

9-2003

The State of the Region: Hampton Roads 2003

James V. Koch

Old Dominion University, jkoch@odu.edu

Aditi Agarwal

Old Dominion University

Vinod Agarwal

Old Dominion University, VAGARWAL@ODU.EDU

John R. Broderick

Old Dominion University, jbroderi@odu.edu

Gary Chiaverotti

Old Dominion University

See next page for additional authors

Follow this and additional works at: https://digitalcommons.odu.edu/economics_books



Part of the [Real Estate Commons](#), and the [Regional Economics Commons](#)

Recommended Citation

Koch, James V.; Agarwal, Aditi; Agarwal, Vinod; Broderick, John R.; Chiaverotti, Gary; Colburn, Chris; Curtis, Vicky; Daniel, Steve; Hughes, Susan; Inclan, Enrique T.; Isakovski, Tatiana; Lomax, Sharon; Lombard, John R.; Manthey, Trish; Wu, Grace; and Yochum, Gilbert, "The State of the Region: Hampton Roads 2003" (2003). *Economics Faculty Books*. 18.

https://digitalcommons.odu.edu/economics_books/18

This Book is brought to you for free and open access by the Department of Economics at ODU Digital Commons. It has been accepted for inclusion in Economics Faculty Books by an authorized administrator of ODU Digital Commons. For more information, please contact digitalcommons@odu.edu.

Authors

James V. Koch, Aditi Agarwal, Vinod Agarwal, John R. Broderick, Gary Chiaverotti, Chris Colburn, Vicky Curtis, Steve Daniel, Susan Hughes, Enrique T. Inclan, Tatiana Isakovski, Sharon Lomax, John R. Lombard, Trish Manthey, Grace Wu, and Gilbert Yochum



THE STATE OF

THE REGION

HAMPTON ROADS 2003

REGIONAL STUDIES INSTITUTE • OLD DOMINION UNIVERSITY



September 2003

Dear Reader:

This is Old Dominion University's fourth 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, Dr. Roseann Runte.

Our "State of the Region" reports maintain the modest goal of making Hampton Roads an even better place to live. We are proud of our region's many successes, but realize it would be possible to improve the region's performance. Yet, in order to improve our performance, we must have accurate information about "where we are" and a sound understanding of the policy options available to us. Given the region's strong connections to the military, this year's report focuses on the contributions of veterans to Hampton Roads and on the economic impact of the war in Iraq on our regional economy.

The 2003 report is divided into eight parts:

The Hampton Roads Economy: Defense Expenditures Become More Important: Economically speaking, the 21st century has been a good one for Hampton Roads. By many measures – especially growth in employment and income – Hampton Roads now leads the Commonwealth of Virginia. The war in Iraq had a remarkably small negative impact on the region's economy. Reversing the trend of the 1990s, defense expenditures have become a more important part of the region's economy.

Hampton Roads: A Comparative Tour: We compare Hampton Roads to other metropolitan areas in terms of a variety of economic, social and educational variables. We focus in particular on differences between white and black citizens that are apparent in the 2000 U.S. Census and the question of whether a housing price bubble exists in the region.

Private Social Services in Hampton Roads: Problems and Prospects: These services, the funds for which are routed primarily through our United Way organizations, are part of the "social safety net" of which many regional citizens are ignorant. We detail these programs and their challenges.

Military Retirees in Hampton Roads: More than 50,000 military veterans reside in Hampton Roads and their numbers are growing much more rapidly than our general population. Where do they live, what is their economic impact and how could we attract even more if we wished to do so?

Research and Development at Eastern Virginia Medical School: Our region's medical school gradually has been developing a core of significant research and development thrusts despite tremendous challenges. What is EVMS doing and what can we do to stimulate this highly valuable activity?

Consolidation of Public Services in Hampton Roads: Would We Save Money and Enhance the Service We Receive? Numerous individuals have suggested that the consolidation of some public services (police, fire, libraries, etc.) in Hampton Roads would save money. The evidence on this score is mixed, but very interesting, and should challenge some public officials.

The Impact of State Mandates on Hampton Roads: Local elected officials often complain that the Commonwealth imposes costly mandates on the cities and counties of the region. How many mandates are there and what are their costs? The answer to both is, more than most people think.

Are New Housing and Commercial Development Subsidized in Hampton Roads? When new residential and commercial developments occur, do they pay for themselves, or do others subsidize necessary governmental services and infrastructure? The answer depends upon the nature of the situation and the city.

This report would not have been possible without the generous financial assistance and support of the following individuals and organizations:

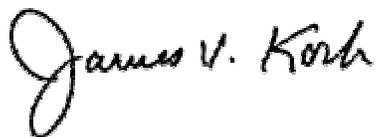
The Aimee and Frank Batten Jr. Foundation	George Dragas Jr.
Frank Batten Sr.	Thomas Lyons
R. Bruce Bradley	Arnold McKinnon
Raymond W. Breeden Jr.	Patricia W. and J. Douglas Perry
Arthur A. Diamonstein	Anne B. Shumadine

The following individuals were instrumental in the research, writing, editing and design of the report:

Aditi Agarwal	Enrique T. Inclan
Vinod Agarwal	Tatiana Isakovski
John R. Broderick	Sharon Lomax
Gary Chiaverotti	John Lombard
Chris Colburn	Trish Manthey
Vicky Curtis	Grace Wu
Steve Daniel	Gilbert Yochum
Susan Hughes	

Our hope is that the report will stimulate you to think further about Hampton Roads and that it will generate discussion about our region's future. Do not hesitate to contact me at jkoch@odu.edu should you have comments or questions.

Sincerely,



James V. Koch

Board of Visitors Professor of Economics and
President Emeritus
Old Dominion University

the hampton roads economy	3
hampton roads: a comparative tour	33
private social services	73
military retirees in hampton roads	85
research and development at eastern virginia medical school	103
consolidation of public services	117
the impact of state mandates	131
are new housing and commercial developments subsidized?	139

TABLE OF

CONTENTS



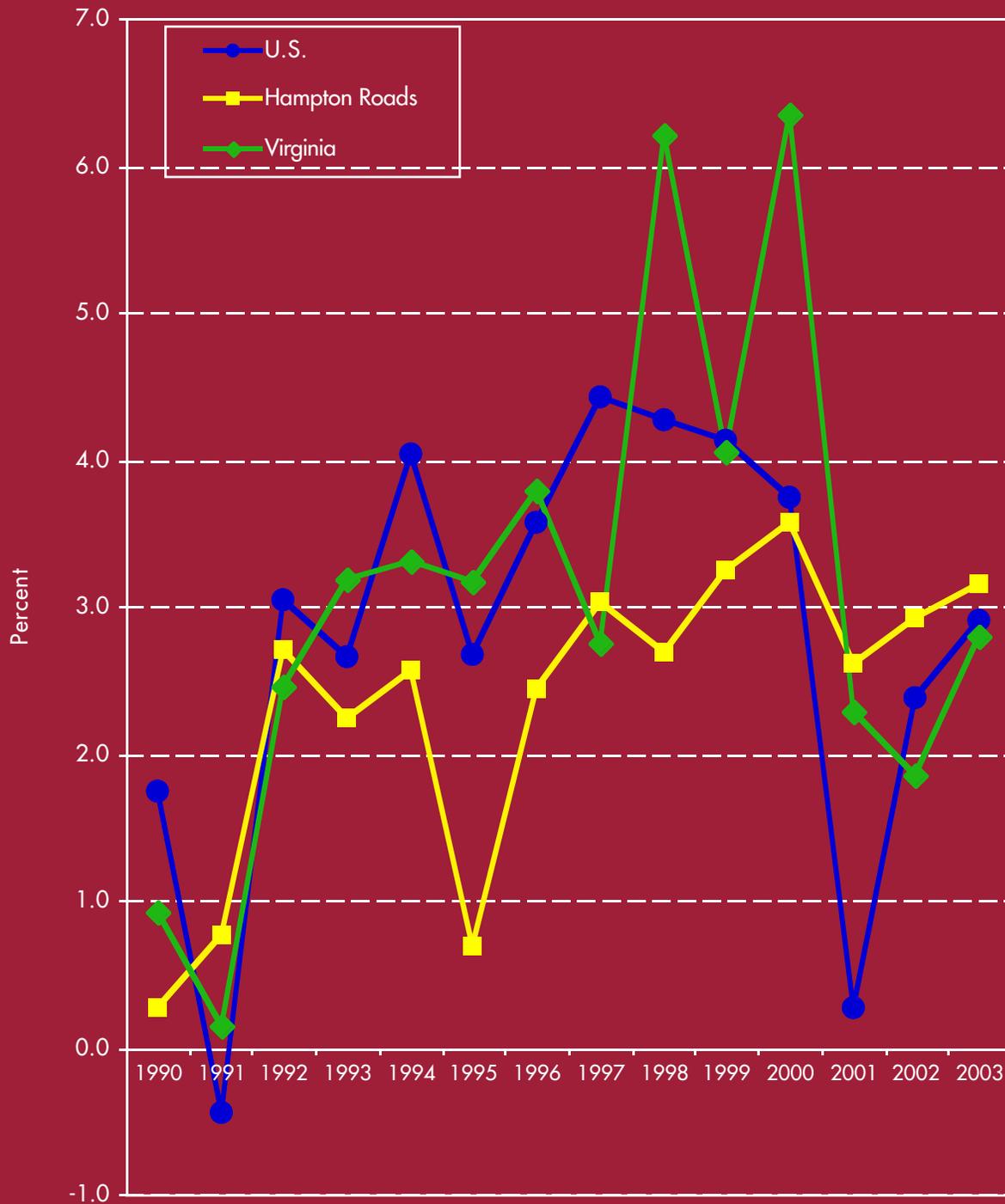
the hampton roads economy

The Hampton Roads Economy: Defense Expenditures Become More Important

During most of the 1990s, presentations about the region's economy were usually apologetic. Hampton Roads' economic growth rate trailed that of Virginia and also lagged the entire country. In addition, our income per capita (a frequently used measure of economic well-being) was well below Commonwealth and national averages. All in all, we seemed to be in extended economic doldrums.

But things have changed, and for the better. **2002 marked the second consecutive year in which the growth rate of the Hampton Roads economy exceeded that of both Virginia and the United States. As Graph 1 illustrates, this performance marks the first time since the late 1980s that the region has put together back-to-back years of growth exceeding that of the Commonwealth and the nation. And, this outstanding performance likely will continue. Despite the war in Iraq and the influence of a lagging national economy on the region, it is a virtual certainty the region will outperform Virginia and the nation in 2003.**

**GRAPH 1
YEAR-TO-YEAR ECONOMIC GROWTH RATES
HAMPTON ROADS, VIRGINIA AND THE U.S.
(1990-2003)**



Source: The Old Dominion University Economic Forecasting Project

The Old Dominion University Economic Forecasting Project predicts the annual growth rate in the Hampton Roads economy between 2000 and 2003 will average 3.1 percent. This means the economic growth rate will be more than 1 percent greater than the U.S. growth rate and .5 percent greater than the Virginia rate over the same period. This growth differential is also reflected in employment data. Table 1 reports that Hampton Roads experienced a 2.9 percent increase in employment between 2000 and 2002, even while employment in both Virginia and the United States contracted. More than 20,000 jobs were created in the region during 2000-02. This trend continued for the first quarter of 2003.

TABLE 1
HAMPTON ROADS, VIRGINIA AND U.S. CIVILIAN EMPLOYMENT
(2000-02, Thousands of Jobs)

	2000	2002	% Change (2000-02)
Hampton Roads	702.4	723.0	2.9%
Virginia	3,562.4	3,486.7	-2.1%
U.S.	132,319.0	130,670.0	-1.2%

Source: U.S. Bureau of Labor Statistics and the Old Dominion University Forecasting Project

The prosperity of the Hampton Roads economy obviously is influenced by trends in the national economy. However, sparkling economic performances in four of Hampton Roads' most important industries (defense, housing, tourism and the port) has, since 2000, overcome the effects of the national slowdown. To understand this better, we will look at each of these industries in turn. Because we examined the economic impact of the Port of Hampton Roads and the tourism industry in some detail in previous reports, we will treat them only briefly. Instead, we will focus most of our attention on the defense sector and the regional housing market.

Defense Expenditures

There are two separate influences here. One is regular military payroll and procurement spending and the other is the war in Iraq (Operation Iraqi Freedom).

MILITARY PAYROLL AND PROCUREMENT SPENDING

The consolidation of F-18 squadrons at Oceana Naval Air Station in 1999 and 2000 signified the end to the 1990s decline in the importance of defense spending to the Hampton Roads economy. As seen in Graph 2, the proportion of Hampton Roads economic activity attributable to defense expenditures is expected to increase by more than two percentage points from 2000 to the end of 2003. That said, the influence of defense expenditures on the regional economy will still be approximately 10 percent less than in 1985.

GRAPH 2
THE PERCENT OF HAMPTON ROADS GROSS REGIONAL PRODUCT
ATTRIBUTABLE TO DEPARTMENT OF DEFENSE SPENDING
(1985-2003)



*Estimated

Sources: Department of Defense and the Old Dominion University Economic Forecasting Project

Further, since 2000, base pay increases for military personnel have exceeded national average pay increases by at least .5 percent. Congress has adopted a policy mandating that military pay increases between now and 2006 should exceed those in the private sector in order to make up for past inequities. **Above-average pay increases from 2000 to 2003, dramatically rising housing allowances, and rising procurement and outsourcing expenditures over the same period have fueled a mini-boom in the Department of Defense’s economic presence in Hampton Roads.**

Even though the number of active-duty military personnel in Hampton Roads is not increasing significantly, total military payroll (including housing allowances) will have increased 20.3 percent from 2002 to the end of 2003. By contrast, over the same period, average civilian worker wages and salaries in the United States will have risen by 10.6 percent.

In addition, between 2000 and 2003, Department of Defense (DOD) procurement and outsourcing expenditures will have risen by an estimated 27.7 percent. When spending for shipbuilding at Northrop Grumman Newport News is included, DOD procurement spending within Hampton Roads increased from an estimated \$2.3 billion in 2000 to \$3 billion in 2003. This has provided considerable economic stimulus.

THE WAR IN IRAQ

Thus far, the war in Iraq has had surprisingly little effect on the Hampton Roads economy. Measured in terms of foregone gross regional product (GRP), the Hampton Roads economy lost only .16 percent of its potential growth for the year and only about 300 jobs. Table 2 summarizes the war’s estimated economic impact on the region’s economy.

Total Additional Personnel Deployed	16,200
Spending Loss	\$100 million
Regional Job Loss	300 jobs
GRP Growth Loss	0.16%

Source: The Old Dominion University Economic Forecasting Project

The economic effects of the war on the region were concentrated in March 2003 and were primarily attributable to reduced spending, resulting from troop deployments. A sector breakdown of the war’s effects is presented in Table 3. For example, new-car sales declined by an estimated \$6 million, though there are signs that enthusiastic troops returning from Iraq will diminish or even erase this deficit.

What lessons should we draw from this?

First, and most obviously, the more quickly the conflict is resolved, the smaller the economic impact on Hampton Roads. Even though 16,200 personnel left the region, the brevity of the deployment did not interfere substantially with economic activity. Many procurement expenditures, for example, continued even after the troops departed. Second, increased defense expenditures in general, such as for salaries and housing allowances, have cushioned the troop departures. Families of departing military personnel typically remained in Hampton Roads and continued to spend their enhanced funds. Third, as Graph 2 illustrates, the region’s economy has diversified over the past few decades and no longer is as sensitive to defense expenditures as it was in the past.

• \$70 million decrease in retail spending
• \$6 million decrease in new-car sales
• \$5 million decrease in new home building permits
• \$5.6 million in reduced hotel room sales

Source: The Old Dominion University Economic Forecasting Project

But, what would happen if a longer war developed or deployments lasted longer, say, one year? Table 4 shows the economic impact of a one-year deployment of the same size we experienced in early 2003 in Iraq. Such a scenario would diminish the region's annual growth rate by .64 percent and cost an estimated 2,700 jobs. This would drag Hampton Roads down to the Virginia average, but we would still have a growth rate higher than the country as a whole.

The bottom line is that our regional economy is remarkably robust and stable, at least compared to many other regions nationally. We were already doing rather well prior to the war in Iraq, and this conflict did not put a significant crimp in the region's economic welfare. We have escaped the economic blues of the 1990s and are doing rather well, thank you.

TABLE 4
ESTIMATED ECONOMIC IMPACT
ON HAMPTON ROADS OF A ONE-YEAR WAR

One Naval Task Force, Army and Air Force Personnel*	
• Total Personnel	16,200
• Spending Loss	\$350 M
• Estimated Regional Jobs Loss	2,700
• GRP Growth Loss	0.64%

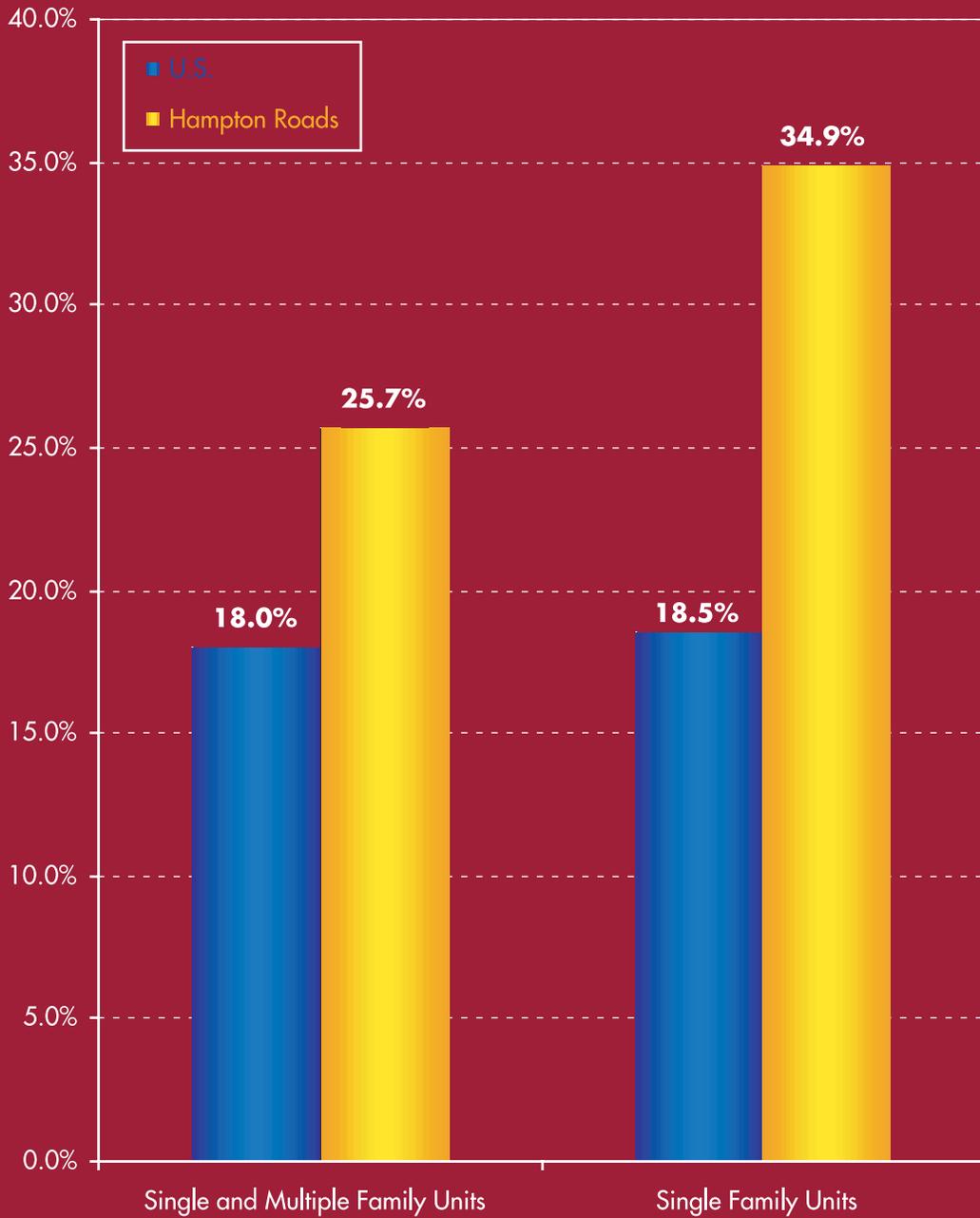
* Force deployment includes one carrier battle group, one amphibious group, one food and ammunition ship, one Langley air wing, Fort Eustis transportation personnel, special forces and Coast Guard personnel.

Source: The Old Dominion University Economic Forecasting Project

Housing

One of the major stories in Hampton Roads in recent years has been the vibrancy of the housing market. Over the past three years, new housing construction has grown dramatically and by the end of 2003 is projected to be more than \$300 million above the 2000 level. Between 2000 and 2002, the value of new single-family residential housing construction in Hampton Roads increased 34.9 percent, compared to 18.5 percent nationally (Graph 3 depicts these data).

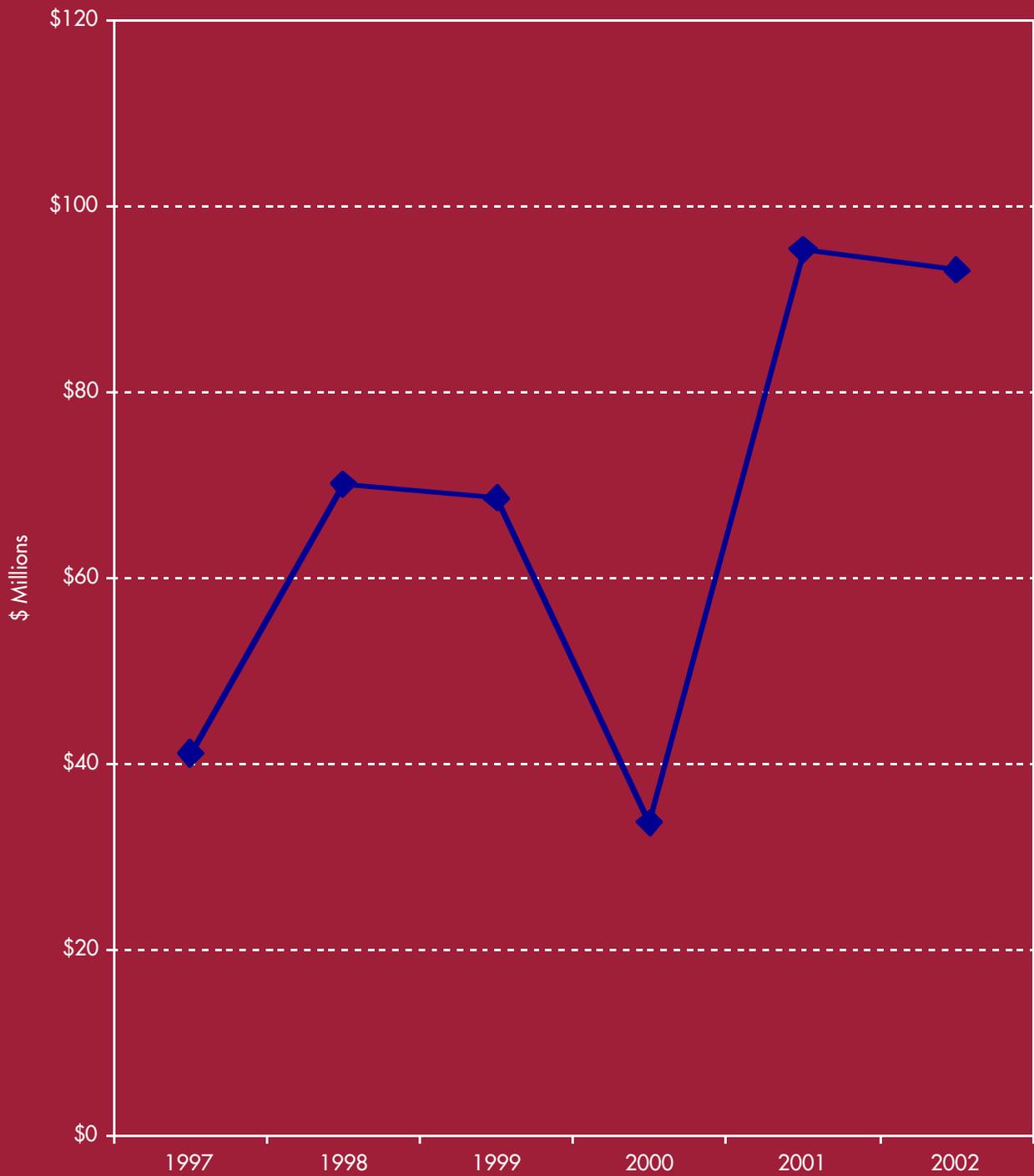
GRAPH 3
RATE OF CHANGE IN THE VALUE OF NEW RESIDENTIAL HOUSING
CONSTRUCTION FOR HAMPTON ROADS AND THE U.S.
(2000-02)



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

Housing growth in Hampton Roads has been concentrated in single-family housing construction; however, multi-unit construction also has fared well. Graph 4 demonstrates that multi-unit housing construction, which in 2002 accounted for roughly 10 percent of new residential construction, more than doubled in value from 2000 to 2002. Taken together with the very healthy increase in single-family residential construction, this produced a situation that many have termed a housing boom.

