of life, but also to stimulate job growth.



Complementary to VMASC is ODU’s Department of Modeling, Simulation and Visualization Engineering, the only such academic department in the United States. The MSVE department offers degree programs ranging from the baccalaureate to the Ph.D. The undergraduate M&S program is the only one in the country.

These degree programs are servicing the growing demand for M&S professionals. An estimated 29,000 job vacancies existed in M&S in the United States in March 2012, according to the employment search engine CareerJet.

With the initiation of the ODU undergraduate degree program in 2010, there is now a full continuum of M&S education in Hampton Roads, and such is not found anywhere else in the world. Notably, other institutions such as Tidewater Community College and Thomas Nelson Community College also have developed M&S academic programs that both will generate individuals who might immediately occupy jobs and graduate other students who will transfer into ODU’s M&S degree programs.

FIGURE 3
BLOOD MANAGEMENT TRAINING SIMULATION



MYMIC AND SIMIS

VMASC hosts an industry consortium of 19 companies that maintain a presence in Hampton Roads and are involved in M&S. The following two examples are instructive in demonstrating what these firms do and how they operate.

MYMIC is a Hampton Roads-based small business specializing in modeling, simulation, analysis and the use of gaming technology. It evolved out of the efforts of the region, ODU and VMASC to stimulate the use of M&S and encourage economic development within Hampton Roads in this sector. Founded in 2000 by Thomas Mastaglio and William L. Younger Jr., MYMIC employs 90 people in eight locations throughout the United States. The main offices are in Portsmouth, with satellite offices in Orlando, Fla., and Alexandria, Va. MYMIC has experienced an average annual growth rate above 20 percent; over the past four years it has increased its workforce from 30 to 90 employees. Annual revenues during that period increased from \$3 million to \$15 million.

MYMIC applies M&S technology across multiple application areas. Primary customers have been in the defense sector; however, over the past two years, it has begun marketing its capabilities to other government agencies and industry.

Among current customers are NASA, the electrical power industry and seaports. The company emphasizes the integration of domain expertise with technical knowledge in order to deliver customized solutions, in many cases based on existing corporate product lines and expertise.

MYMIC's Scalable End to End Logistics Simulation (SEELS) toolset provides the foundation for the company to tailor and deliver a simulation model for any logistics installation, from seaports to warehouse intermodal facilities. Training of medical personnel is delivered using several different platforms. The Complex Incident Response Training System (CIRTS) is architecture for delivering training to those who work in critical positions and must react and make key decisions quickly in an emergency situation. CIRTS is being used to provide training for combat medics that must respond to multiple simultaneous casualty situations in combat. A version of the system to train emergency medical technicians is in development. Another interesting medical training solution involves teaching

distributed medical response teams using avatars in a virtual world. The avatars are deployed over the Internet and employ gaming technology to provide therapy training for those who treat PTSD patients with traumatic brain injuries (TBI).

A large portion of MYMIC's business involves providing on-site services to government offices. These services include support for simulation tools, development and maintenance of enterprise information technology and database solutions, and the analysis of combat operations for strategic study purposes. MYMIC provides support to the Joint Chiefs of Staff, both in the Pentagon and those elements located in Hampton Roads. The analytic support MYMIC provides to the Joint Staff J8 is key to the smooth functioning of the Joint Capabilities Integration and Development System requirements process for delivering quality products and services to war fighters.

Currently MYMIC is examining the international market potential for its goods and services in Asia, the Middle East and Europe as a strategy to sustain its continuing growth. MYMIC is emblematic of the companies in the region that have been launched and grown as a result of a regional economic development focus on modeling and simulation.

SimIS Inc. is a 26-person, minority- and veteran-owned business and an 8(a)-certified corporation with the Small Business Administration (SBA). This certification enables it to enjoy special developmental support from the SBA. SimIS concentrates on innovative approaches and solutions in two fast-growing information technology sectors – modeling and simulation and information security. **Formed in 2007, SimIS has become notable for its determination, business acumen and customer focus.**

SimIS provides an excellent example of resiliency and flexibility in response to a changing economic environment. In August 2010, the secretary of defense announced that JFCOM would close. Johnny Garcia, CEO and president of SimIS Inc., knew that this would cause problems for SimIS because it was heavily dependent upon JFCOM-related projects. And, indeed, its 2011 revenues fell to \$1.7 million, a 53 percent decrease from 2010. But, SimIS proved nimble and flexible, launching several new, commercialized products for the private sector that targeted the medical, training and entertainment industries.

One of the new products is the Automated Intelligent Mentoring System (AIMS), a cloud-based, subscription software package designed to change the way people learn in the medical community by supplying new, highly interactive methods of training. AIMS replaces more costly, simulated training that historically has provided only limited feedback to users. The result has been a cost-effective means to eliminate inconsistencies in training methods and to reduce time demands placed upon expert clinical educators.

SimIS quickly came to understand that product development for the commercial sector would place different financial demands on it than defense work. Medical markets purchase products and compensate producers for their efforts, but most of these customers are not strongly interested in becoming involved with the development process. By contrast, Department of Defense contracts often involve extensive DOD involvement in the shared development of new technologies.

Hence, in its new world, SimIS would have to take risks and self-fund product developmental work. However, it had an incentive to do so because there are more than 10,000 centers providing education in health care in the United States. Further, the simulation training market is about \$1.5 billion annually in size. SimIS judged that the benefits and rewards likely would justify taking significant risks.

There is a happy ending to this tale. SimIS revenue estimates for 2012 and 2013 currently range between \$6 million and \$9 million.

The Competition

There are two other areas in the United States that can be considered as competitors to VMASC in the M&S field – Orlando, Fla., and Huntsville, Ala. Each of these cities has a university-based M&S research center similar to VMASC, graduate degree programs in M&S and at least one significant M&S customer such as the former JFCOM. A July 2010 report in the Orlando Sentinel estimated that the M&S industry in Orlando hosts 25,000 jobs and that it has an annual economic impact of \$3 billion. Both of these numbers dwarf those reflecting M&S in Hampton Roads. The majority of these jobs are in two sectors, entertainment and defense, and the DOD spends large sums in Orlando. The Huntsville simulation effort is more modest and is connected primarily to the U.S. Army and NASA's Marshall Space Flight Center.

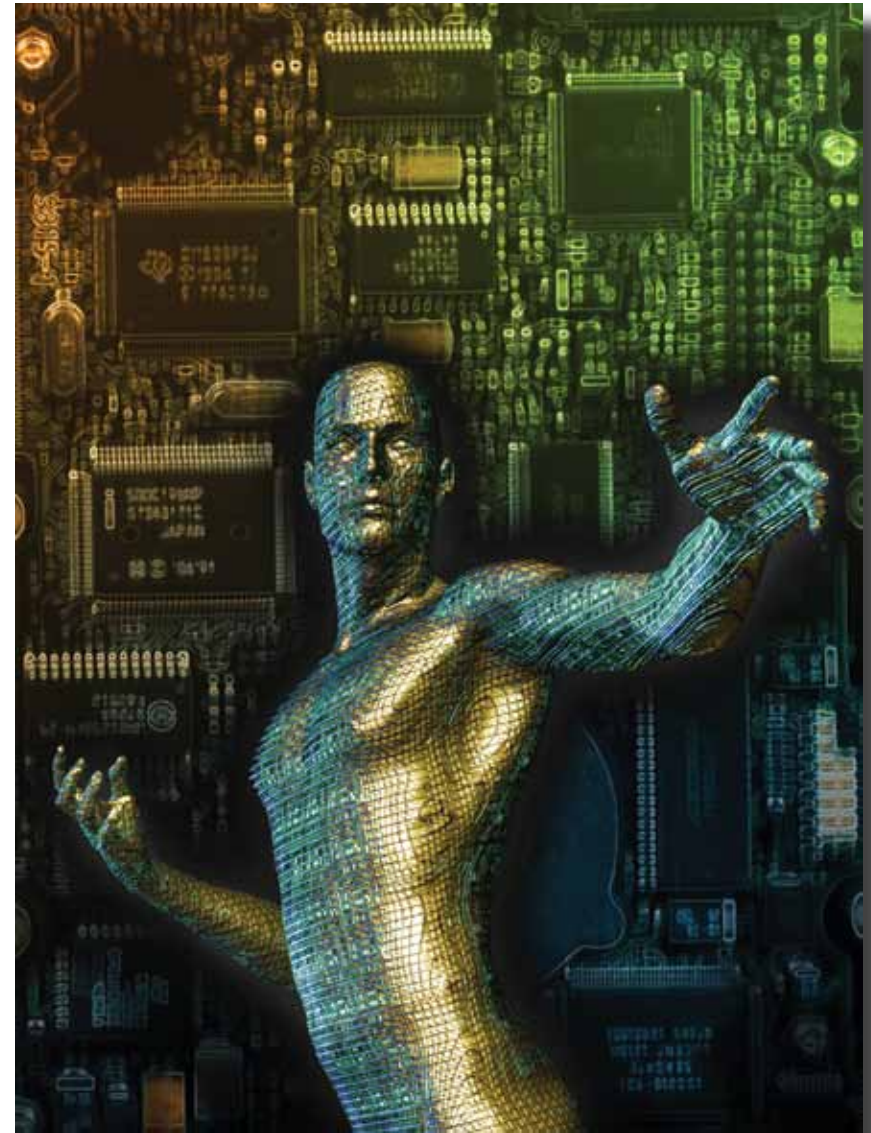
While these cities clearly can be considered to be competitors to Hampton Roads, and Orlando's modeling and simulation activities clearly are larger than those in our region, the M&S focus of both cities is somewhat different from that here. Our region has focused on the use of computer simulations in training and decision-support roles. We have developed unique expertise in these areas of simulation application not found in the other two regions. Orlando's expertise centers on large-simulation system development, such as cockpit flight simulators. Huntsville's focus has been in the development of simulations to address specific engineering design problems. Thus, while there is overlap, it is not extensive.

Final Thoughts

There can be little doubt that the closure of JFCOM put a serious dent in M&S activity in Hampton Roads, which prior to that misfortune had been on a strong, upward trajectory. If there is a bright spot connected to this situation, it is that JFCOM's demise forced regional M&S personnel to focus much more intensely on private-sector applications. Our budding expertise in medical- and health-oriented M&S applications exemplifies such a thrust.

Ultimately, it is private-sector spinoffs from defense-oriented modeling and simulation that will determine whether our regional investment in M&S activities will have paid off. The trajectory of other technology-intensive regions (for example, Boston's Route 128 corridor, Austin, Texas, and Silicon Valley) typically began with significant public-sector investments (federal and state) in research areas such as the Defense Advanced Research Projects Agency network that evolved into the Internet, or interest in transistors and microcircuitry. These regions contained institutions of higher education and private firms that were able to capitalize on such investments and commercialize dozens of new technologies that flowed from the initial governmental interest.

It remains to be seen whether we in Hampton Roads are able to walk the same general path. We certainly aren't starting at ground zero. The extensive military presence in Hampton Roads guarantees that some defense-oriented M&S activity always will occur in our region. Further, Old Dominion University has made a major financial commitment to faculty, curricula and research in M&S. Nevertheless, it will be the end of this decade before we know whether these proverbial saplings will have grown into mighty oaks.



Cover: Map courtesy of Hampton Roads Military and Federal Facilities Alliance
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