GRAPH 4
TOTAL VALUE OF NEW FIVE-UNIT OR MORE
RESIDENTIAL HOUSING STRUCTURES
(1997-2002)



Source: U.S. Bureau of the Census

THE HOUSING BOOM AND RISING HOMEOWNERSHIP

The housing boom in Hampton Roads has been fueled by a significant change in the ratio of owners to renters. From 1999 to 2002, the proportion of households owning homes rose more than 10 percent. This is an astonishing change. Graph 5 demonstrates how Hampton Roads has surged ahead of Virginia and the rest of the nation in this regard. Our region now has the fourth-highest homeownership rate among the 75 largest metropolitan areas in the nation.

How to explain the meteoric increase in the region's homeownership rate and accompanying boom in the housing industry? One explanation is the persistent decline in home mortgage interest rates since 2000, which clearly has stimulated the housing market. Even so, this decline has occurred throughout the country, but led to only a 2 percent increase in the homeownership rate nationally. Thus, only about two percentage points of the 10 percentage-point increase in homeownership in Hampton Roads might be attributed to lower mortgage rates. What accounts for the remaining 8 percent?

A second explanation focuses upon the general prosperity of the region. As we have seen, Hampton Roads has been doing better economically than the rest of the United States. Our prosperity has stimulated housing demand; however, statistically, numerous economic studies tell us that the sensitivity of housing demand to income changes is not that large. No more than one-half of 1 percent of the increase in housing ownership has been due to the larger-than-average increases in income in the region in recent years.

A third explanation focuses on important changes in U.S. government policies. There are five changes of interest that appear to have special impact on Hampton Roads.

- Starting in 2000, the DOD increased the housing allowance it pays its active-duty personnel. These increases across all pay grades were significant and particularly large among lower-level enlisted personnel. For example, according to DOD data, an E-5 (mid-level enlisted grade) individual now receives 32.5 percent more housing allowance than in 2000, while an E-1 (the lowest enlisted grade) receives 54.4 percent more.
- Military pay raises have been higher than the national average for all employees.
- The DOD began an informal "Homesteading Policy" in the mid-1990s. This tacit policy is designed to reduce the probability that personnel will be required to change their geographic locations, especially if they are in a military-heavy area such as Hampton Roads. Human resources personnel have been advised, to the extent possible, to be sensitive to the location needs of active-duty personnel, thus reducing the transient nature of military family life. This appears to have allowed military personnel to become more confident about home purchases.
- In 1999, the Office of the Chief of Naval Operations began to follow a "Sailors Ashore" policy in order to improve the quality of life of sailors and thereby increase retention. The policy encourages sailors to move ashore from their ships and take advantage of the significantly increased housing allowances available to them since 2000.
- The DOD's new "Community First" policy is designed to reduce the number of personnel living on domestic military bases. Under this policy, non-base housing placements for personnel have become a priority as part of DOD's attempts at privatization.

There is widespread agreement that these policy changes have stimulated the housing demand among military personnel in Hampton Roads. It is not clear that together they account for the remaining 7.5 percent of unexplained increase. On the other hand, the impact of these changes may have been even larger. It is too early to know. This is an empirical question that the Old Dominion University Economic Forecasting Project will tackle in the future after more evidence is available.

GRAPH 5
HOMEOWNERSHIP RATES FOR HAMPTON ROADS, U.S.
AND THE 75 LARGEST U.S. METROPOLITAN AREAS
(1997-2002)



Source: U.S. Bureau of the Census

A HOUSING BUBBLE IN HAMPTON ROADS?

The national media have been filled with speculation that a “price bubble” may have developed in housing markets in some cities and regions. The Federal Reserve Bank has also issued caveats in this regard. What is a housing “price bubble” and does the hot housing market in Hampton Roads mean we have one here?

An April 2002 conference held by the Chicago Federal Reserve Bank and World Bank focused on asset price bubbles. Here, a price bubble was defined as a situation where an asset in question (say, housing) trades at prices not justified by economic fundamentals. In the case of a share of stock, this could mean that the price/earnings ratio (P/E) is unreasonably high. Consider a stock that trades for \$100 per share and pays an annual dividend of \$1. The P/E ratio, therefore, is $\$100/\$1 = 100$. This means that one must invest \$100 to obtain \$1 of dividend income. Contrast this to a 10-year U.S. government bond, which in June 2003 was yielding 3.26 percent. Here, the P/E ratio was $\$100/\$3.26 = 30.67$, meaning that one could invest only \$30.67 to obtain \$1 of income. Further, the U.S. government bond is virtually risk-free, while the share of stock is not.

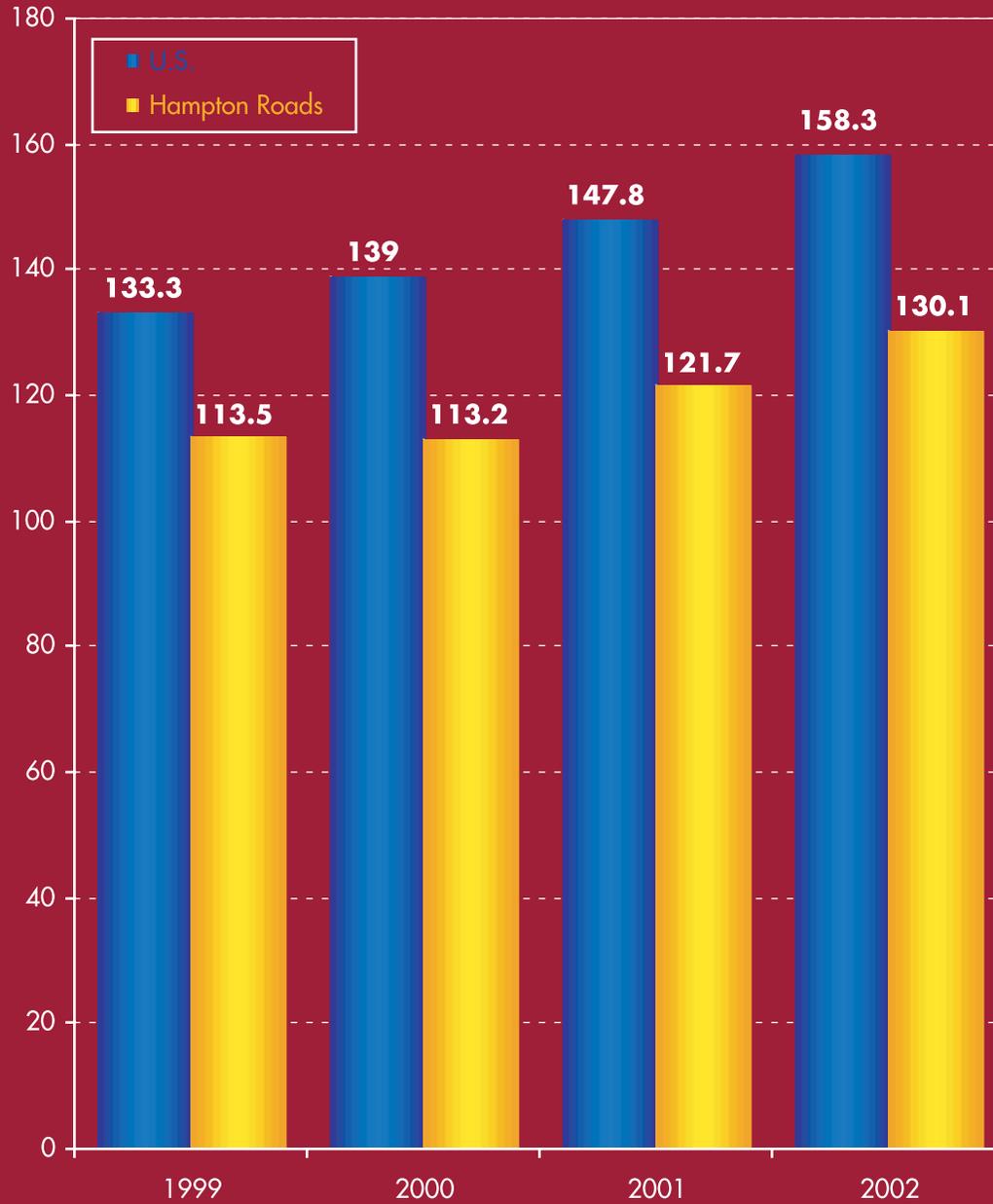
Now, consider a house to be an asset similar to a share of stock. Instead of a dividend, a house can generate rental income. Even if the owner doesn't choose to rent the house, he or she could do so and thus sacrifice whatever rent he/she could have received. Suppose a \$100,000 house could be rented for \$500 per month, or \$6,000 per year. Then, the P/E ratio for this house is $\$100,000/\$6,000 = 16.67$. In this case, one needs to invest only \$16.67 in order to generate \$1 of income, though there is some risk attached. But, holding risk constant, purchasing a house and renting it (or living in it and receiving that rent implicitly as the value of living there) is an investment that is superior to the share of stock or the U.S. government bond. Its P/E ratio is substantially lower.

But, if the reverse were true, and the P/E ratio for houses was substantially higher than for other assets, then we would conclude that housing was not so attractive an investment and might in fact be overpriced. That is, when housing prices are unrealistically high relative to the rental value of those houses, those houses may well be overpriced. Currently, this situation appears to hold true in cities such as Boston and San Francisco, and this suggests the real possibility of housing price bubbles there. The very term “bubble” implies the possibility that the bubble will burst and housing prices will tumble substantially.

The question is: Are Hampton Roads houses trading at prices not justified by economic fundamentals? The underlying fundamentals in the Hampton Roads housing market, as with those of the nation, include the price, availability and affordability of housing. We'll examine each of these.

Let's begin by looking at regional housing prices (see Graph 6). Since the beginning of the current boom in home prices in 1999, the median house price nationally has risen from approximately \$133,000 to about \$158,000. This is an 18.8 percent increase. By contrast, in Hampton Roads, the median price of a home rose from \$113,500 to \$130,100, or only 14.6 percent. Thus, despite substantial increases in housing values, the median house price in Hampton Roads is now lower than it used to be when compared to national prices. Residential housing is a bargain in Hampton Roads.

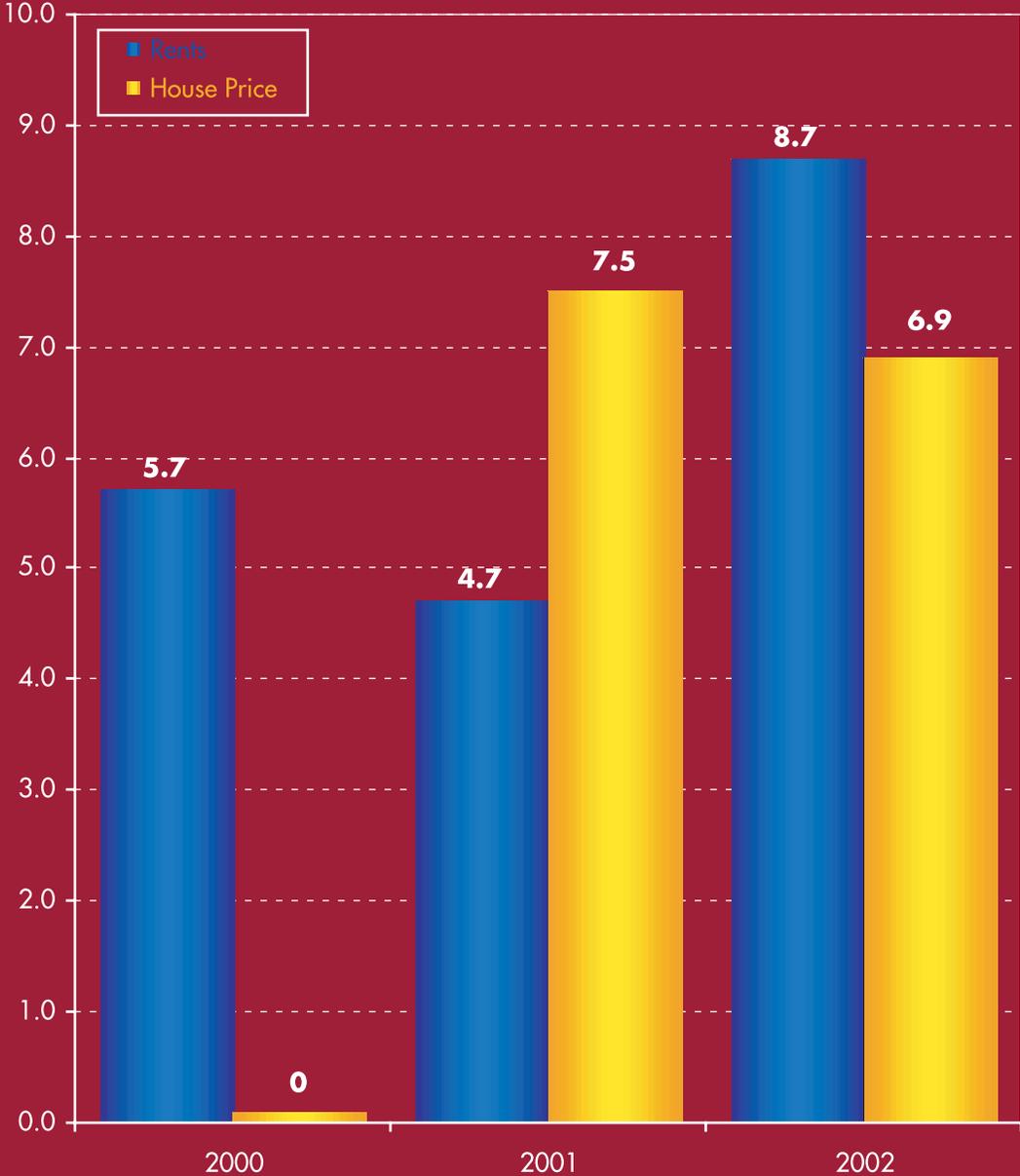
GRAPH 6
MEDIAN HOUSE PRICES IN HAMPTON ROADS AND THE U.S.
(1999-2002)



Sources: National Realtors Association and the Virginia Realtors Association

What has been happening to rents? As Graph 7 illustrates, rents have risen faster than median house prices in two of the past three years. Indeed, since 1999, median home prices have risen less than rents in Hampton Roads (14.6 percent vs. 17.9 percent). Thus, the critical indicator of a housing price bubble – a situation where housing prices rise much more rapidly than rents, causing very high housing P/E ratios – does not hold true in Hampton Roads. In fact, the opposite is occurring. Rents are rising faster than home prices and therefore housing P/E ratios are diminishing. Housing has become a better investment in the past few years and, relative to other assets, is now a more attractive investment. This is the opposite of what has been occurring in “price bubble” housing markets in metropolitan areas such as Boston and San Francisco. Thus, P/E ratios are not out of line for housing in Hampton Roads.

GRAPH 7
PERCENT CHANGE IN RENTS AND MEDIAN
HOUSE PRICES IN HAMPTON ROADS
(2000-02)



Sources: Old Dominion University Center for Real Estate and Economic Development, Virginia Realtors Association and the Old Dominion University Economic Forecasting Project

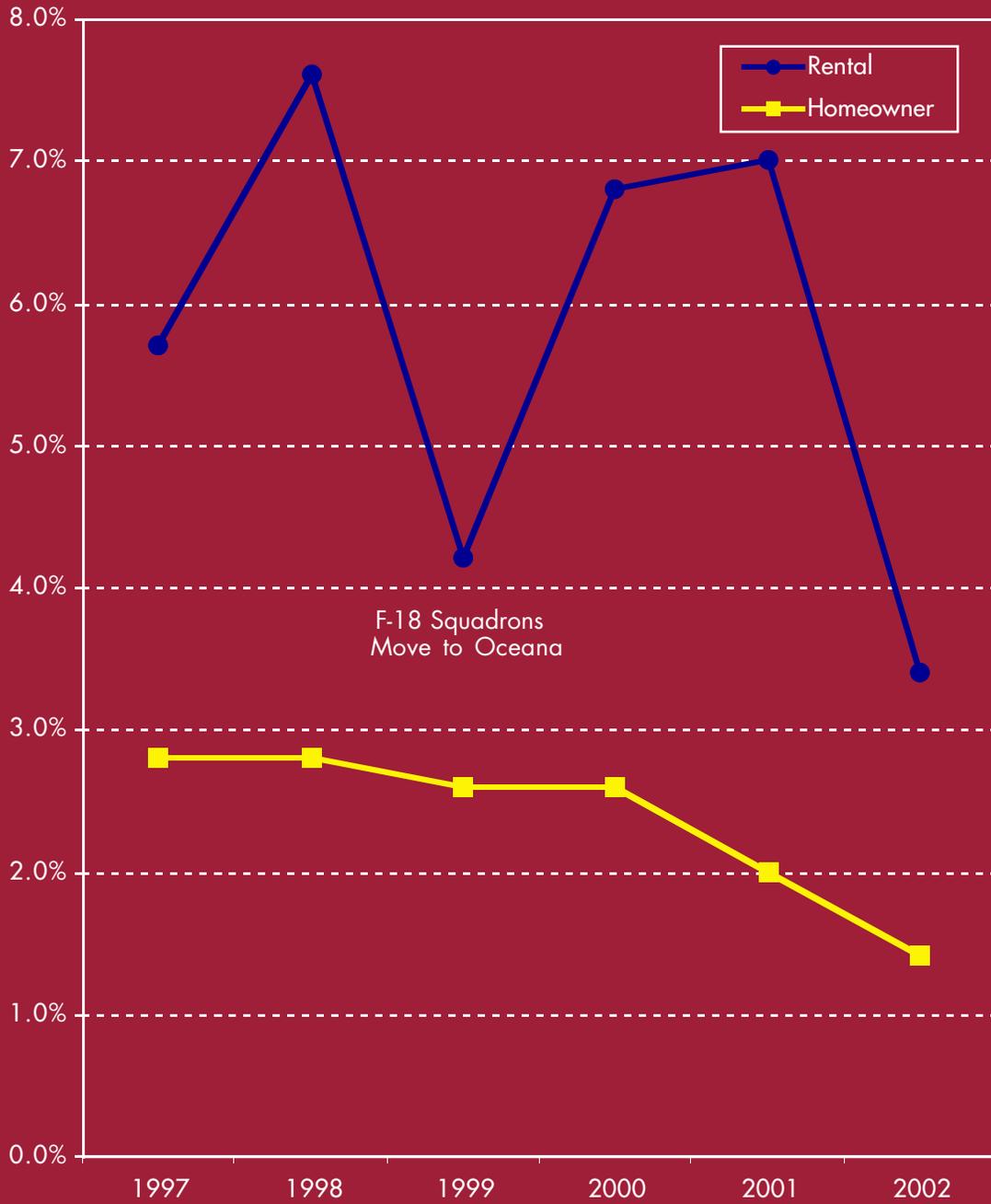
HOUSING AVAILABILITY

Another important aspect of the housing market is general housing availability. Independent of housing prices and rental rates, how much unoccupied housing exists? Vacancy rates have declined significantly in Hampton Roads since 1999, both for rental housing and for homes. The region's 2002 rental market vacancy rate of 3.4 percent was the second lowest of any metropolitan area in the country (see Graph 8). It is also the lowest rental vacancy rate in Hampton Roads in more than 15 years (including the high military growth years of the mid- to late 1980s).

In addition, data from the Virginia Realtors Association indicate that the average sales market time for houses in Hampton Roads – the time that passes between listing and sale – fell more than 36 percent between 1999 and 2002. Preliminary data from 2003 indicate this trend has continued.

What does this imply for housing prices and the notion of a housing price bubble? Low vacancy rates are likely to push prices upward (both for rental housing and owner-occupied homes) and consequently spur home building. If home prices were rising, but rents were stagnant, this would point to a housing price bubble. However, that is not what we see in Hampton Roads.

**GRAPH 8
HAMPTON ROADS RENTAL AND HOMEOWNER VACANCY RATES
(1997-2002)**



Source: U.S. Bureau of the Census

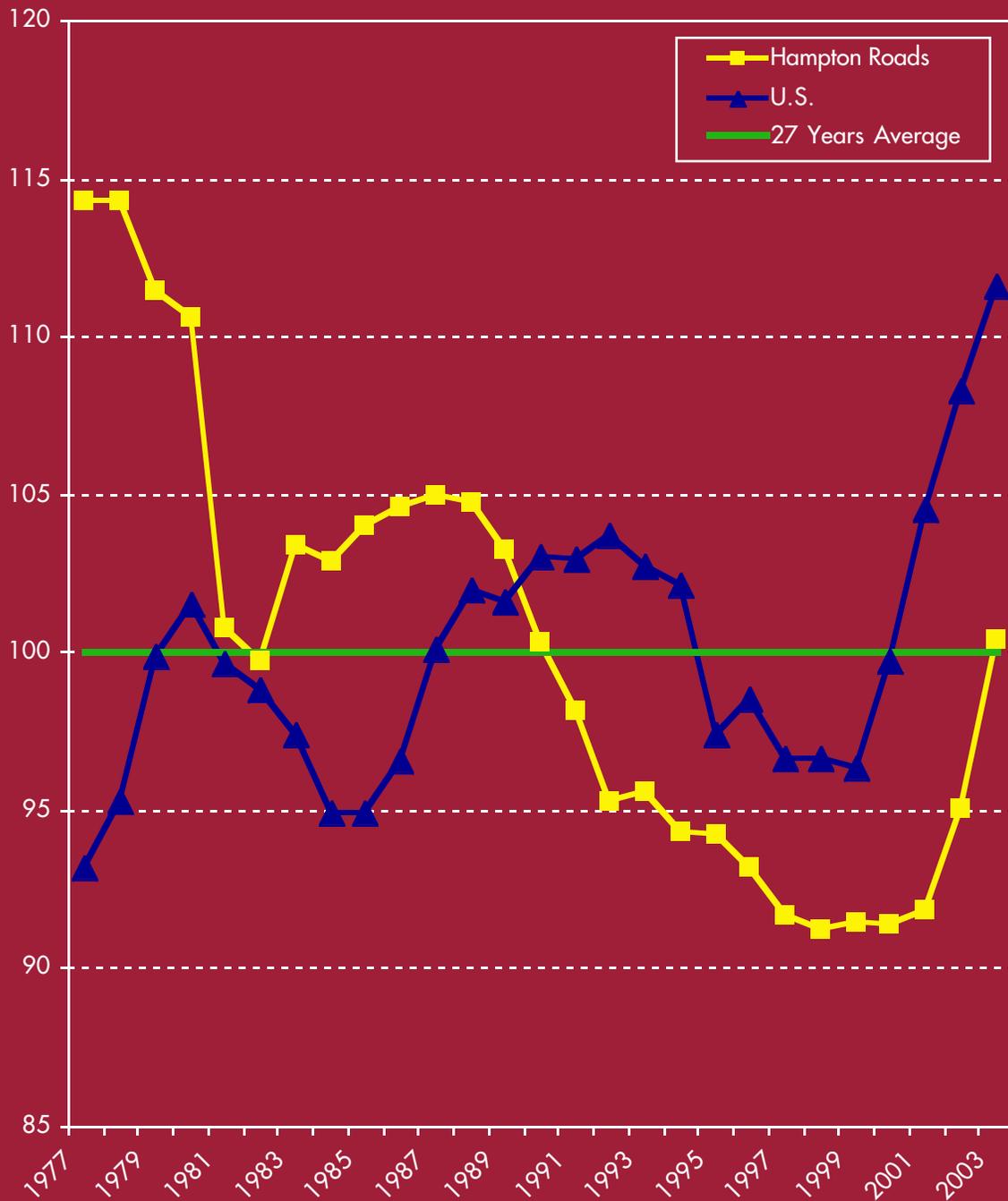
AFFORDABILITY

The rapidly increasing levels of homeownership in Hampton Roads imply that our housing is, in general, affordable for many individuals and families. The ratio of our median house price to our median household income is one measure of affordability, while the ratio of our yearly household mortgage debt to our median household income is another that is commonly used. Both measures offer different perspectives of the median household's ability to carry and support debt.

Graph 9 presents an index of the ratio of the median house price to median household income. This ratio is a measure of how affordable homes are relative to the ability of families to purchase them. The average of this ratio between 1977 and 2003 is the horizontal line labeled 100. Thus, for example, during part of the 1980s, houses were less affordable than average and Graph 9 shows that the ratio of housing prices to household income was above its 27-year average during that time. However, throughout the 1990s, both Hampton Roads and the United States were below that average, signifying that houses were more affordable than usual.

This highly favorable situation may be changing. By the end of 2003, we project the U.S. price-to-income ratio to be more than 11 percent above its 27-year average. This could reflect the beginning of a housing market bubble. In the case of Hampton Roads, however, even a 10 percent increase in the index would only bring us to the 27-year average for this ratio. In other words, our housing may be getting more expensive relative to our incomes, but we're still in very good shape.

GRAPH 9
INDEX RATIO OF SINGLE-FAMILY HOUSE PRICES TO
HOUSEHOLD INCOME IN HAMPTON ROADS AND THE U.S.
(1977-2003)



Source: The Old Dominion University Economic Forecasting Project

The second measure of house affordability is displayed in Graph 10, which shows the percentage of household income needed to pay for a loan in order to purchase a house in any given year. This proportion has consistently fallen over the past 25 years for both Hampton Roads and U.S. homebuyers and now is only about half as high in our region as it was in 1979. Falling mortgage interest rates have had much to do with this. Hence, despite the recent run-up in house prices in both Hampton Roads and the nation, the ability of households to incur debt to purchase housing actually increased from 1999 to 2003. By this measure, houses are becoming increasingly affordable.

Further, Hampton Roads has improved more than the country as a whole in terms of housing affordability. In 1979, the spread between the United States and Hampton Roads was only 2.3 percent. By 1999, the spread had risen to 5.4 percent (in our favor) and we estimate it to be 5.87 percent in 2003. This implies that Hampton Roads is becoming one of the better places in the nation to purchase a home. Houses are affordable in the region and that affordability is improving more rapidly here than in the nation as a whole. Once again, there is no evidence to support the notion of a housing price bubble in the region.

SUMMING UP THE HAMPTON ROADS HOUSING SITUATION

All things considered, over the past few years, the housing market in Hampton Roads has exhibited “Goldilocks” characteristics – not too hot, but not too cold. Homeownership has surged; homes are affordable, according to conventional measures; we’ve avoided a real estate price bubble; and vacancy rates are sufficiently low that they provide incentives to landlords to build. Seldom have we experienced such a beneficent situation. It may be the best housing situation in the modern history of the region.

GRAPH 10
HOUSE PURCHASE BORROWING COSTS AS A PERCENT OF MEDIAN
HOUSEHOLD INCOME IN HAMPTON ROADS AND THE U.S.
(1979-2003)



*Estimated

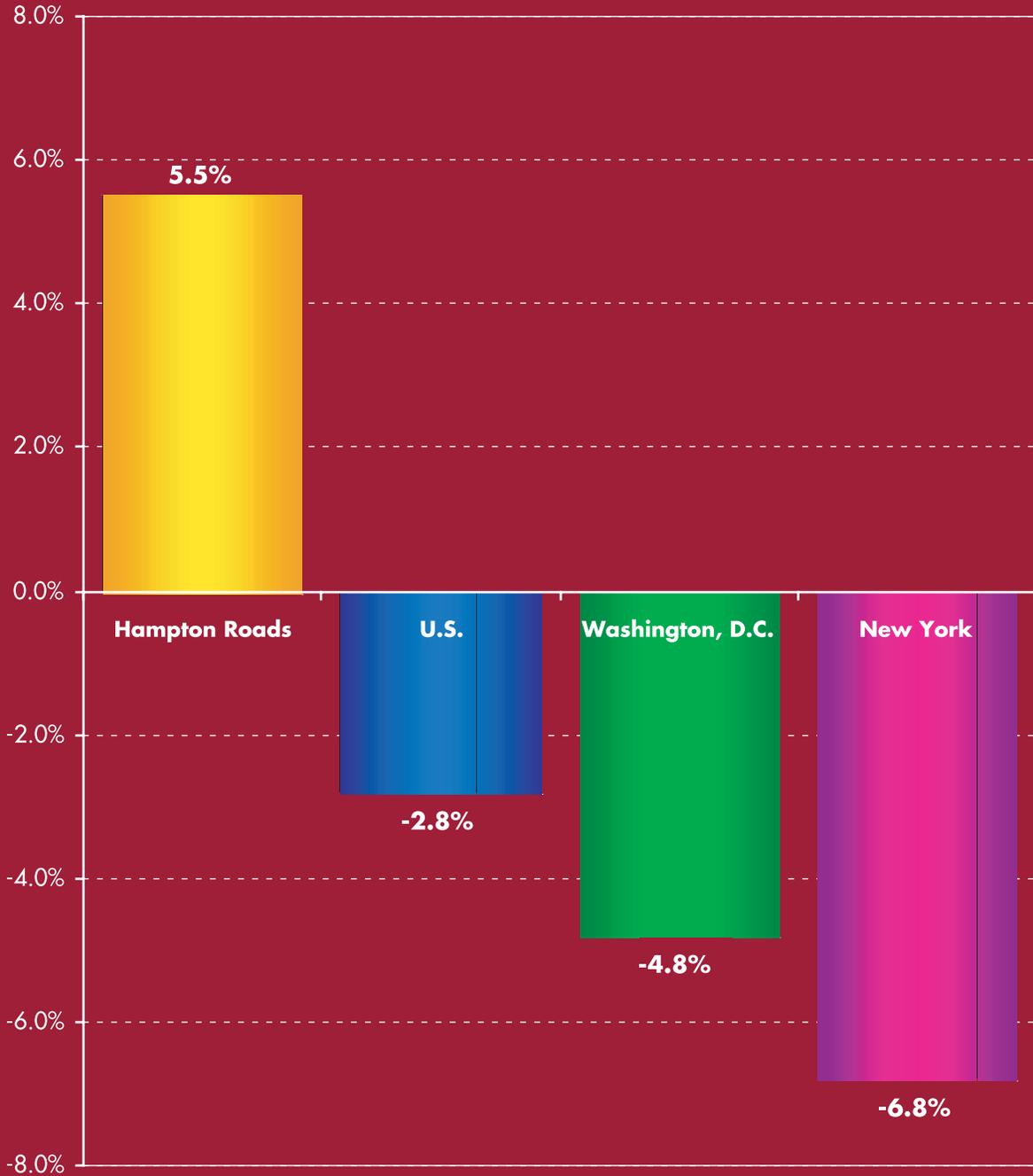
Source: The Old Dominion University Economic Forecasting Project

Tourism

The events of Sept. 11 imposed significant changes upon the U.S. travel industry. Most metropolitan travel destinations have suffered as a result. Travel destinations that are particularly dependent upon tourist air travel have experienced declining visitor traffic, reduced hotel room nights and, in many cases, falling room rates. Hawaii is the poster child for this malaise, but many other travel destinations have suffered as well.

Nonetheless, tourism in Hampton Roads has done very well over the past two years. As depicted in Graph 11, between 2000 and 2002 the total number of rooms rented per night (room nights), which is a good proxy for the number of visitors to a metropolitan destination, rose by 5.5 percent in Hampton Roads while, on average, room nights declined by 2.8 percent in the United States as a whole. On the East Coast, the visitor decline has been particularly severe in Washington, D.C., and New York City, two areas that suffered from the 9/11 attacks and which are heavily dependent on tourist air travel.

GRAPH 11
PERCENT CHANGE IN TOTAL ROOM NIGHTS
HAMPTON ROADS, NEW YORK, WASHINGTON, D.C. AND THE U.S.
(2000-02)

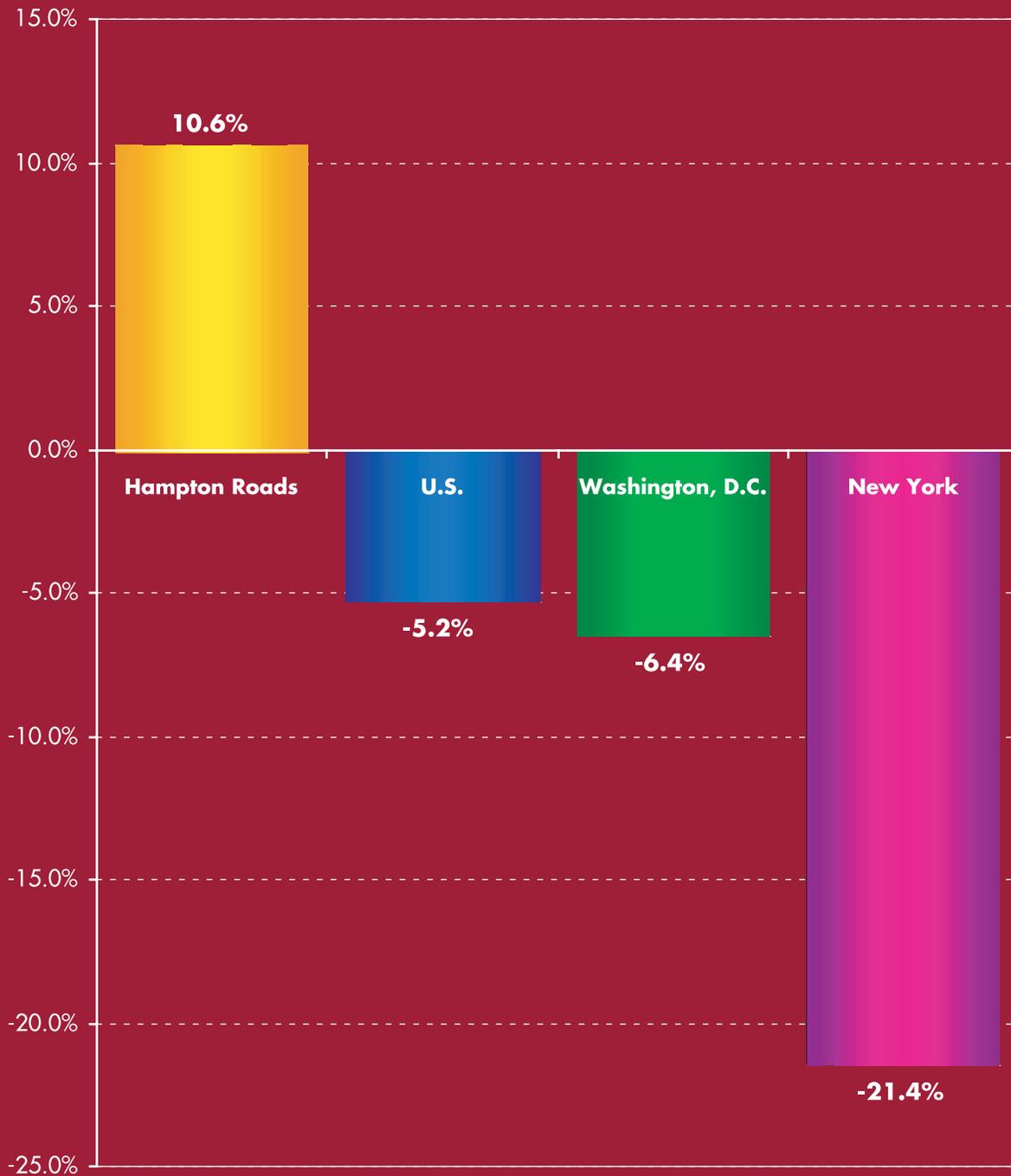


Sources: Smith Travel Research and the Old Dominion University Economic Forecasting Project

Hotel revenue tells much the same story. Graph 12 reports that the growth in hotel room revenue between 2000 and 2002 was 15 percent greater in Hampton Roads than in the nation as a whole. According to Smith Travel Research data, during 2002, Hampton Roads experienced the largest percentage increase in average hotel room rates of any metropolitan area in the United States. Not only are tourists coming to Hampton Roads, they are spending their money. Contrast our hotel room revenue performance (+10.6 percent) with that of New York City (-21.4 percent). We have done quite well.

Why has our region done so well in the area of tourism? A large majority of Hampton Roads visitors travel here by car. For example, in 2002, roughly 95 percent of Virginia Beach tourists arrived by automobile. Virginia Beach and Hampton Roads are perceived to be safe, accessible and affordable. This perception, plus the problems of other destinations, created a mini-boom in Hampton Roads' tourist industry in 2002. This is an important contributing reason why our regional economic growth exceeded that of the nation over the past three years. Of course, things can change. Inclement weather throughout the early part of summer 2003 could reverse the positive impact of tourism on the region.

GRAPH 12
PERCENT CHANGE IN TOTAL HOTEL ROOM REVENUE
HAMPTON ROADS, NEW YORK, WASHINGTON, D.C. AND THE U.S.
(2000-02)



Sources: Smith Travel Research and the Old Dominion University Economic Forecasting Project

The Port Of Hampton Roads

As has been pointed out in previous reports, the Port of Hampton Roads, which is spread throughout the region, has a huge economic impact on all of the cities and counties. Indeed, the city that benefits most from the port is Virginia Beach, despite the fact that it does not host any port facility of consequence.

From 2000 to 2002, general cargo tonnage served by the Port of Hampton Roads increased by 7.1 percent. The Old Dominion University Economic Forecasting Project estimates this cargo growth at the port, plus growth in port-related industries, generated between 750 and 1,000 new jobs within the region.

Of particular importance to recent port cargo growth, and its continued growth over the next few years, was the West Coast dockworkers' strike in September/October 2002. This forced several international ocean carriers to change their distribution patterns. Shut out of their usual West Coast ports, they diverted cargo to Hampton Roads. This caused many shippers to learn that it is cost-effective to route cargo directly to Hampton Roads rather than through West Coast terminals. This "capture effect" was evident in general cargo movement through the first half of 2003, long after the West Coast strike had ended. General cargo tonnage over the first half of 2003 was approximately 15 percent above the same period in 2002.

Also important in this arena has been the growth in port-related retail distribution centers within Hampton Roads. Firms such as Wal-Mart, Cost Plus, Dollar Tree and Target have expanded operations within the region. They will likely increase their cargo tonnage by 10 to 20 percent in 2003.

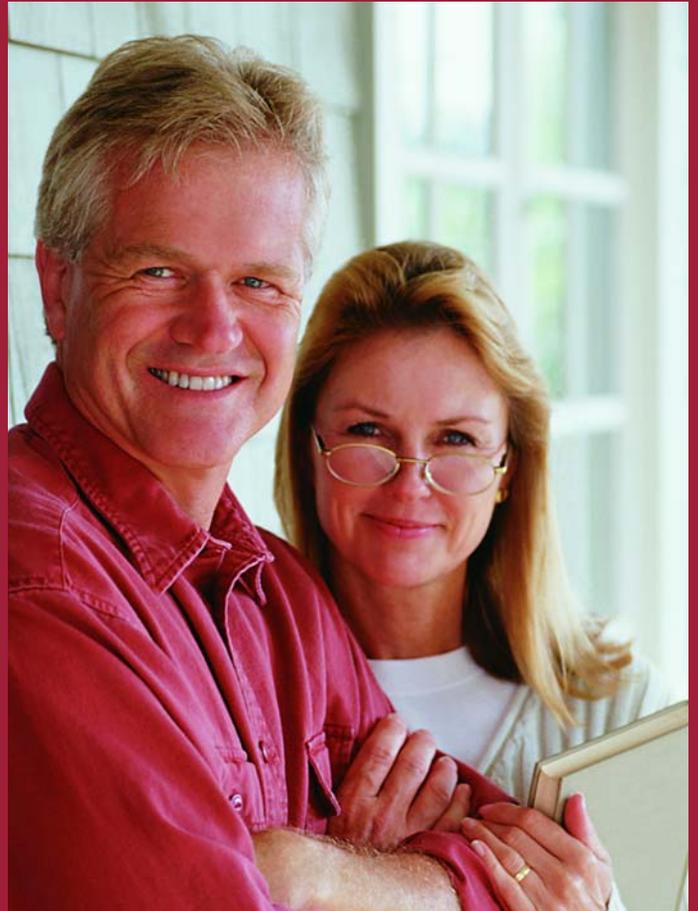
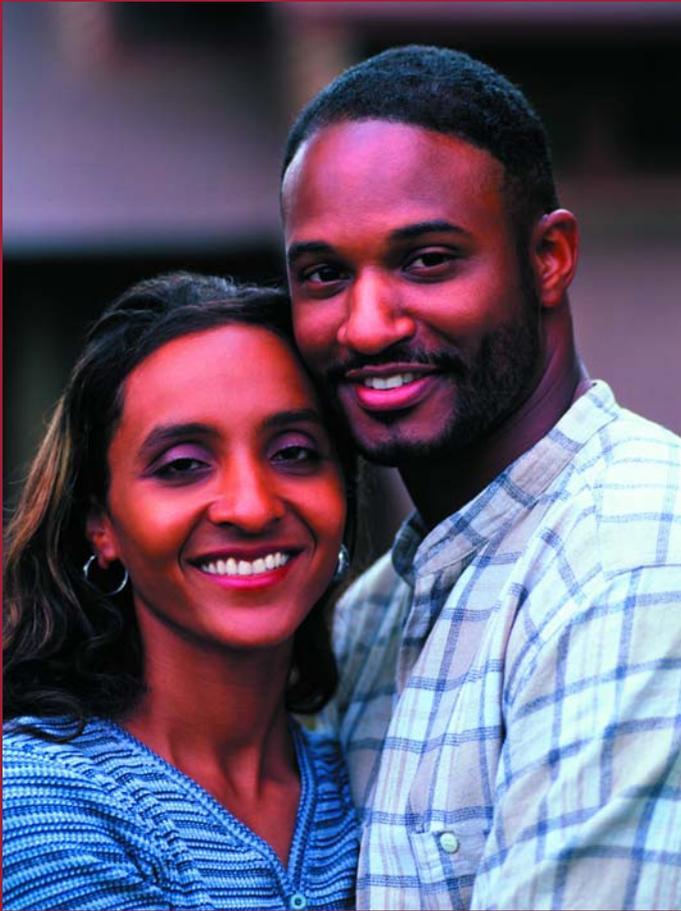
The bottom line is the Port of Hampton Roads once again has provided economic stimulus to the region.

SUMMING IT UP

While it would be inappropriate for us to exhibit *Schadenfreude* – joy over others' misfortunes – area residents must confess that it is refreshing for a change to see Hampton Roads in the position of leading the Commonwealth's economy. In a nutshell, we're growing and most other regions in Virginia are not. Further, we're growing at a substantially higher pace than the nation as a whole.

The major reason for this is increased defense expenditures on personnel, materiel, and shipbuilding and repair. But, tourism has also been an important stimulant, as has the Port of Hampton Roads. Interlaced among these sectors has been the marvelous performance of the region's housing market. Homeownership has surged; homes are affordable; we've avoided a real estate price bubble; and vacancy rates are now sufficiently low to provide incentives to builders. Seldom have we experienced such a beneficent situation. These conditions won't last forever, but they have increased the welfare of thousands of people within the region in recent years.





hampton roads: a comparative tour

Hampton Roads: A Comparative Tour

The 2002 “State of the Region” comparative tour covered a wide swath of statistical categories that compared Hampton Roads with the nation and selected metropolitan areas. The purpose of the comparison was to create quantitative reference points so that, in a limited way, we could measure ourselves according to national standards. In this issue we attempt to update a few of last year’s statistics and go further in depth within particular themes.

As with last year’s report, a group of comparable metropolitan areas was selected to aid in the analysis. Inclusion within the comparison group is based on three primary factors: proximity, size and affinity with Hampton Roads.

Bread, Butter And Jobs

How big is the regional economy? If Hampton Roads were an independent country, it would rank among the top one-third of all countries. **Graph 1 discloses that the value of the economic activity of Hampton Roads is roughly equivalent to that of Syria. Relative to other metropolitan areas in the United States, Hampton Roads ranks among the top 15 percent and is roughly one-eighth the size of New York City (see Graph 2).**

Graph 3 illustrates that the Hampton Roads economy grew slowly in the latter half of the 1990s. However, Graph 4 shows the region has reversed this circumstance since 2000. **Our employment growth was 4.2 percent above the national average for 2000-02.** Coincidentally, our unemployment rate in 2002 was well below the national average (Graph 5). Graph 6 indicates that this has been true consistently since 1990.

GRAPH 1
COMPARATIVE INTERNATIONAL SIZE OF
THE HAMPTON ROADS ECONOMY
(Billions of Dollars in Purchasing Power Parity, 2001)



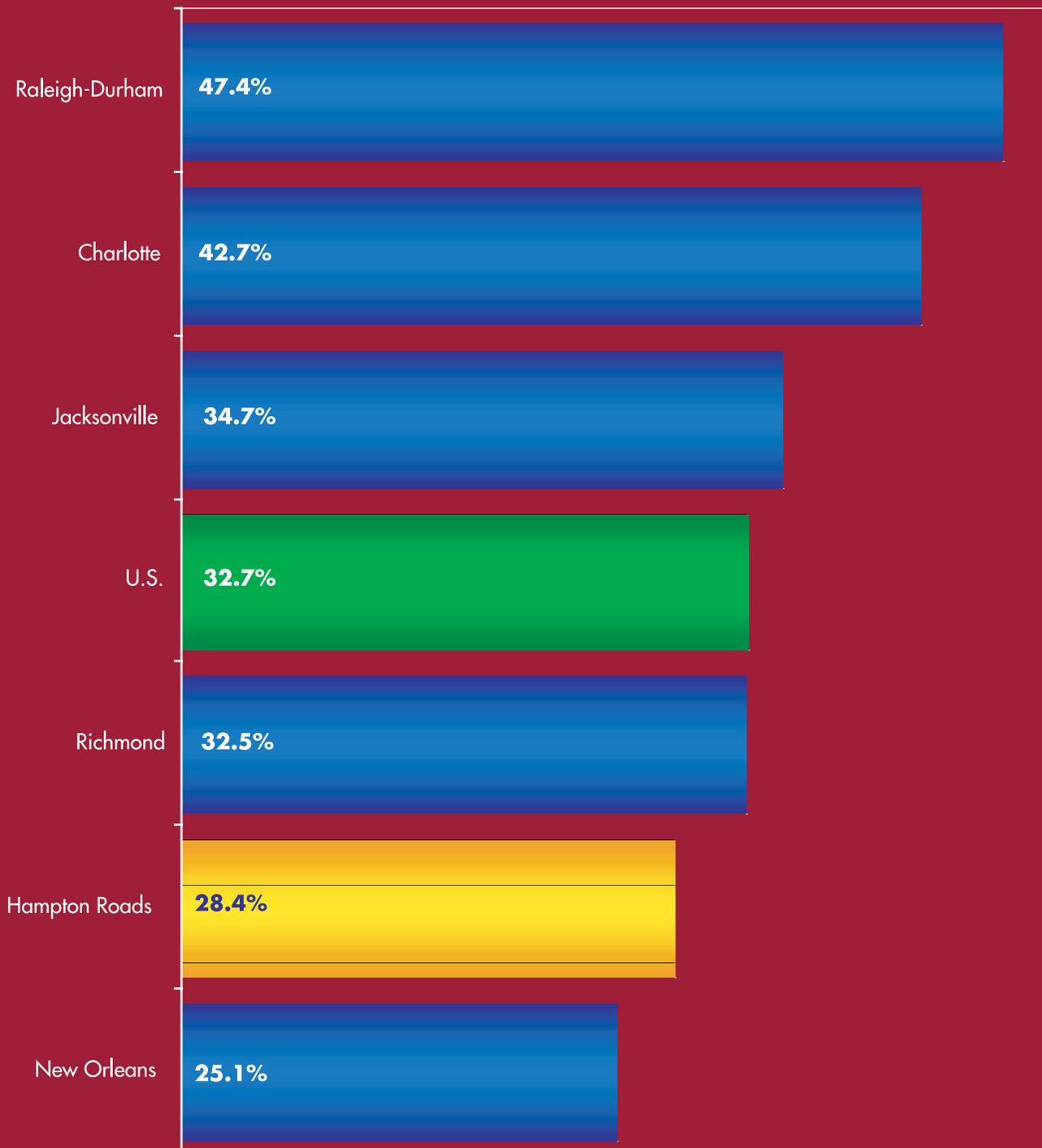
Sources: World Bank and the Old Dominion University Economic Forecasting Project

GRAPH 2
COMPARATIVE METRO SIZE OF THE HAMPTON ROADS ECONOMY
(Gross Product, Billions of Dollars, 2001)



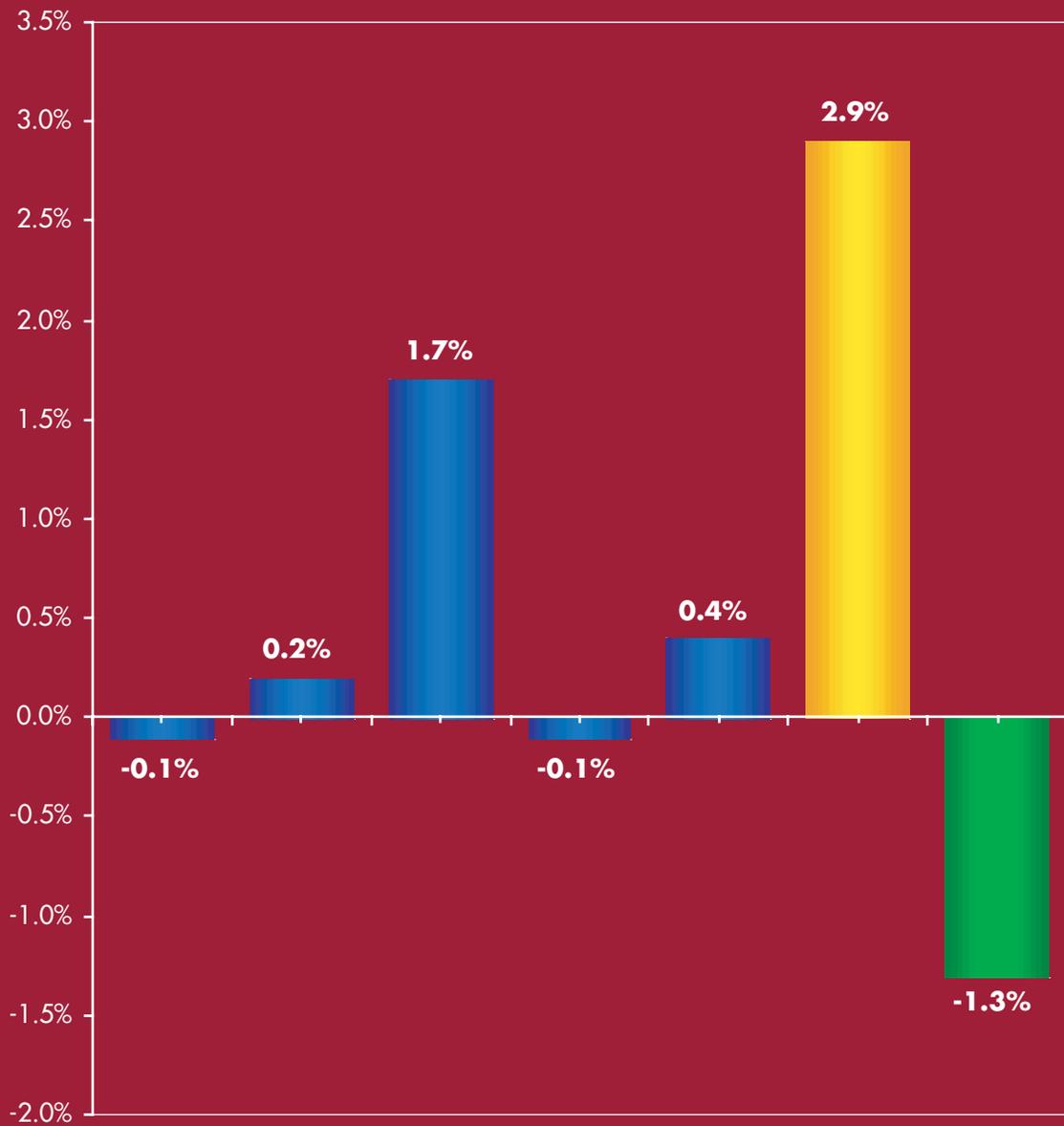
Sources: Standard and Poor's DRI and the Old Dominion University Economic Forecasting Project

GRAPH 3
COMPARATIVE ECONOMIC GROWTH
(Gross Product Increase from 1996 to 2001)



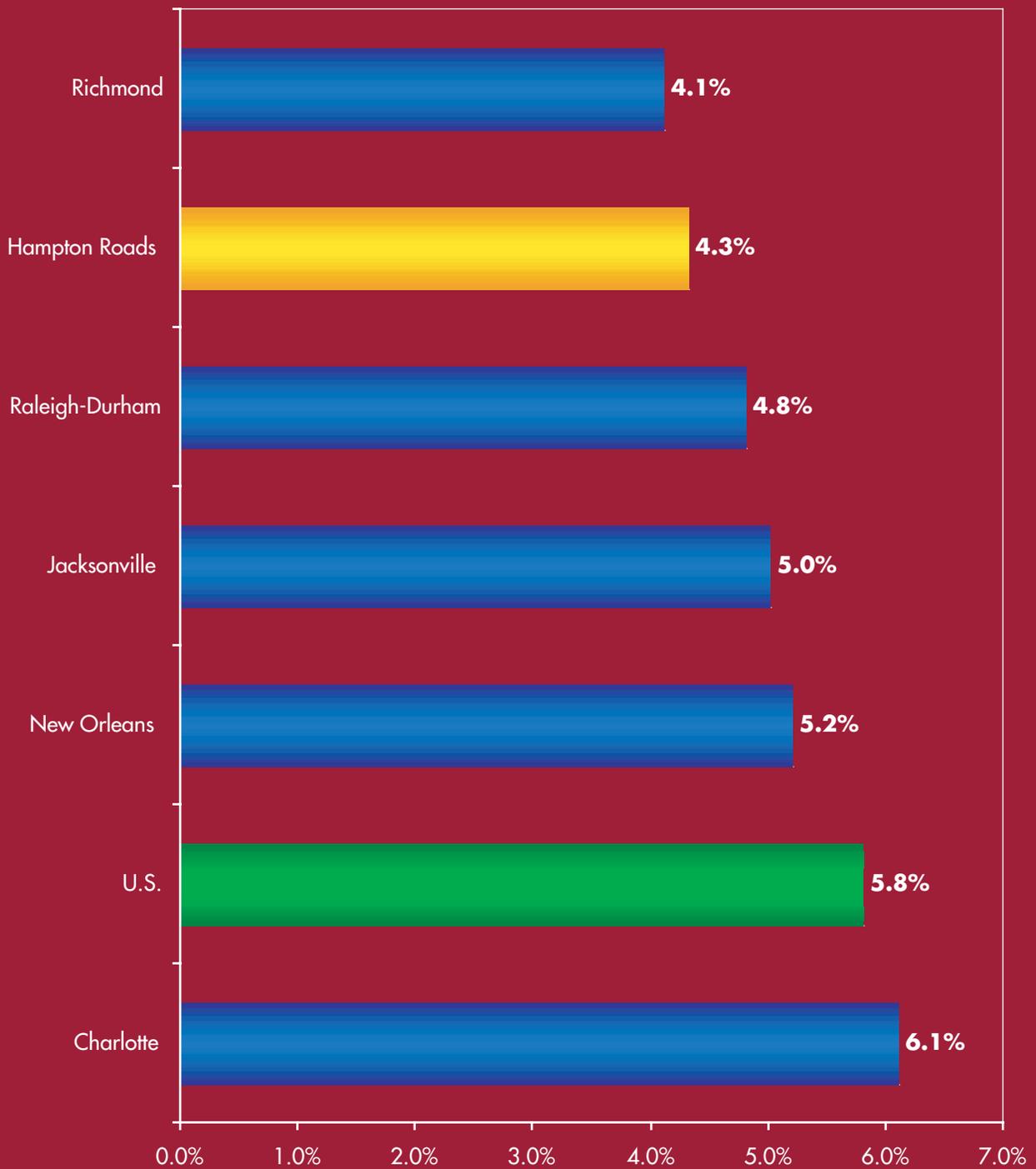
Source: The Old Dominion University Economic Forecasting Project

**GRAPH 4
EMPLOYMENT GROWTH
(2000-02)**



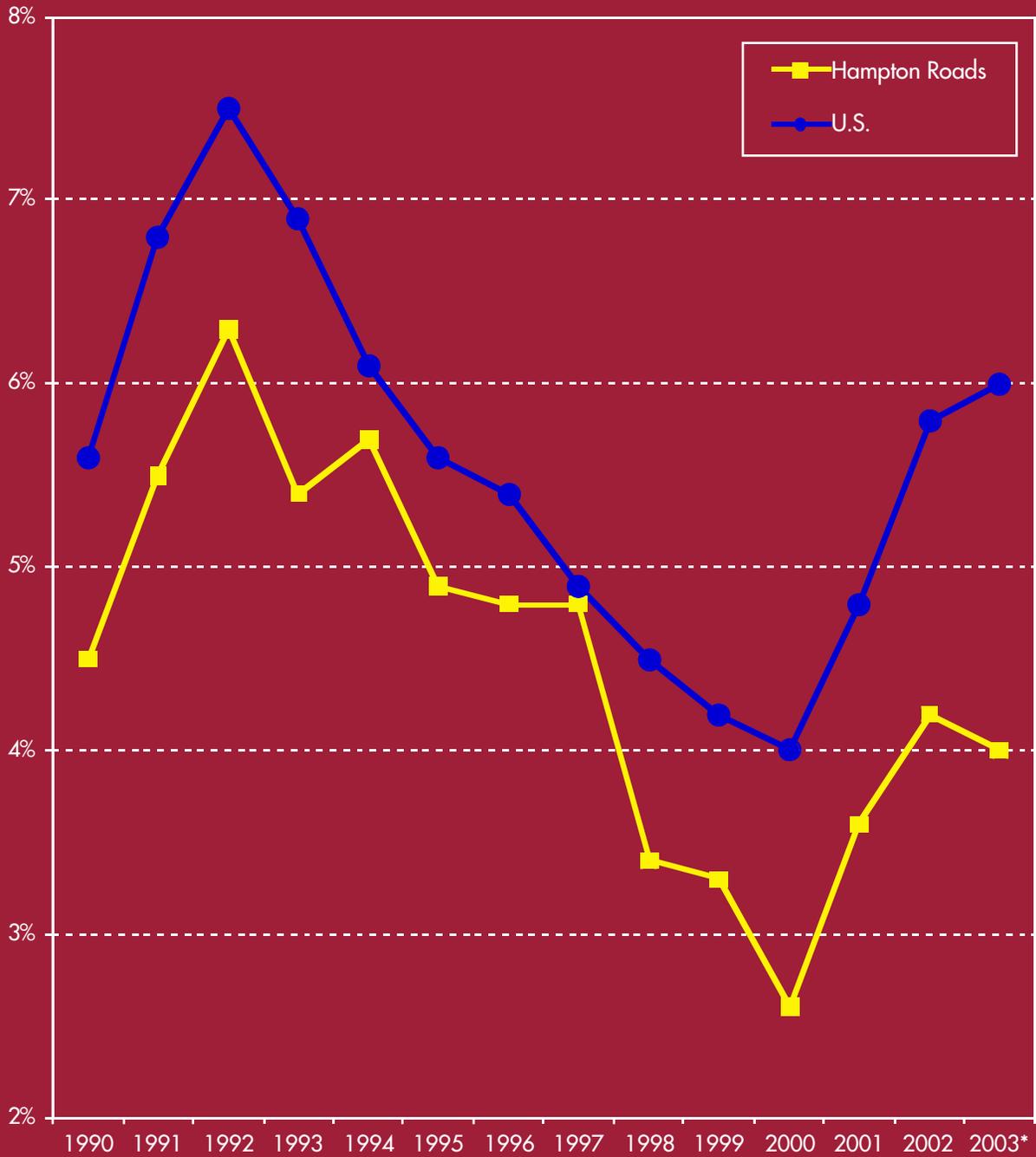
Sources: Bureau of Labor Statistics and the Old Dominion University Economic Forecasting Project

**GRAPH 5
UNEMPLOYMENT RATES
(2002)**



Source: U.S. Bureau of Labor Statistics

**GRAPH 6
YEARLY UNEMPLOYMENT RATE IN HAMPTON ROADS AND THE U.S.
(1990-2003)**



*Estimated

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

Much has been said about the fact that per capita income in Hampton Roads has for many years trailed national averages. However, once we adjust for differences in the cost of living (see Graph 7), we find that the region's per capita income was 98.6 percent of the U.S. average in 2000 (see Graph 8). **Further, because of military compensation increases and other factors, by the end of 2003, Hampton Roads' price-adjusted income per capita is likely to exceed the national average by about 1.2 percent. Things are looking up.**

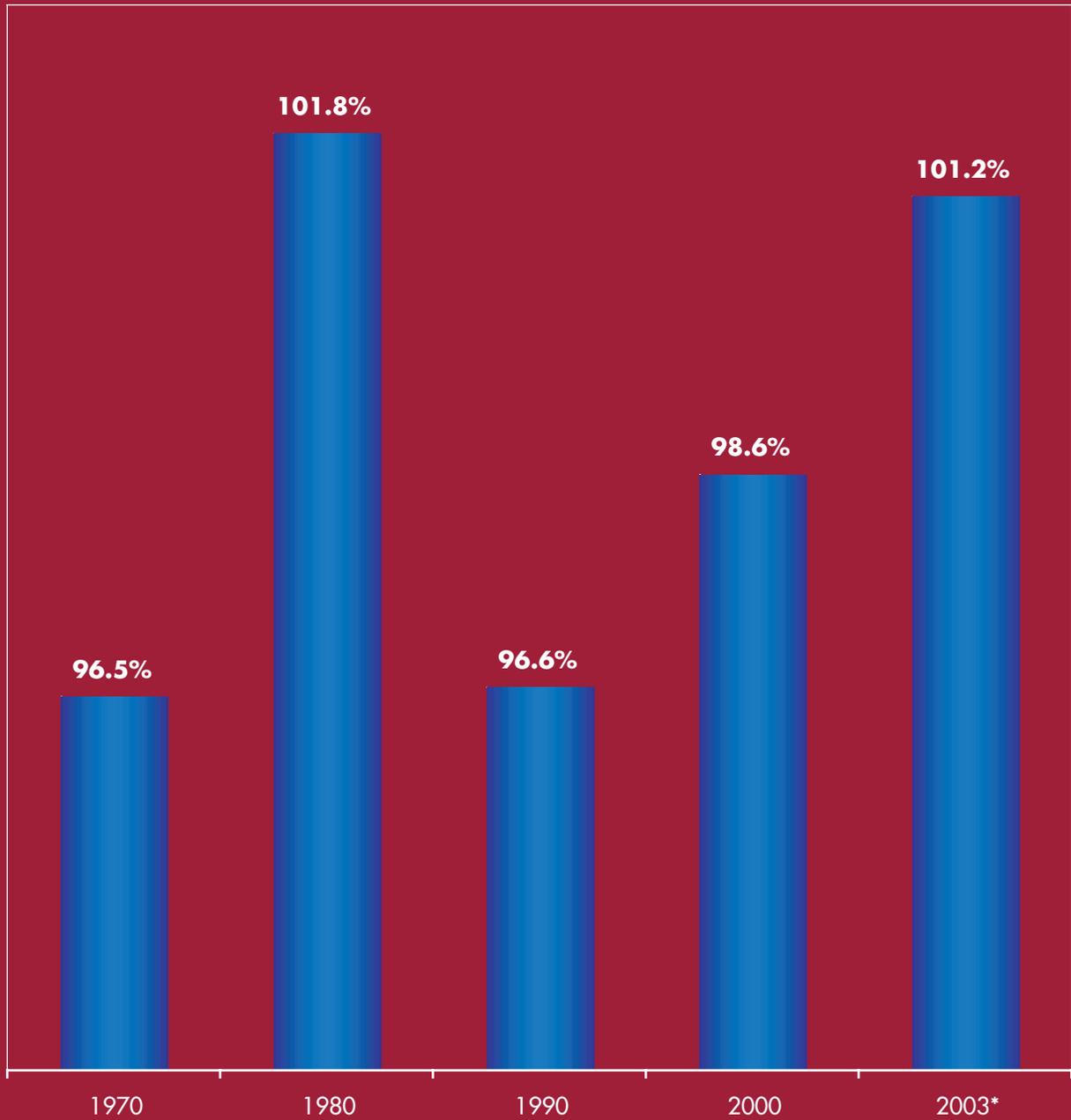
Despite the apparent similarity between the national standard of living and that of Hampton Roads, a closer look reveals *most* of the region's residents enjoy a considerably higher standard of living than do *most* Americans. For example, the average household in New York City has a lower average income than does the average household in Hampton Roads. Indeed, as Graph 9 reports, the bottom 60 percent of households in Hampton Roads are better off economically than the bottom 60 percent of households in New York City, and this does not even take into account the huge cost of living difference between the two regions. **Once living costs are considered, perhaps as many as 85 percent of households in Hampton Roads are better off economically than comparable households in New York City.** The Big Apple has a few people who earn very high incomes, thus inflating the average household income in that city. The typical New Yorker, however, is not doing as well economically as the typical resident of Hampton Roads.

GRAPH 7
PER CAPITA INCOME
(Purchasing Power Adjusted, 2001)



Source: The Old Dominion University Economic Forecasting Project

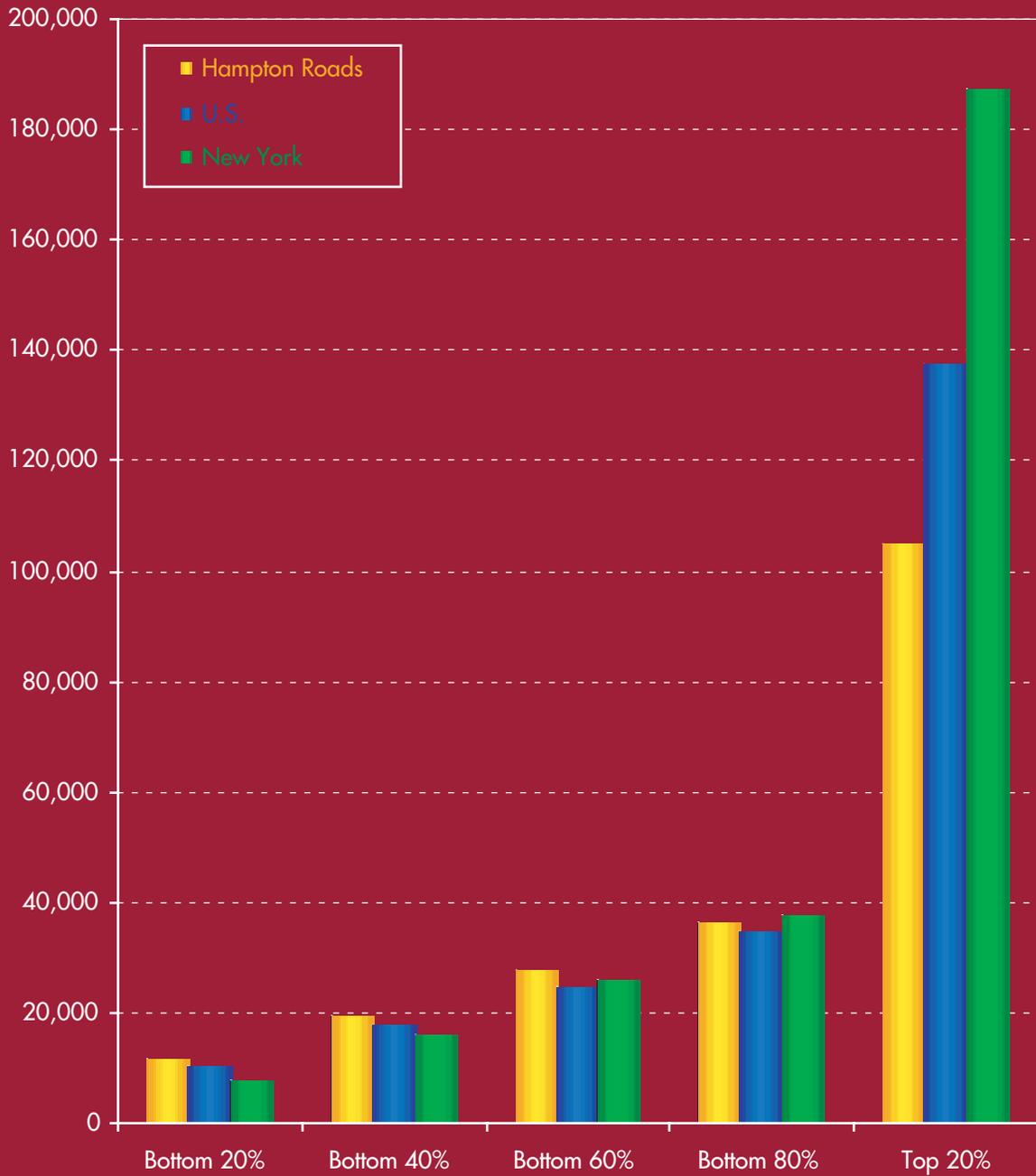
GRAPH 8
HAMPTON ROADS PER CAPITA INCOME AS A
PROPORTION OF U.S. PER CAPITA INCOME
(Adjusted for Purchasing Power)



*Estimated

Source: The Old Dominion University Economic Forecasting Project

GRAPH 9
MEAN HOUSEHOLD INCOME BY CUMULATIVE
POPULATION QUINTILE AND TOP QUINTILE



Source: The Old Dominion University Economic Forecasting Project

The Economics Of Race And Color

Roughly one-third of Hampton Roads residents are black¹ (see Graph 10). As Graph 11 discloses, the median income of black households in Hampton Roads in 2000 was \$30,500, 3.7 percent higher than that of the average black household nationally. **However, as Graph 11 also illustrates, black household incomes in the region are less than two-thirds of those of whites. Specifically, Graph 12 shows that black household incomes were only 62.8 percent of white household incomes in the region in 2000. The national average was 65.8 percent.** The reasons for this are not entirely clear and are beyond the scope of this chapter. Nonetheless, blacks in the region are not doing as well (relatively speaking) as blacks in many other regions of the United States.

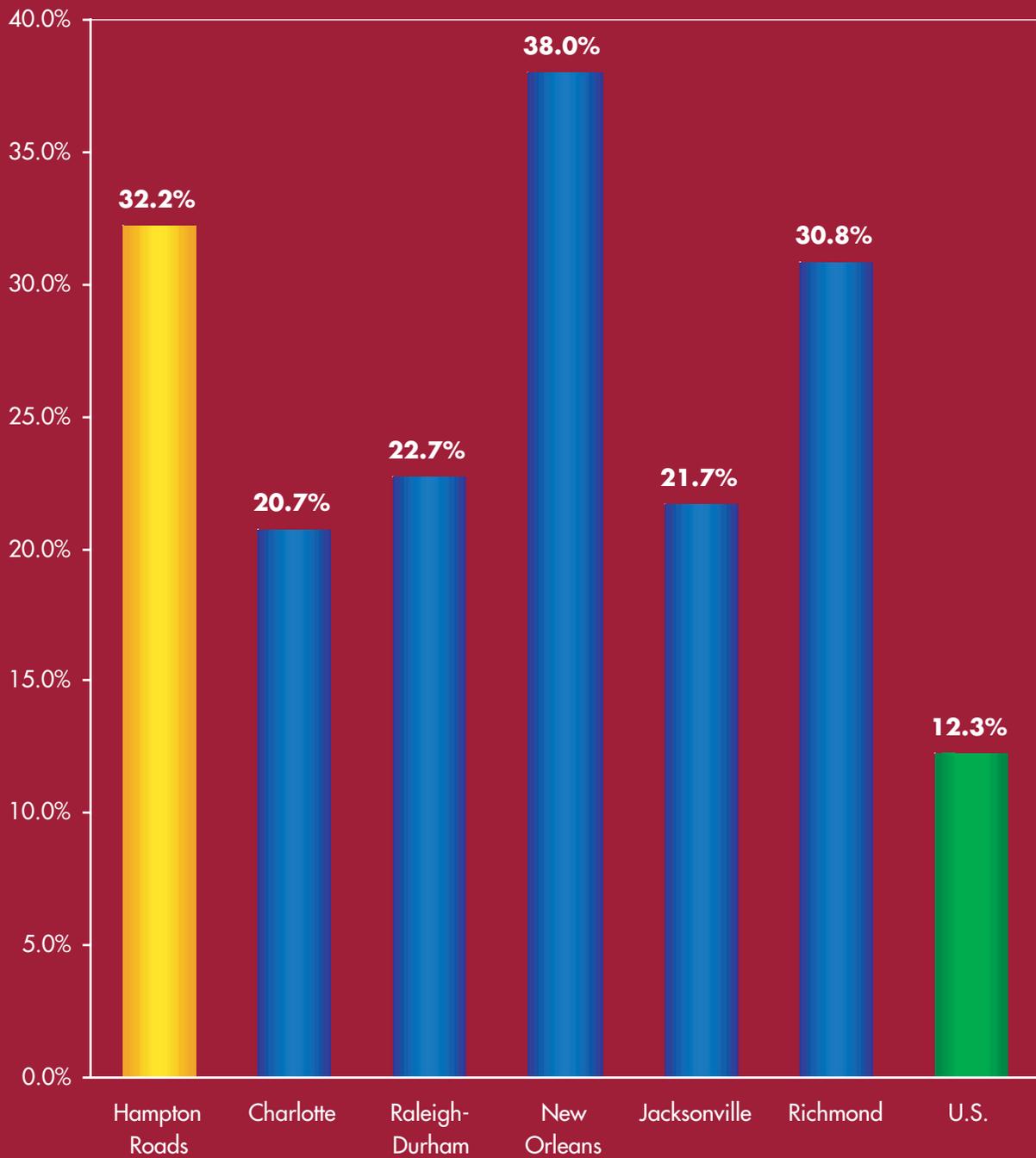
Nearly 21 percent of black citizens in Hampton Roads live in poverty even though the overall regional poverty rate is about 10 percent (see Graph 13). Proportionally, about four times as many blacks as whites live below the poverty line in Hampton Roads. This multiple is only 2.7 for the United States as a whole. Once again, we see that black citizens within Hampton Roads often have not fared as well as blacks in other metropolitan areas and regions.

Economic stress among blacks in Hampton Roads is manifest in many ways, including use of public transportation. Lower-income residents often cannot afford to own or operate an automobile and hence turn to public transportation. This pattern is evident in Graph 14, which depicts greater reliance by blacks on public transportation, not only in Hampton Roads, but also across the nation. This is a reality that should be considered when proposals to cut public transit are discussed.

At the same time, however, blacks in Hampton Roads have a long history of owning their own businesses. Graph 15 reports that Hampton Roads is one of the leading metropolitan areas in the nation in the proportion of businesses owned by blacks. However, the income and poverty data reported in Graphs 11-13 suggest that few of these businesses have achieved great economic success.

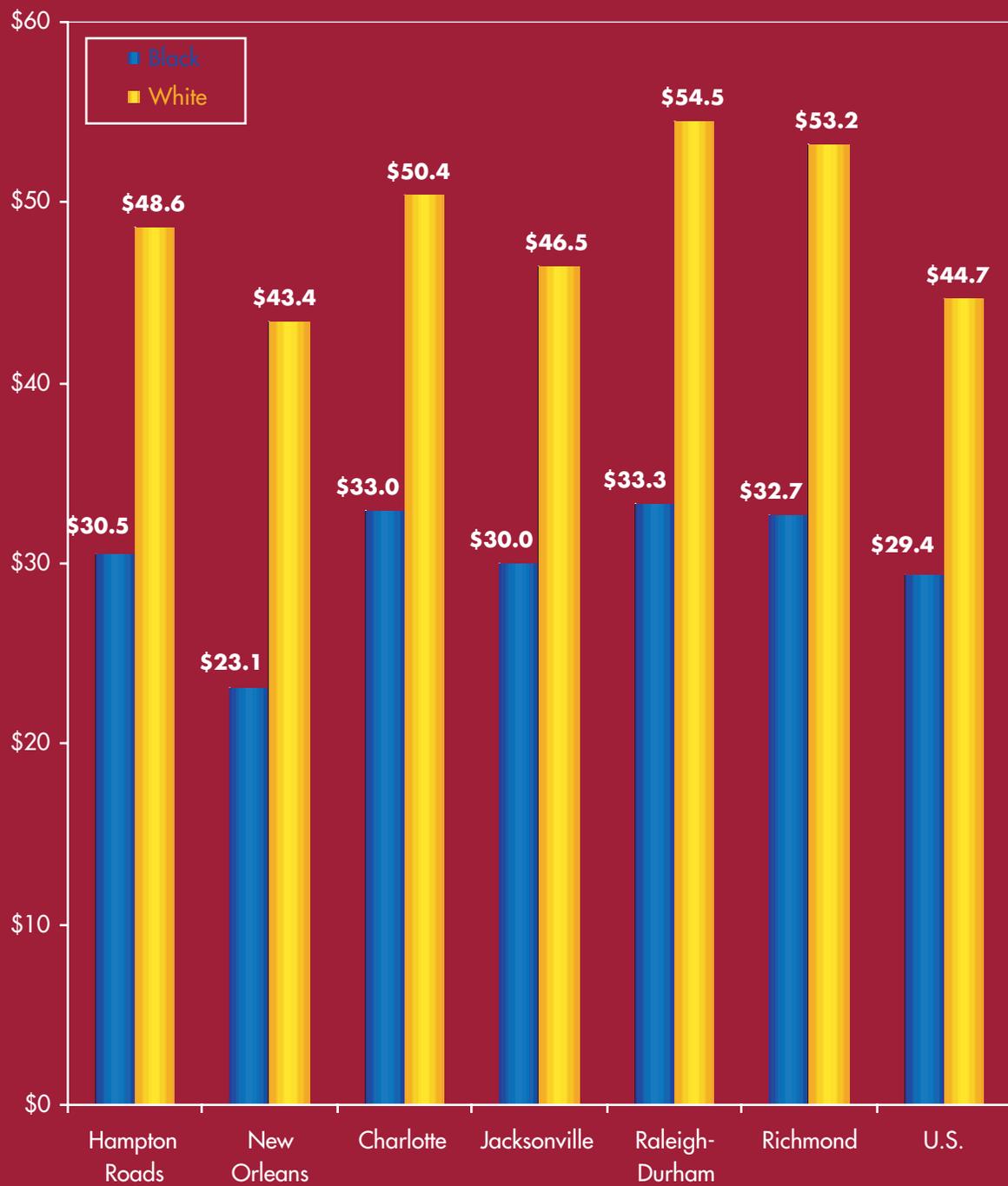
¹ "Black" is the term utilized by the U.S. Census. We use it to represent self-identified African Americans and other people, some of whom are Hispanic, who are dark-skinned and whose original heritage is Africa. Thus, "black" is an inexact term that may pertain to many people of various origins and may as well identify those of mixed ethnic origin. But, it is sufficiently accurate to serve our purposes in this chapter.

GRAPH 10
BLACKS AS A PERCENTAGE OF TOTAL POPULATION



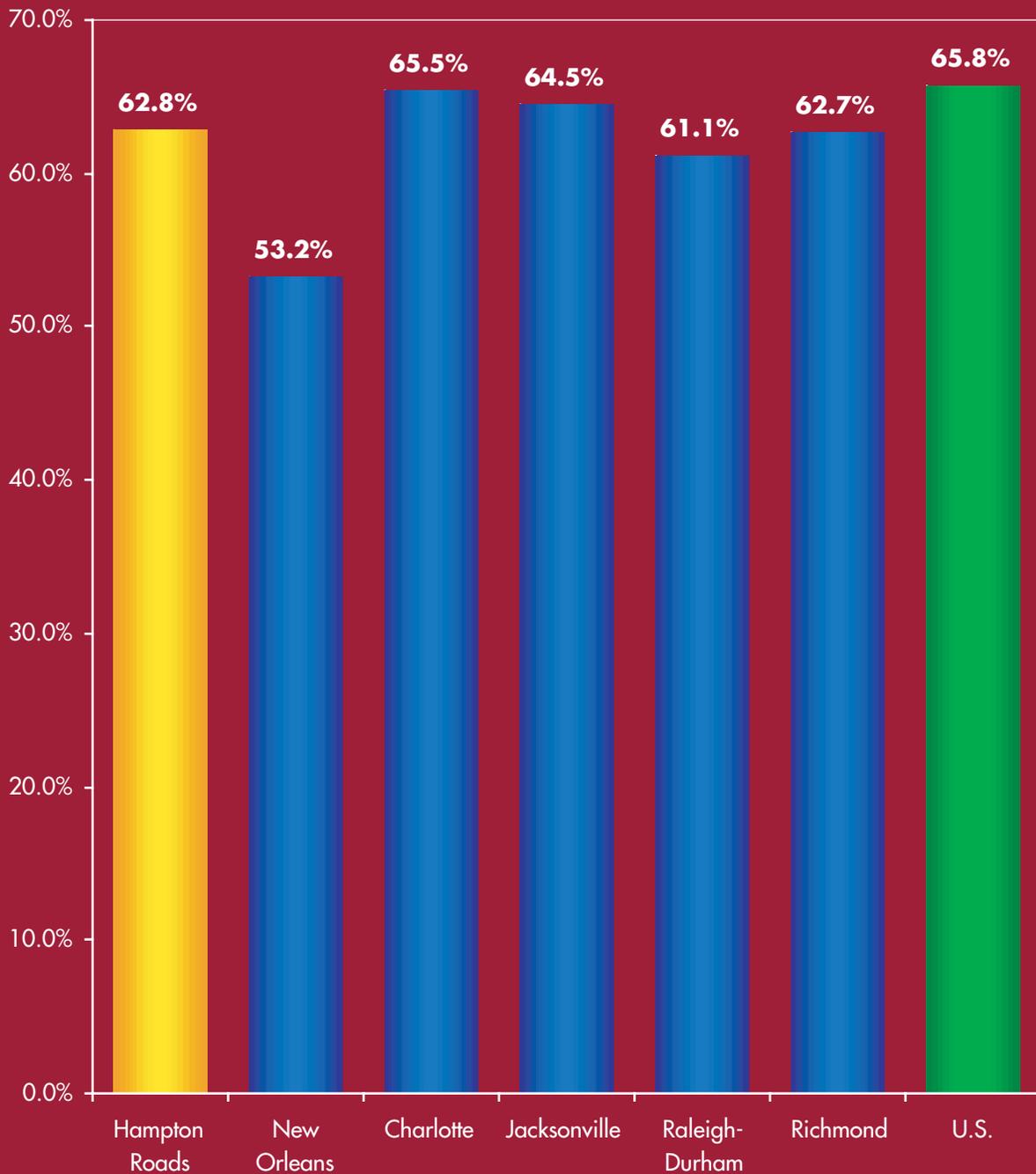
Source: U.S. Bureau of the Census

GRAPH 11
MEDIAN HOUSEHOLD INCOME OF BLACKS AND WHITES
(Thousands of Dollars, 2000)



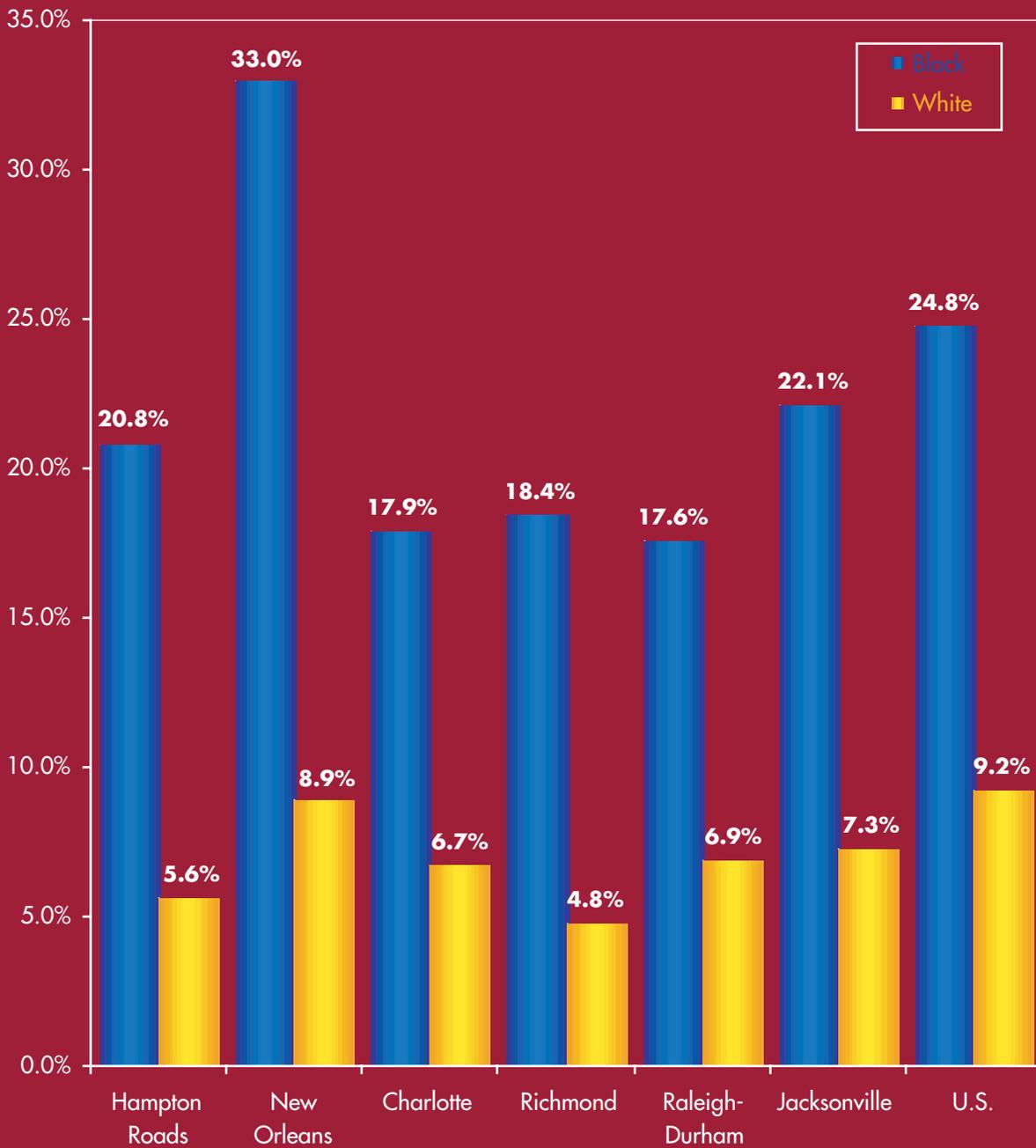
Sources: 2000 Census, U.S. Bureau of the Census and the Old Dominion University Economic Forecasting Project

GRAPH 12
BLACK HOUSEHOLD INCOME AS A PERCENTAGE
OF WHITE HOUSEHOLD INCOME
(2000)



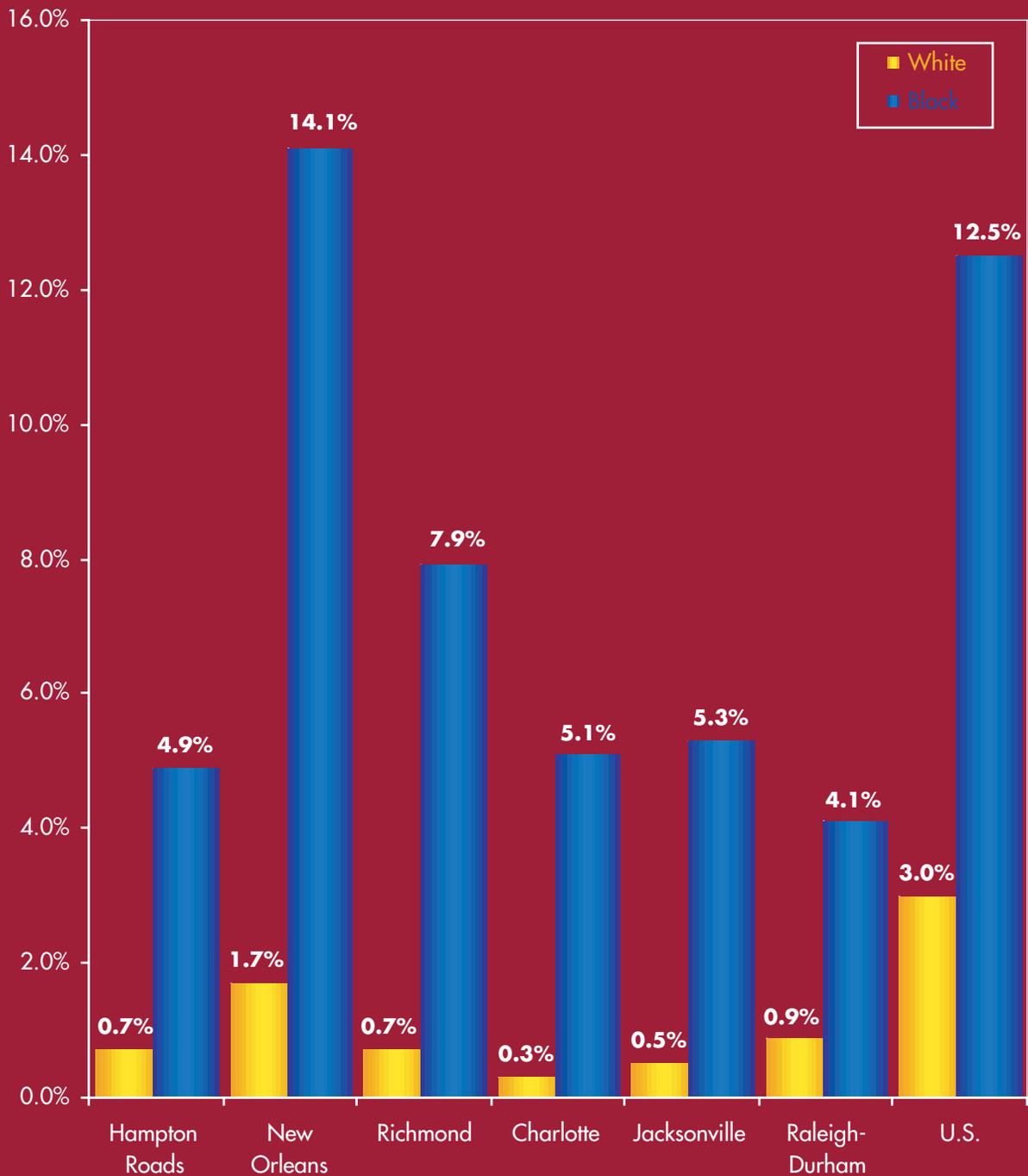
Sources: U.S. Bureau of the Census and the Old Dominion University Economic Forecasting Project

GRAPH 13
PERCENT POPULATION LIVING IN POVERTY
(2000)



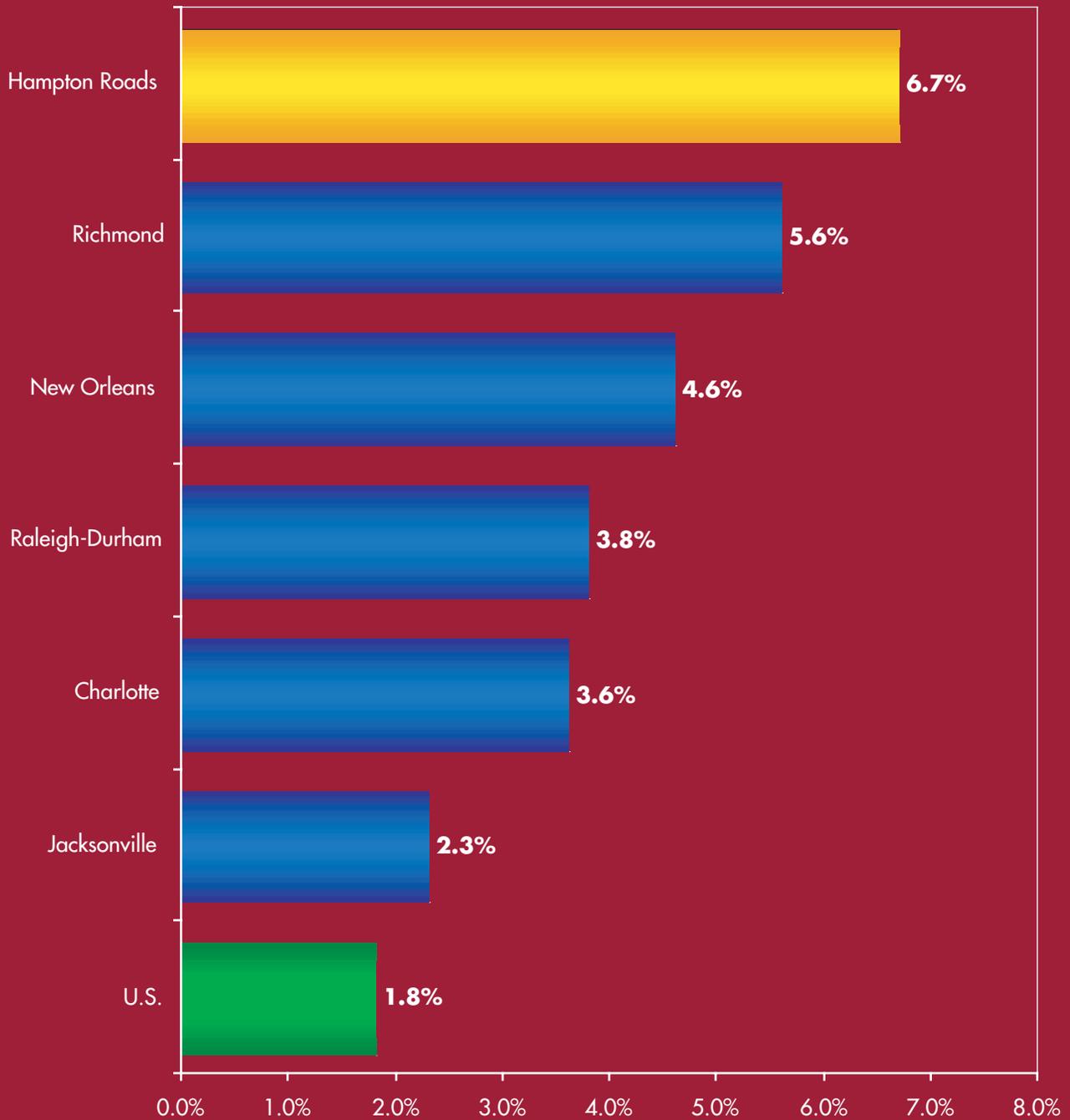
Sources: 2000 Census, U.S. Bureau of the Census and the Old Dominion University Economic Forecasting Project

GRAPH 14
PERCENTAGE OF WORKERS TAKING PUBLIC
TRANSPORTATION TO WORK
(2000)



Sources: 2000 Census, U.S. Bureau of the Census and the Old Dominion University Economic Forecasting Project

GRAPH 15
PERCENTAGE OF BUSINESSES WITH PAID EMPLOYEES
OWNED BY BLACKS
(2000)



Sources: 2000 Census, U.S. Bureau of the Census and the Old Dominion University Economic Forecasting Project

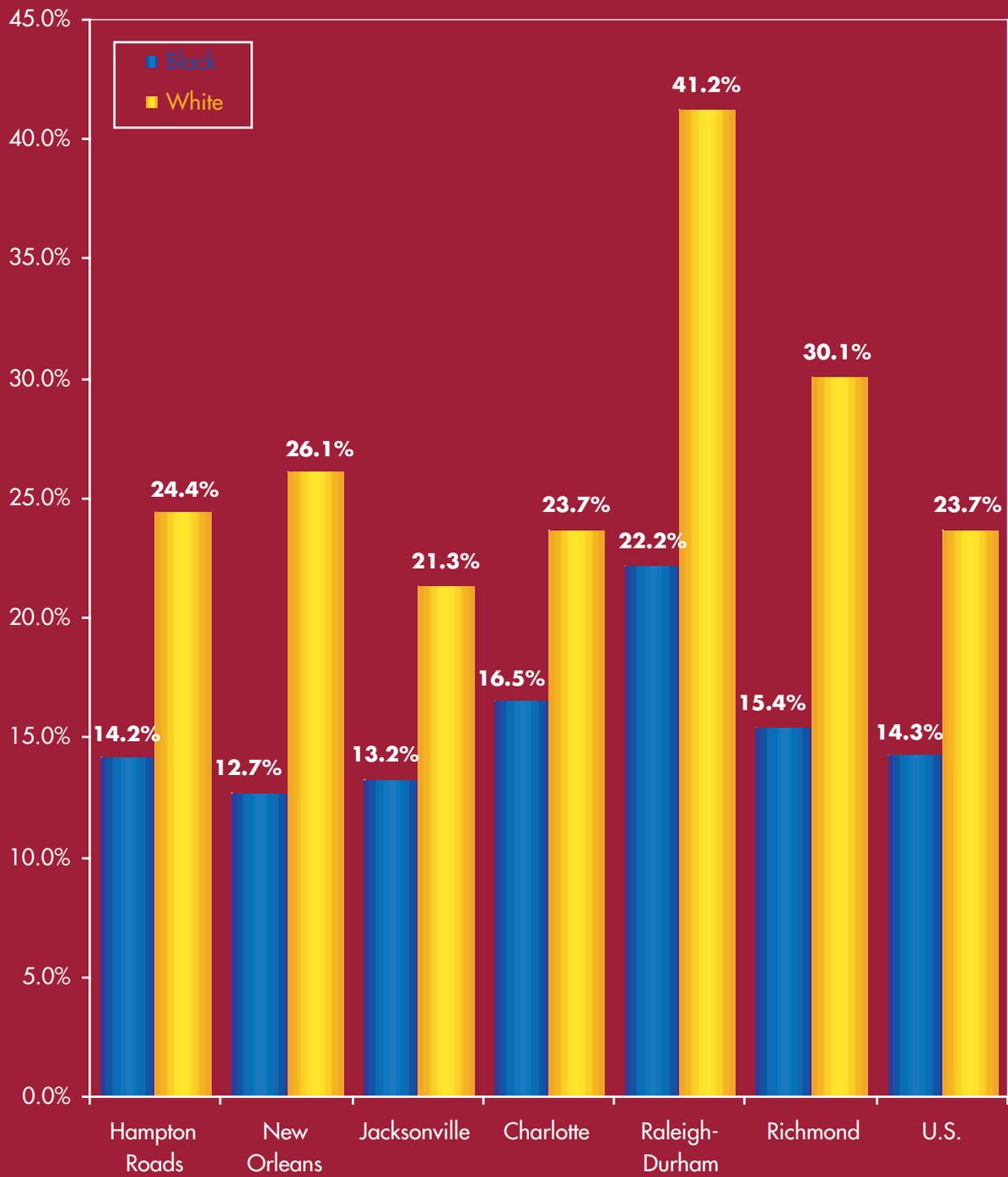
Despite the presence of two nationally prominent, historically black universities in the region, Hampton Roads blacks are no more likely than blacks throughout the United States to have a college degree. Graph 16 contrasts Hampton Roads in this regard to other regions and to the nation. Charlotte and Raleigh-Durham stand out in terms of having much higher percentages of black college graduates. Additionally, as Graph 17 shows, **the region's black men are less likely than black males across the nation to have graduated from college, though this is not true for whites.** These differences in rates of college completion for blacks vs. whites are important in explaining the racial income disparity observed in Graphs 11 and 12.

However, the separation between blacks and whites in terms of income in Hampton Roads does not translate to residential living patterns. A recent study produced by the University of Wisconsin, Milwaukee, revealed the region's neighborhoods to be the most integrated in the nation (see Graph 18). Relatively more blacks and whites live next to each other on the same residential block in Hampton Roads than almost anywhere else in the nation.

Graph 19 reveals that 45.6 percent of blacks in Hampton Roads owned their own home in 2000, compared to 71.5 percent for whites. The median value of black homes was \$85,200 in 2000, 71.3 percent of the value of whites' homes (see Graph 20). This is significantly higher than the national average of 65.6 percent.

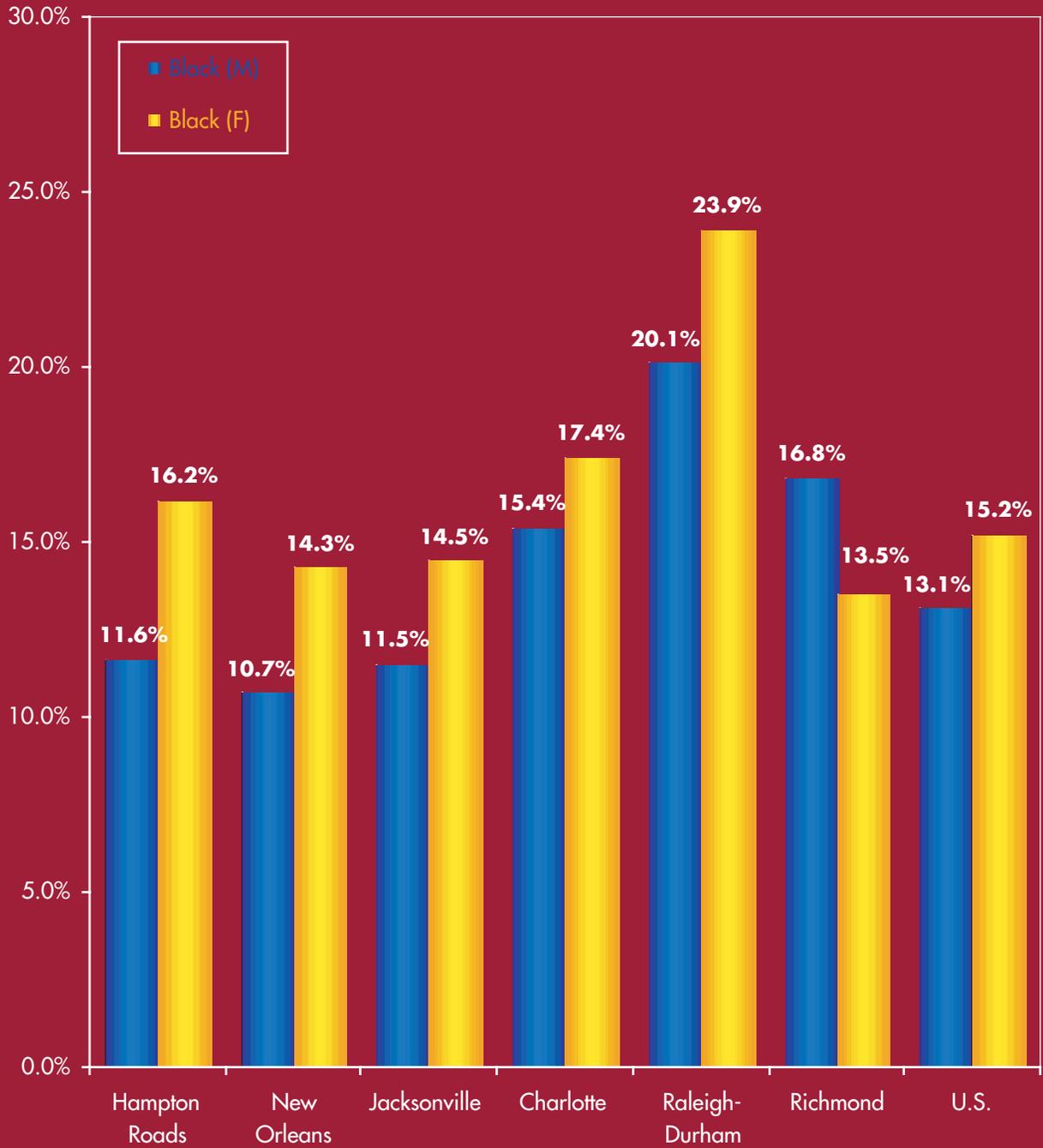
Home equity accounts for the largest share of household net worth for most Americans. Graph 21 reveals that blacks within the region are in a peculiar and advantageous position in that 35.4 percent of those who own their homes have no home mortgage. This is almost 60 percent greater than that of the region's white homeowners and is one of the highest rates of any racial group in the country. A combination of relatively low home prices and military housing allowances may be responsible for this. Fewer blacks than whites own their own homes, but blacks appear to place a high priority on not having any mortgage debt.

GRAPH 16
PROPORTION OF COLLEGE GRADUATES 25 YEARS OR OLDER



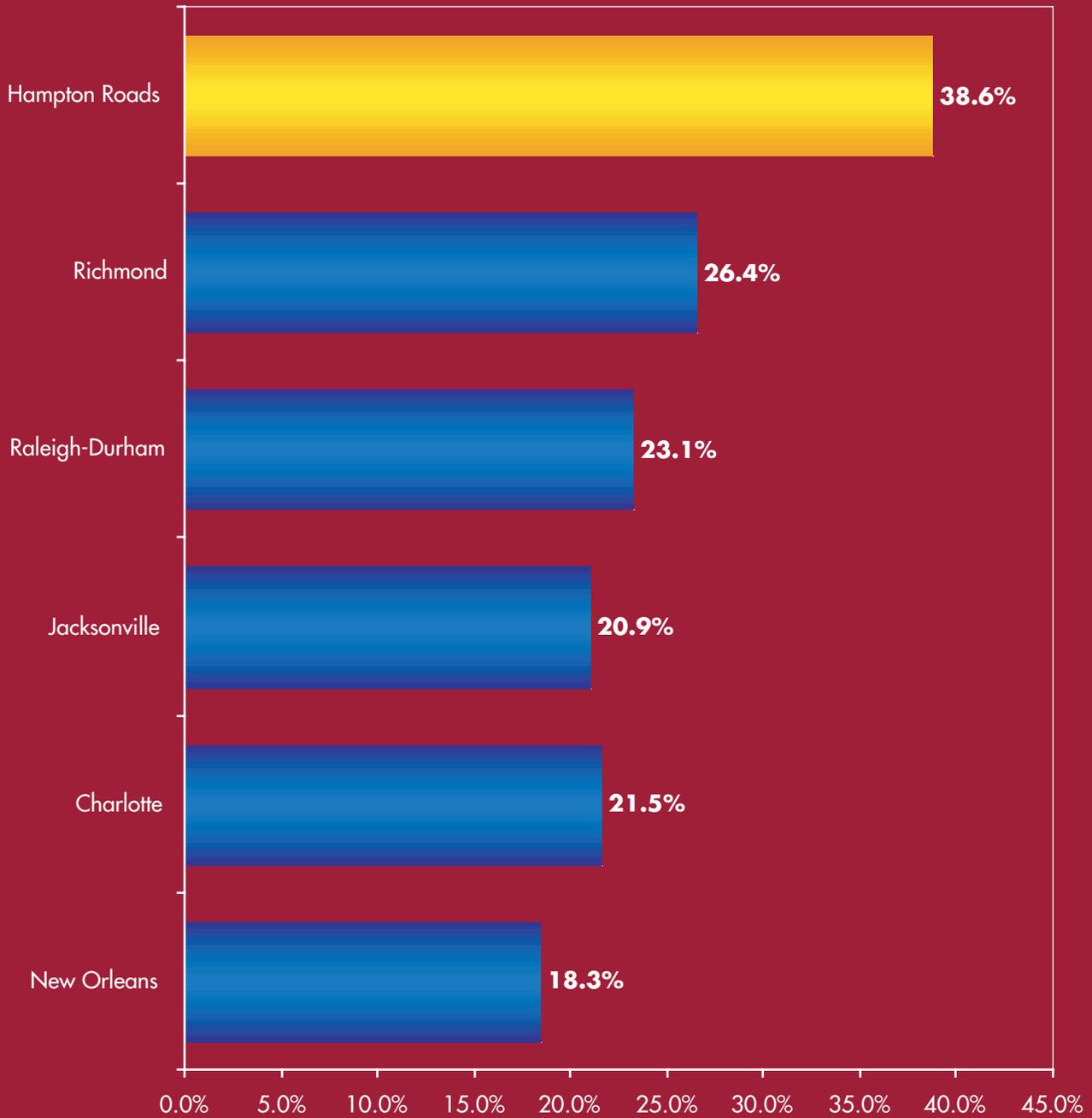
Sources: 2000 Census, Bureau of the Census and the Old Dominion University Economic Forecasting Project

GRAPH 17
PROPORTION OF BLACKS WHO ARE COLLEGE GRADUATES
25 YEARS OR OLDER, BY SEX



Sources: 2000 Census, Bureau of the Census and the Old Dominion University Economic Forecasting Project

GRAPH 18
PERCENTAGE OF POPULATION LIVING IN
INTEGRATED NEIGHBORHOODS
(2001-02)



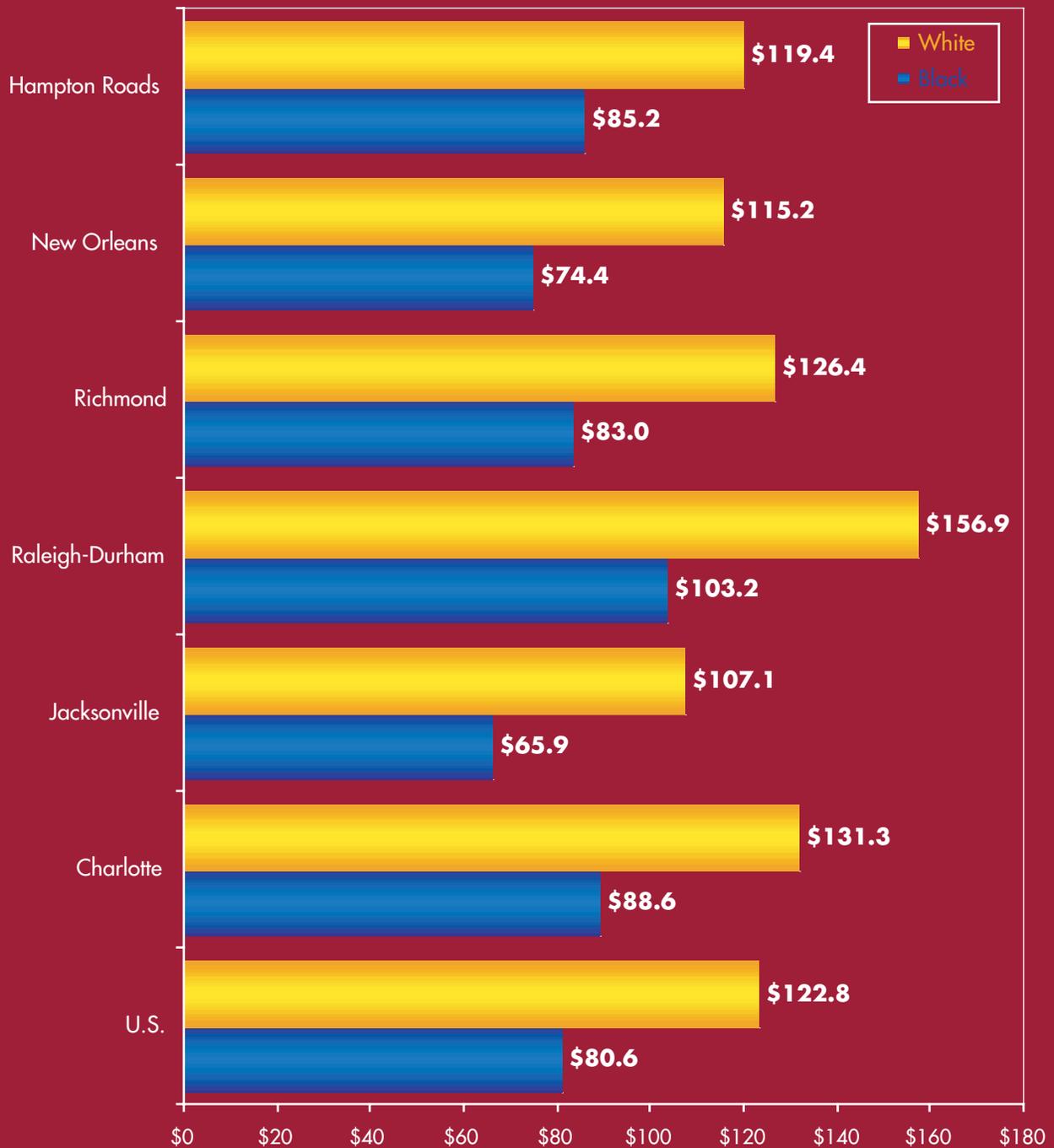
Sources: University of Wisconsin, Milwaukee, Employment and Training Institute, January 2003

GRAPH 19
PERCENTAGE OF RESIDENTS WHO OWN THEIR OWN HOUSE



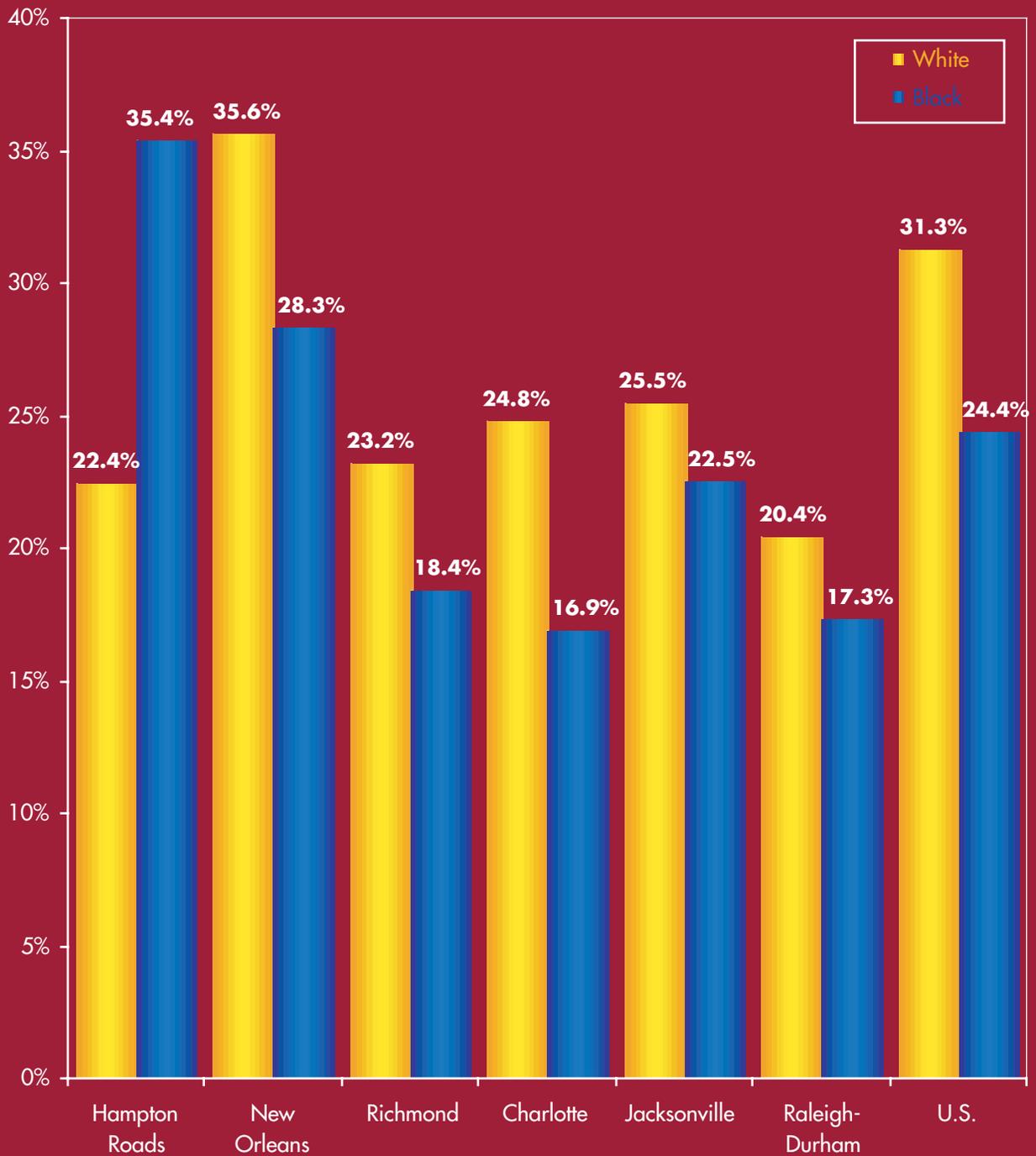
Sources: 2000 Census and U.S. Bureau of the Census

GRAPH 20
MEDIAN HOUSE VALUE, 2000
 (Thousands of Dollars)



Sources: 2000 Census, U.S. Bureau of the Census and the Old Dominion University Economic Forecasting Project

GRAPH 21
PERCENTAGE OF HOMEOWNERS WITH NO HOME MORTGAGE
(2000)



Sources: 2000 Census, U.S. Bureau of the Census and the Old Dominion University Economic Forecasting Project

Local Government Finance And Jobs

The Hampton Roads metropolitan area includes 15 local political subdivisions that range from Williamsburg to the north and Currituck County to the south. **The sum total of all local government expenditures accounts for about one-tenth of the value of regional economic activity (see Graph 22). It is notable that local government economic presence in Hampton Roads is proportionately larger than that in Richmond and most South Atlantic competitor cities.**

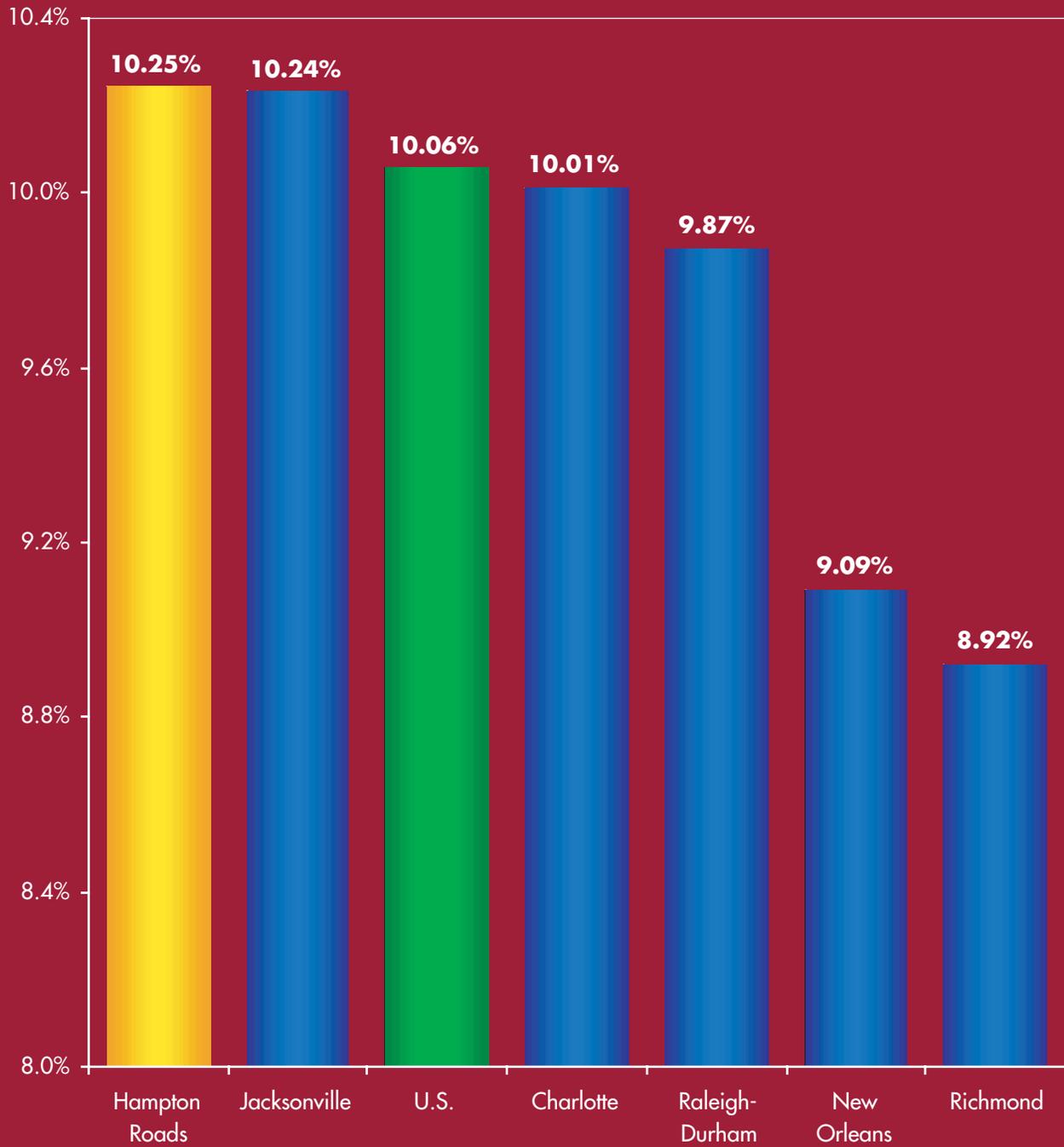
It should come as no surprise that the most important revenue sources for local governments in Hampton Roads are the taxes they collect. However, some may be surprised by the fact that money transfers from state and federal governments are almost as important as tax revenue. As Graph 23 illustrates, about one-third of all local government revenue comes from the state and federal governments, relationships which closely mirror national habits.

Surprisingly, despite the strong Department of Defense presence in the region, Hampton Roads receives on a per-resident basis only 74 percent of the amount of federal revenue of the average local government in the United States (see Graph 24). Even Richmond bests Hampton Roads in corraling federal revenue on a per capita basis. Our local governments do not milk the federal cow quite as effectively as other cities and regions. The reasons for this are not immediately clear, but are worthy of additional study.

Local governments in Hampton Roads have not been afraid to incur debt. Graph 25 demonstrates that local government debt per resident is about 10 percent higher in Hampton Roads than the national average. However, when compared to rapidly growing areas like Raleigh-Durham, the region's local government debt per resident is rather small. Relatively heavy debt loads such as those carried by Jacksonville and Raleigh-Durham are sustainable as long as their local economies grow vigorously. Recent national economic stagnation has impacted areas such as these, and hence their debt levels could prove to be problematic in the next few years.

Hampton Roads' local governments employ about 7.4 percent of the region's employed workers. **On a per-person basis, Hampton Roads has about 10 percent more local government employees than the national average (see Graph 26). This is consistent with the data presented in Graph 22, where we found that local government accounts for a higher proportion of economic activity in Hampton Roads than in many other areas.** However, as Graph 27 illustrates, local workers in the region are not paid particularly well, at least if we use a national measuring stick. Graph 27 shows that the region's local government workers earn only about 92 percent of the national average for such workers.

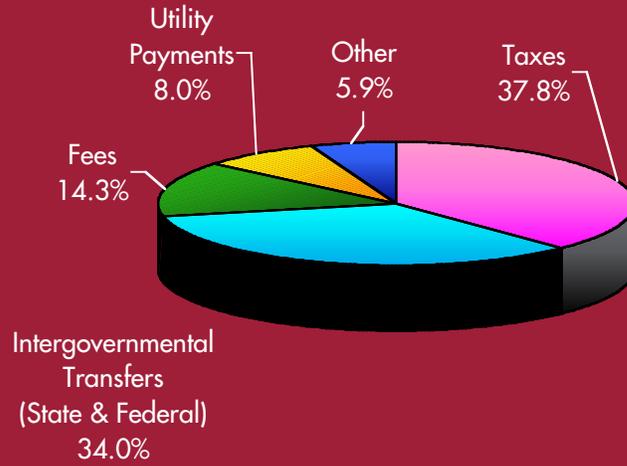
GRAPH 22
LOCAL GOVERNMENT EXPENDITURES AS A PROPORTION
OF GROSS PRODUCT



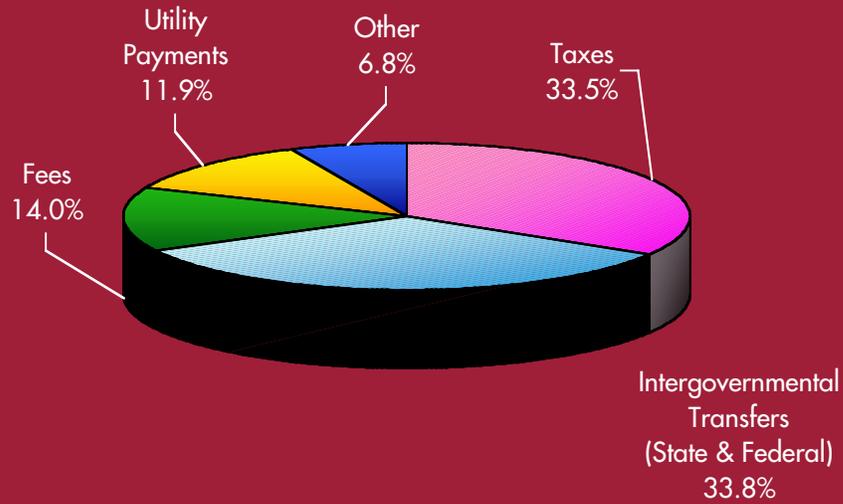
Sources: U.S. Bureau of the Census, U.S. Bureau of Economic Analysis and the Old Dominion University Economic Forecasting Project

GRAPH 23
PROPORTIONAL REVENUE SOURCES FOR LOCAL GOVERNMENT IN
HAMPTON ROADS AND THE LOCAL GOVERNMENT AVERAGE FOR THE U.S.

HAMPTON ROADS



U.S. AVERAGE



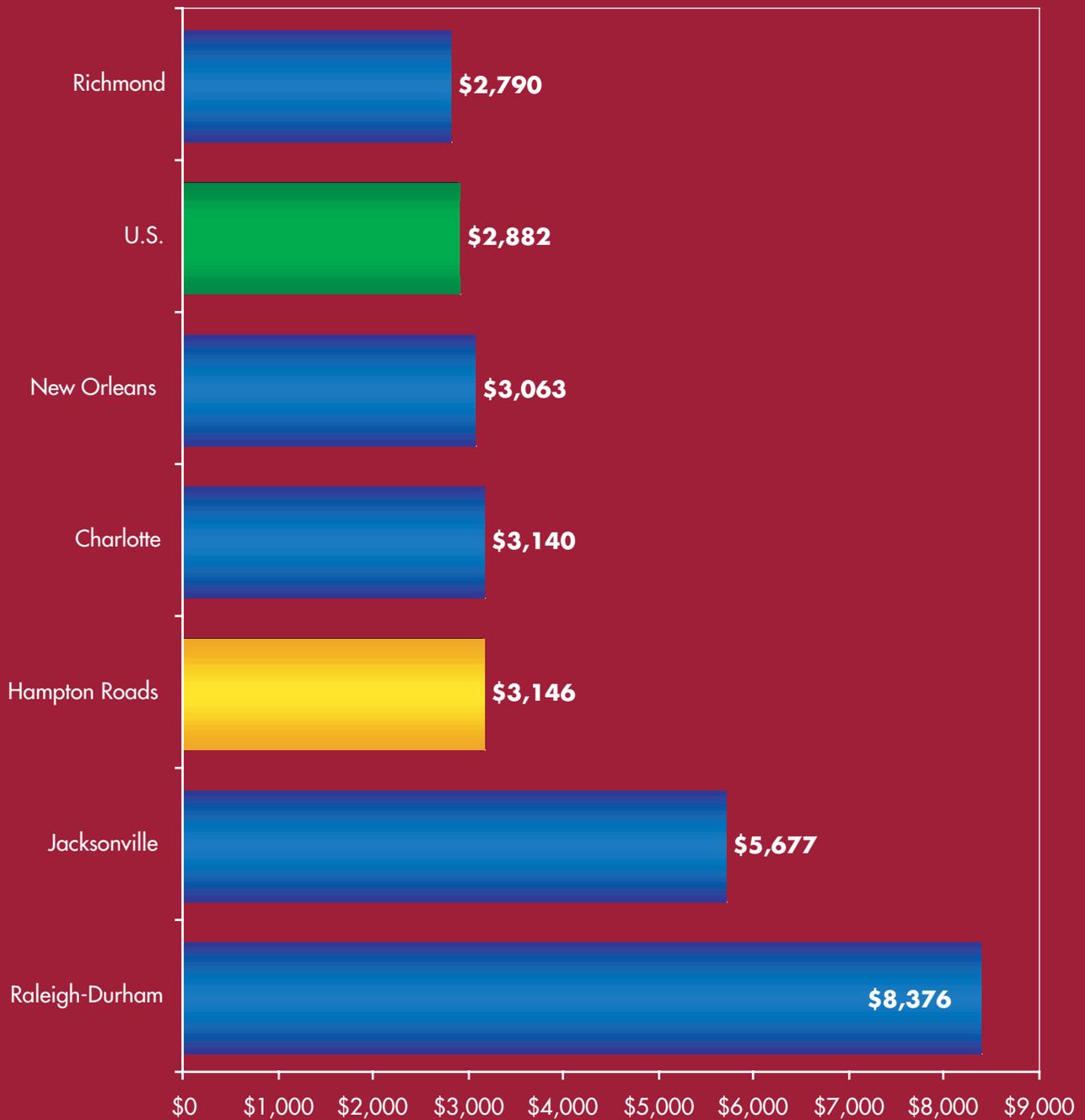
Sources: U.S. Bureau of the Census, Census of Governments, Revised October 2002, and the Old Dominion University Economic Forecasting Project

GRAPH 24
INTERGOVERNMENTAL REVENUE FROM THE
FEDERAL GOVERNMENT PER RESIDENT PER YEAR



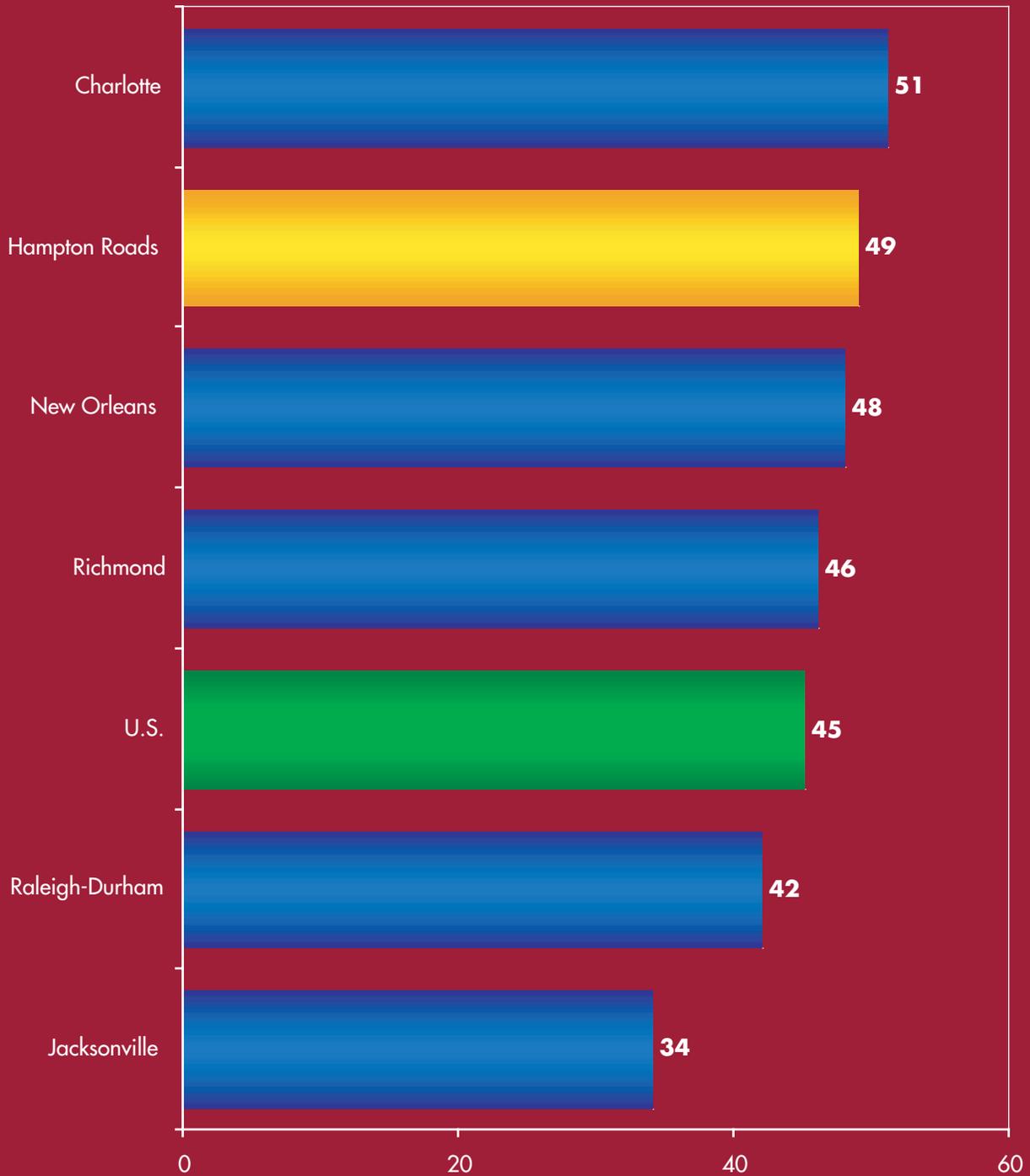
Sources: U.S. Bureau of the Census, Census of Governments, Revised October 2002, and the Old Dominion University Economic Forecasting Project

GRAPH 25
LOCAL GOVERNMENT DEBT OUTSTANDING PER RESIDENT



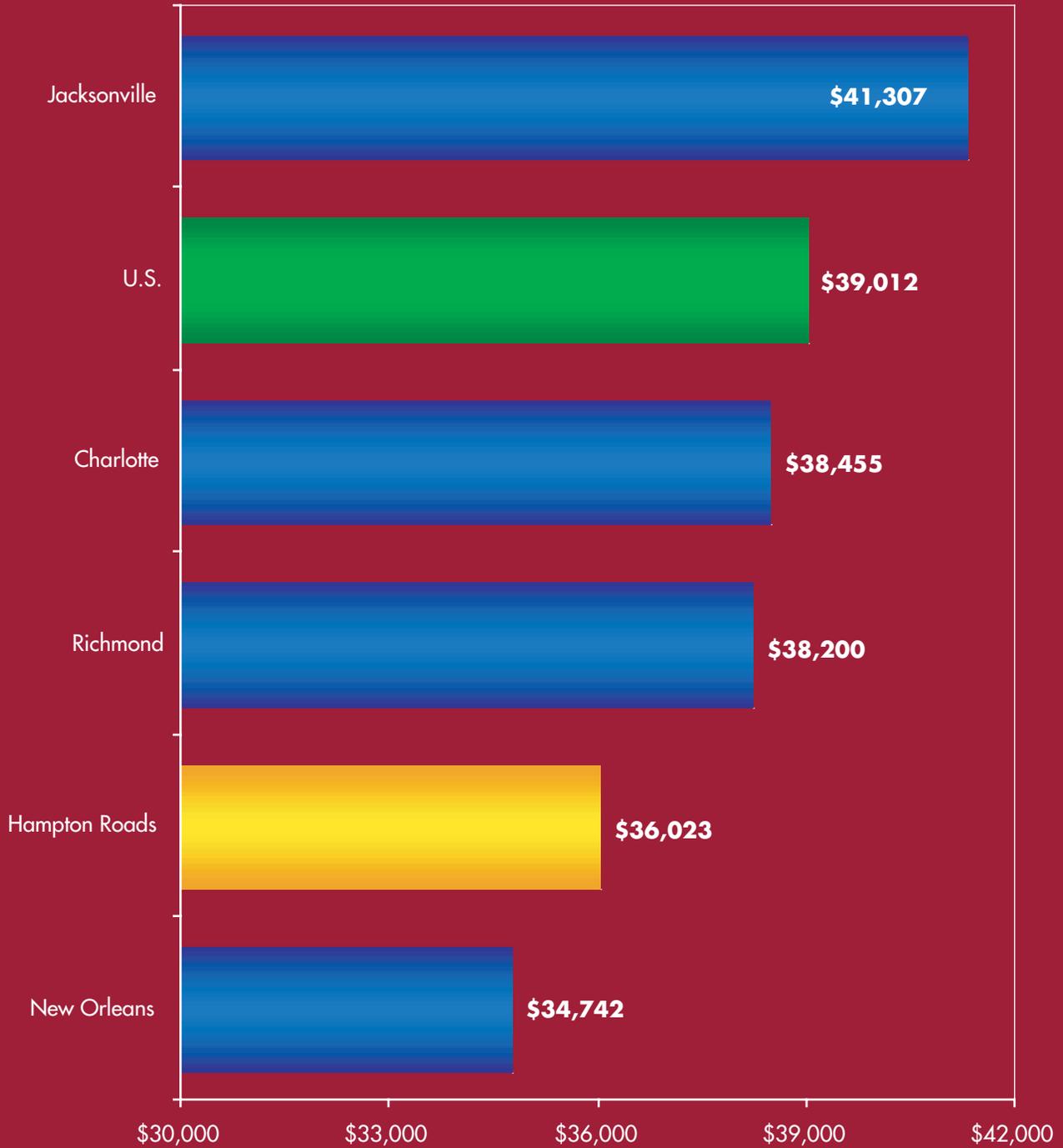
Sources: U.S. Bureau of the Census, Census of Governments, Revised October 2002, and the Old Dominion University Economic Forecasting Project

GRAPH 26
LOCAL GOVERNMENT EMPLOYEES PER 1,000 RESIDENTS



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

GRAPH 27
AVERAGE INCOME OF LOCAL GOVERNMENT EMPLOYEE
(2001)



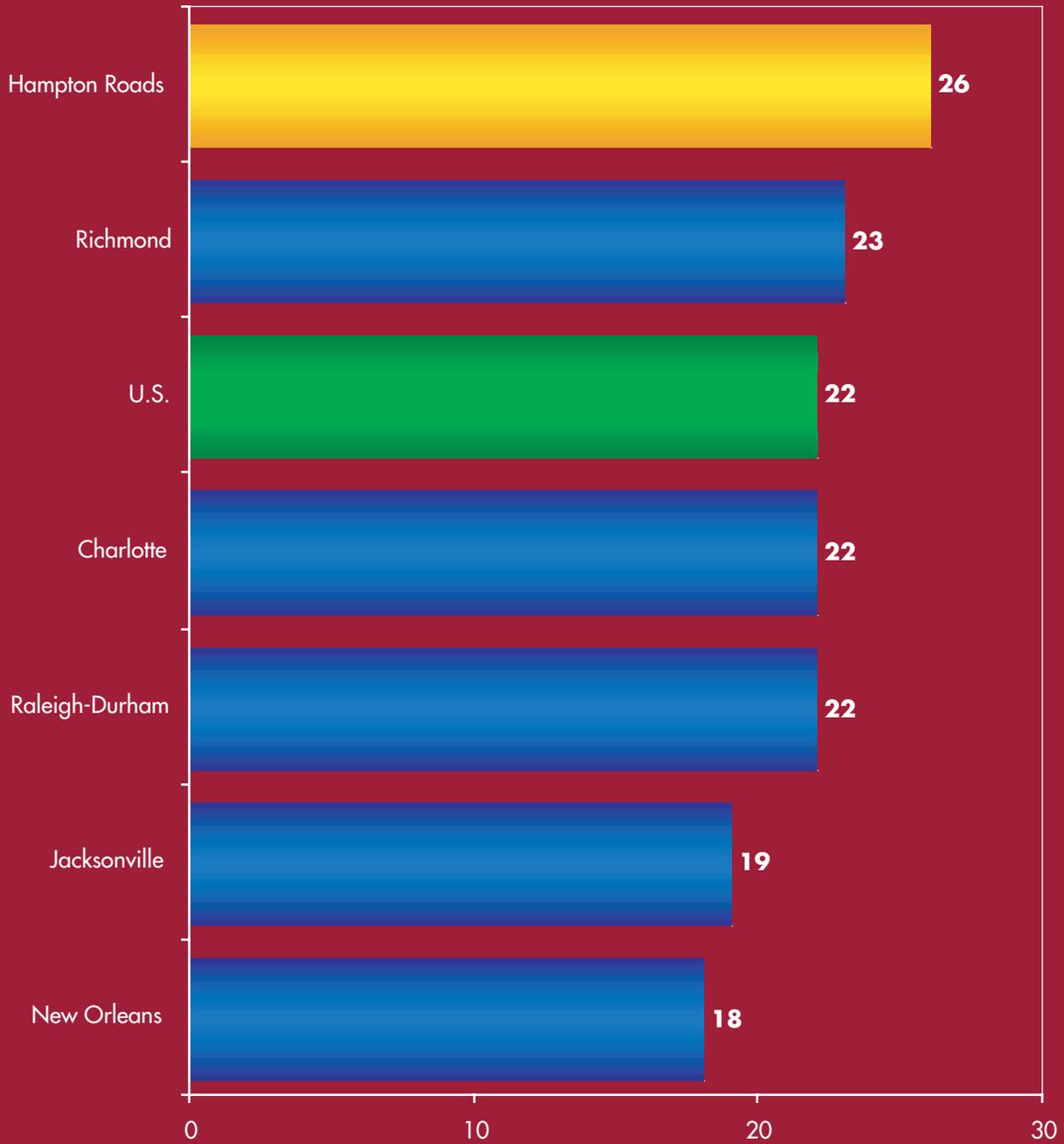
Sources: U.S. Bureau of Economic Analysis and the Old Dominion University Economic Forecasting Project

Teachers and educational administrators constitute the largest portion of local government employees in Hampton Roads and account for 58.1 percent of this group. On a per capita basis, Hampton Roads stands out in terms of the number of its K-12 educational employees (see Graph 28). We have approximately 18 percent more K-12 educational employees per 1,000 employees than the national average. Further, only about half of these are teachers (see Graph 29); this is almost 4 percent less than in Richmond. Thus, the data suggest the region is well endowed with educational administrators.

Nonetheless, Graph 30 shows that Hampton Roads boasts one of the lower student-to-teacher ratios in the nation. How can this be true when the region tends to be administrator-heavy? The answer is lower salaries – most K-12 educational employees in Hampton Roads, including teachers, tend to be paid less than comparable employees nationally. Thus, the region can afford to hire more teachers because it does not pay them as much as do other cities and regions.

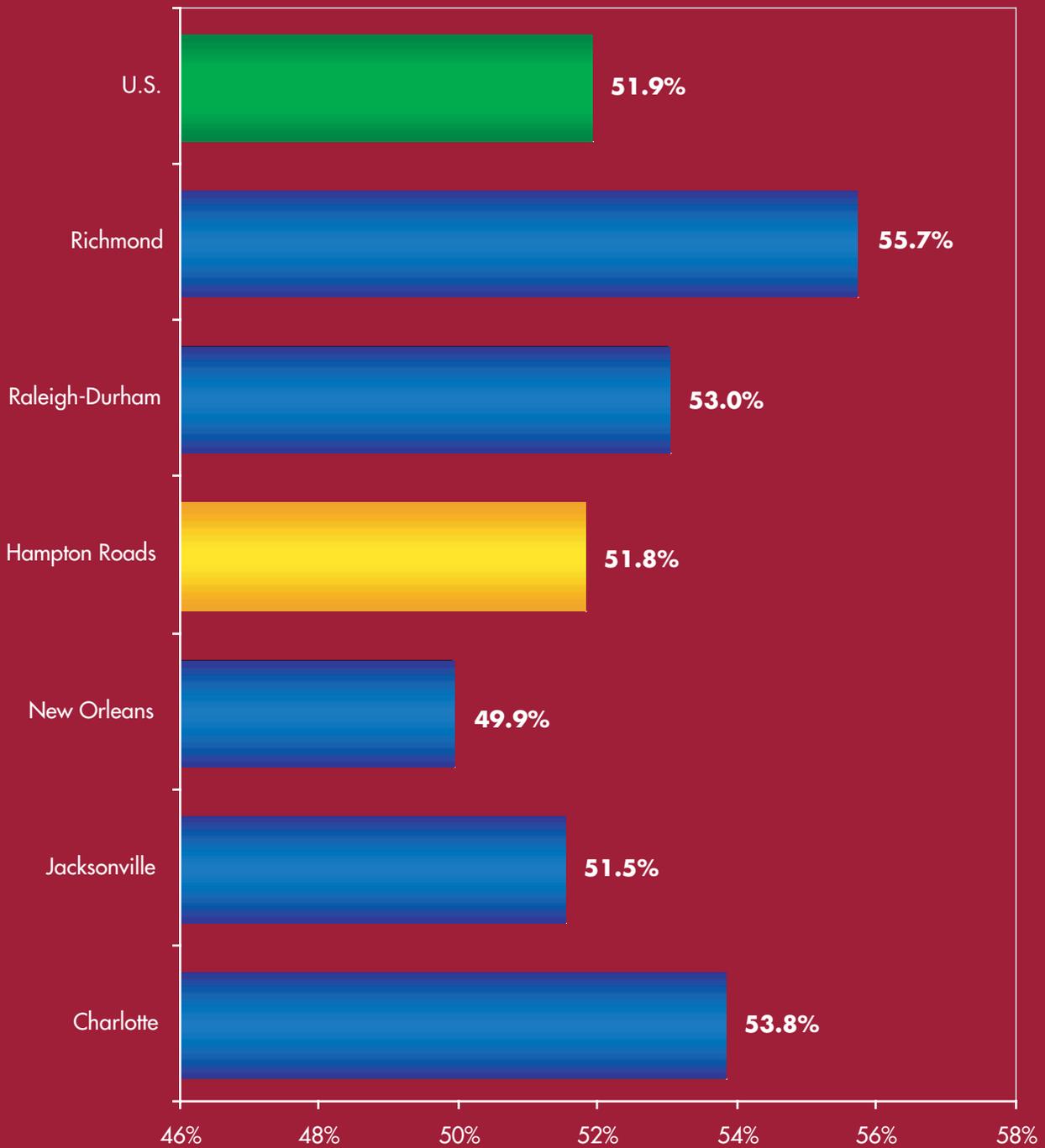
Police officers constitute the second-largest group of local public employees in Hampton Roads. At 264 officers per 100,000 residents, the region is very close to the national average (see Graph 31).

GRAPH 28
FULL-TIME EQUIVALENT EMPLOYEES, ADMINISTRATORS AND TEACHERS
PER 1,000 RESIDENTS IN PUBLIC K-12 EDUCATION



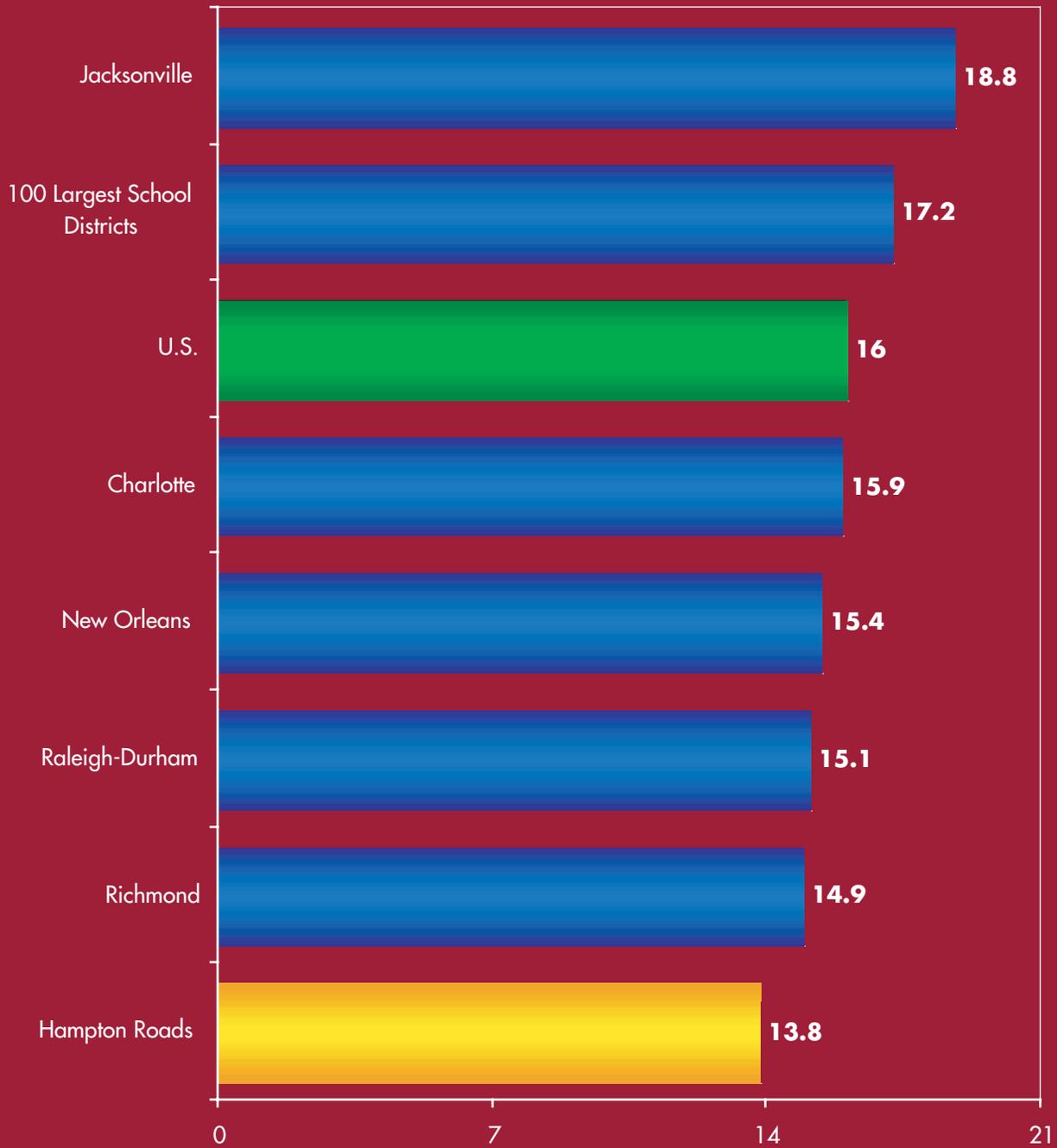
Sources: U.S. Bureau of the Census, Census of Governments, Revised October 2002, and the Old Dominion University Economic Forecasting Project

GRAPH 29
TEACHERS AS A PERCENTAGE OF TOTAL STAFF
(2001-02)



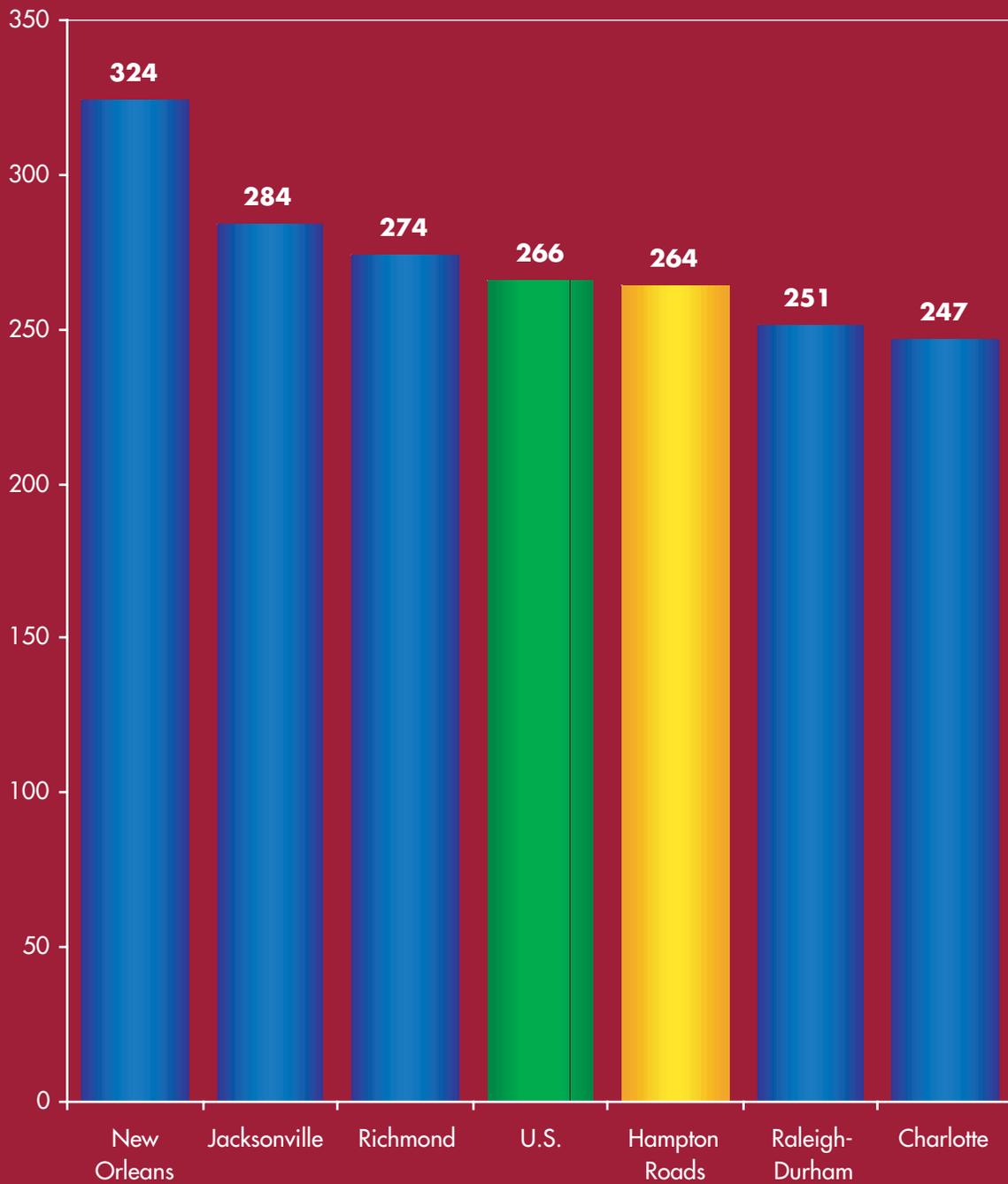
Sources: National Center for Education Statistics and the Old Dominion University Economic Forecasting Project

GRAPH 30
PUBLIC SCHOOL STUDENT-TO-TEACHER RATIO
PUBLIC K-12 SCHOOLS



Source: National Center for Education Statistics, School Year 2001-02

GRAPH 31
FULL-TIME EQUIVALENT POLICE OFFICERS PER 100,000 RESIDENTS



Sources: U.S. Bureau of the Census, Census of Governments, Revised October 2002, and the Old Dominion University Economic Forecasting Project

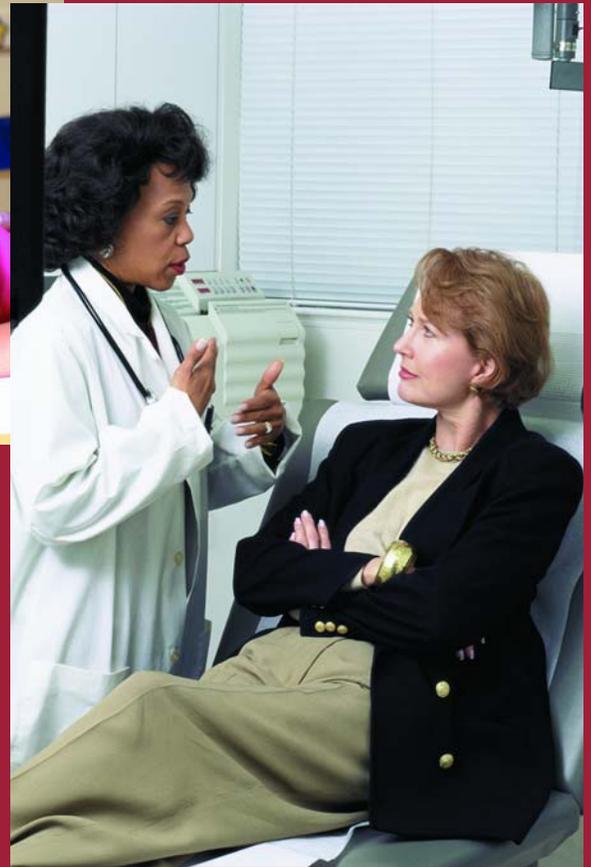
Summing It Up

Hampton Roads is doing better economically than the nation as a whole. Per capita incomes have been rising more rapidly than in the rest of the United States, and the typical household is better off in our region than nationally because incomes are more equally distributed here. We do not have as many rich people or as many poor people as most other regions.

However, significant racial income differences exist within the region. Black residents earn less in Hampton Roads relative to white residents than is the case in the rest of the nation. **In a nutshell, if the black residents of Hampton Roads earned incomes proportionally similar to black residents in the rest of the country, then per capita income in our region would exceed the national average by several percentage points. Hence, one of the greatest untapped human potentials for increased regional economic growth exists among Hampton Roads' black residents. Closing the gap between the region's black residents and black citizens nationally, and between blacks and whites within the region, would have a visible, positive influence upon Hampton Roads' economic prosperity and standing.**

The reasons why blacks lag whites more here than in other parts of the country are complex and reflect many long-standing influences. But whatever the reasons, the data speak loudly and they should command the attention of the region's decision-makers.

When one examines the number of local government employees in the region, it is clear that Hampton Roads is rather generously endowed with local government employees in general and K-12 education employees in particular. This is consistent with data showing that local governments in the region account for a somewhat larger proportion of regional economic activity than one sees in the cities and regions that are our major competitors.



private
social
services

Private Social Services In Hampton Roads: Problems And Prospects

“When an American asks for the cooperation of his fellow citizens, it is seldom refused; and I have often seen it afforded spontaneously and with great good will.”

— Alexis de Tocqueville, *“Democracy in America,”* 1835

Introduction

The impulse to reach out and help another person in need is a basic component of humanity and often used as a measuring stick for the overall well-being of a society. Americans are noted for their generosity and compassion in times of crisis, and Hampton Roads is no exception. In this chapter, we focus on the non-governmental ways we provide social services in our region. Nonprofit organizations have traditionally filled the gaps in social services not met by government and were especially prominent following the Sept. 11 tragedy, when they came to the fore in handling the cathartic outpouring of donations that funneled aid to victims’ families. However, along with this temporarily high volume of donations nationally came vastly increased scrutiny, some of which damaged the reputations of private providers of social services.

In order to understand the scope of private social service in Hampton Roads, we will look through the windows of our local United Way organizations. This requires that we understand how the United Ways and private social service agencies are organized as nonprofit entities. We will also measure the growth and development of the nonprofit sector over the last decade.

The Nonprofit Universe

There are 25 different categories of tax-exempt organizations under the U.S. tax code. United Way organizations require their member agencies to be incorporated as a 501(c)(3) tax-exempt organization. Achieving this classification indicates that an agency has met threshold criteria outlined by the Internal Revenue Service (IRS) and has received a letter confirming its status as a 501(c)(3) organization.

The nonprofit sector has experienced phenomenal growth nationally in recent years. Data compiled by Independent Sector (a coalition of leading nonprofits, foundations and corporations) in its *“The New Non-Profit Almanac”* detail the growth of 501(c)(3) and 501(c)(4) organizations from 1992-98 in the United States. Table 1 demonstrates the growth of these organizations – from 161,125 to 224,772 (a 39 percent increase) nationally and from 4,291 to 6,138 (a 43 percent increase) in Virginia. It should also be noted that this chart includes only organizations that filed IRS Form 990. It does not include religious congregations and organizations with less than \$25,000 in gross receipts. If one includes these smaller entities, then the numbers almost triple. Notably, Independent Sector (www.independentsector.org) reported that in 2001 the private social service sector employed 10.9 million workers.

TABLE 1
REPORTING PUBLIC CHARITIES: NUMBER AND STATE, 1992 –98

	Number of Reporting Agencies				Six-Year Percent Change
	1992	1995	1997	1998	
U.S.	161,125	186,871	215,237	224,772	39.2
South Atlantic Region	26,624	31,525	36,677	38,435	44.4
Delaware	605	711	804	848	40.2
District of Columbia	2,376	2,691	2,991	3,077	29.5
Florida	6,075	7,229	8,535	8,995	48.6
Georgia	3,111	3,665	4,348	4,624	48.6
Maryland	3,417	4,048	4,713	4,900	43.4
North Carolina	4,146	4,973	5,793	6,056	46.1
South Carolina	1,609	1,908	2,224	2,337	45.3
Virginia	4,291	5,110	5,872	6,138	43.0
West Virginia	1,014	1,190	1,397	1,459	43.9

Note: Reporting public charities include only organizations that both reported (filed IRS Form 990) and were required to do so. Organizations not required to report include religious congregations and organizations with less than \$25,000 in gross receipts.

Source: "The New Non-Profit Almanac and Desk Reference," Independent Sector, 2002

One important aspect of the private, nonprofit sector is the countless hours of volunteer service given in large and small amounts by many thousands of people. **Independent Sector also found that 44 percent of adults volunteer annually and 69 percent volunteer on a regular basis, and that volunteers to formal organizations averaged just over 24 hours per month of volunteer time.**

Locally, the importance of volunteering is highlighted in the annual United Way Day of Caring. In 2002, the United Way of South Hampton Roads' (UWSHR) Day of Caring was termed a "Day of Remembrance" in honor of the victims of Sept. 11 and their families. More than 2,000 people from area businesses volunteered to help complete special projects at United Way agencies.

Who And What Is The United Way?

The origin of the United Way movement in North America can be traced to 1887, when religious leaders founded the Charity Organization Society in Denver. It was the first United Way and in 1888 raised \$21,700. In 1894, charitable institutions were granted a critically needed exemption from the first tax imposed on corporations organized for profit.

In 1918, executives of 12 fund-raising federations met in Chicago and formed the American Association for Community Organizations, the predecessor to the United Way of America. By 1948, more than 1,000 communities had established United Way organizations. In 1999, Bill and Melinda Gates donated \$10.5 million to the United Way of America in an effort to help strengthen United Way programs and services.

United Way of America functions as a trade association for the 1,400 local, autonomous, community-based United Ways. Each local United Way is an independent, separately incorporated organization governed by local volunteers. However, the shared name and logo of United Way causes many people to believe that "all United Ways are one." This perception can result in significant hardship. **In recent years, after high-profile scandals occurred in several local and regional United Ways, other local United Ways were forced to seek ways to distance themselves from these difficulties and assert the autonomous nature of their community-based organizations.**

In the past year, United Way of the National Capital Area (a federation of eight local United Ways in the Washington, D.C., area) came under intense scrutiny for alleged employee theft and questionable accounting practices. Many long-established accounting practices no longer passed muster after recent corporate scandals. Public expectations have increased.

Most agree that the best thing troubled charities can do is be honest about their difficulties. The public must understand that the charity realizes it has a problem and is working to fix it. Then, internal systems must be changed to safeguard against the problem happening again. **Transparency is important regarding financial information, and United Ways in the Hampton Roads region receive high marks in this regard. This has been less true at the national level.** However, United Way at the national level has taken strategic steps to meet the challenges that the scandals have produced. Chief among these is to establish stricter accounting standards for member organizations and to promote a community-building agenda. Such standards are critical to the public, which has become more knowledgeable about charitable giving over the last decade and desires to know that its donated dollars are handled with care. These dollars are not small in amount. **In 2001-02, United Ways across America collectively raised an estimated \$5 billion. This represented an increase of 6.8 percent from \$4.7 billion in 2000-01. The major factor driving this growth was Sept. 11. More than 70 percent of Americans reported charitable involvement in some way following these tragic events.**

One local organization that received financial contributions as a result of Sept. 11 was UWSHR, which collected \$300,000. Fifty percent of these funds were disbursed locally to agencies impacted by Sept. 11. The remaining funds were disbursed to the national organization. Since then, UWSHR has maintained a United Way Response Fund in a joint venture with United Way of America to respond to the program needs of local United Way-certified agencies that help military service members and their families.

What Private Social Services Are Available? Who Are The Providers?

UNITED WAY OF SOUTH HAMPTON ROADS

UWSHR is the largest of the local United Way umbrella organizations in the region. Its mission is “to build a stronger South Hampton Roads by mobilizing its communities to improve people’s lives.” Currently, UWSHR has 69 certified “check-off” agencies with which it is primarily involved. In addition, more than 365 non-certified organizations receive write-in donations as a part of the campaign process.

Table 2 describes how UWSHR distributed \$42.6 million in funds in each of its five “major need” areas between 1998 and 2003. Emergency services continue to constitute the greatest draw on UWSHR funds, followed by expenditures to support youth programs.

**TABLE 2
FUND DISTRIBUTION BY NEED AREA: UNITED WAY OF SOUTH HAMPTON ROADS**

Need Area FY 2002-03	Amount	Percent of Total
Emergency Services, Special Needs, and Multi-Program Agencies	\$2,712,906	31
Health Care, Rehabilitation, Research, and Medical Services	\$1,164,613	13
Youth	\$1,708,290	19
Counseling for Families and Individuals/Elderly/Support Services	\$1,459,423	17
Childcare and Community Services	\$1,526,029	17
Suffolk	\$ 208,907	2
Isle of Wight	\$ 81,725	1
	\$8,861,893	100
Need Area FY 2001-02		
Emergency Services, Special Needs, and Multi-Program Agencies	\$2,845,619	32
Health Care, Rehabilitation, Research, and Medical Services	\$1,238,042	14
Youth	\$1,715,244	19
Counseling for Families and Individuals/Elderly/Support Services	\$1,450,468	16
Childcare and Community Services	\$1,395,832	16
Suffolk	\$ 215,344	2
Isle of Wight	\$ 75,000	1
	\$8,935,549	100
Need Area FY 2000-01		
Emergency Services, Special Needs, and Multi-Program Agencies	\$2,749,993	32
Health Care, Rehabilitation, Research, and Medical Services	\$1,176,277	14
Youth	\$1,636,344	19
Counseling for Families and Individuals/Elderly/Support Services	\$1,402,443	16
Childcare and Community Services	\$1,347,503	16
Suffolk	\$ 198,864	2
Isle of Wight	\$ 74,115	1
	\$8,585,539	100
Need Area FY 1999-2000		
Emergency Services, Special Needs, and Multi-Program Agencies	\$2,539,782	31
Health Care, Rehabilitation, Research, and Medical Services	\$1,268,797	15
Youth	\$1,566,411	19
Counseling for Families and Individuals/Elderly/Support Services	\$1,330,128	16
Childcare and Community Services	\$1,293,934	16
Suffolk	\$ 165,664	2
Isle of Wight	\$ 70,720	1
	\$8,235,436	100
Need Area FY 1998-99		
Emergency Services, Special Needs, and Multi-Program Agencies	\$2,363,461	30
Health Care, Rehabilitation, Research, and Medical Services	\$1,369,958	17
Youth	\$1,505,386	19
Counseling for Families and Individuals/Elderly/Support Services	\$1,278,968	16
Childcare and Community Services	\$1,244,167	15
Suffolk	\$ 154,111	2
Isle of Wight	\$ 68,000	1
	\$7,984,051	100

UNITED WAY OF THE VIRGINIA PENINSULA

The foundation of what would eventually become United Way of the Virginia Peninsula had its origin in 1939 when community leaders formed the Newport News Community Chest. Its first campaign raised \$34,304. In 1943, the Hampton Community Chest was formed, raising \$45,000 in its first year. Both drives continued to operate independently until 1957, when the first United Fund Campaign was conducted, raising \$300,000 more than the year before and reaching a total of \$814,120.

United Way of the Virginia Peninsula has done well over time with its fund-raising efforts:

1966 – first \$1 million campaign

1978 – more than \$2 million

1983 – more than \$4 million

1991 – more than \$6 million

2000 – more than \$7 million

The mission of United Way of the Virginia Peninsula (UWVP) is “to improve the quality of life for people in our community, at a cost not to exceed the resources provided by our donors.” UWVP recently adopted a Policy Governance Model for its umbrella organization. This represented a significant paradigm shift in management style. Among the first steps in applying the new model was the downsizing of the UWVP board from 28 to 12 members. Over the past year, UWVP offered training in this new management philosophy to directors of member agencies and their staff.

The Policy Governance Model has achieved prominence in the last decade and has gained enthusiastic adherents. The intent is to reduce the ineffective nature of many volunteer boards. Based on the ideas of John Carver, an international authority on the governance of nonprofit organizations, the model: (a) views board members as servant-leaders; (b) emphasizes a CEO who is the staff point of contact to the board and who is held accountable to board expectations for organizational performance; and (c) relies upon the term “ends” to describe projected accomplishments and “means” to describe financial planning, purchasing, programs and services.

To accomplish stated “ends,” the fund-raising campaign offers donors the opportunity to contribute to targeted critical local issues. UWVP helps support more than 49 certified agencies and distributes funds to over 1,000 organizations. Funded agencies respond to calls for assistance for everything from emergency services and youth development to meeting basic needs for food and clothing.

In 2003, UWVP allocated just over \$5.3 million, including money from the Combined Federal Fund and all other designations from donors to agencies. Table 3 summarizes the “ends” that UWVP funded in 2002-03.

TABLE 3
UNITED WAY OF THE VIRGINIA PENINSULA
FUNDS AWARDED BY POLICY CATEGORIES AND “ENDS” STATEMENTS

POLICY	“ENDS” STATEMENTS		
<p>People in our community have adequate food and shelter.</p> <p>2002 Funding: 14.7%</p>	<p>Adequate Food: Sufficient food supply from food stamps; Women, Infants and Children’s Program; free school breakfast and lunch programs; and the Foodbank to meet the food needs of the 15% of the population of Hampton and Newport News who live at or below 100% of the poverty level set by the federal government.</p> <p>Adequate Shelter: The affordability ratio for our community, as developed by the National Association of Realtors, compared to similar communities, the supply of Section 8 and public housing available in Hampton and Newport News, the availability of emergency/temporary shelter for victims of domestic violence and disasters, and the supply of available group homes for the mentally/physically challenged and the elderly.</p>		
<p>People in our community are safe from abuse and violence.</p> <p>2002 Funding: 8.2%</p>	<p>Safe: Statistically better by 10 basis points, compared to similar communities, in following abuse and violence measurements.</p>	<p>Abuse: Police reports of domestic violence between domestic partners, and domestic violence shelter admissions, child abuse cases and elderly abuse cases reported to Social Services in Hampton and Newport News.</p>	<p>Violence: Number of murders reported, number of rapes reported, and number of assaults reported in our community.</p>
<p>People in our community do not use illegal drugs or abuse legal substances.</p> <p>2002 Funding: 5.32%</p>	<p>Illegal Drugs: Marijuana, opium, derivatives and hallucinogens (i.e., Ecstasy).</p>	<p>Abuse: Negative impact on person’s health or life.</p>	<p>Legal Substances: Alcohol, prescription medications and over-the-counter medications.</p>
<p>People in our community are healthy.</p> <p>2002 Funding: 10.8%</p>	<p>Healthy: Statistically better by 10% compared to similar communities in the areas of: (a) percent of population using tobacco products; (b) rates of clinical depression as defined by the American Psychiatric Association; (c) percent of population covered by employer provided health insurance, Medicare, Medicaid and FAMIS; (d) children’s fitness as defined by the Presidential Council on Physical Fitness and rates of adult obesity as defined by the American Medical Association; (e) percent of population covered by prescription drug benefits.</p>		
<p>Elderly people in our community live a dignified life.</p> <p>2002 Funding: 4.6%</p>	<p>Elderly: 65 and over</p>	<p>Dignified Life: Access to health care, affordable housing, and learning opportunities are statistically better by 10% as compared to similar communities.</p>	
<p>Children in our community become happy, well-educated, productive adults.</p> <p>2002 Funding: 35.8%</p>	<p>Happy: The number of developmental assets as defined by the Search Institute for the children of our community are statistically better by 10% as compared to similar communities.</p>	<p>Well-educated: Percent graduating from high school and percent pursuing post - secondary education are statistically better by 10% as compared to similar communities.</p>	<p>Productive Adults: Percent unemployed and under-employed and percent of 18-25- year-olds incarcerated are statistically 10% less as compared to similar communities.</p>

UNITED WAY OF GREATER WILLIAMSBURG

United Way of Greater Williamsburg (UWGW), founded in 1949, grew out of the Greater Williamsburg community's need to raise funds and meet community growth. The organization began with six partner agencies and raised \$6,475 its first year. Its stated mission is to "improve people's lives by mobilizing the caring power of our community."

In 2002, UWGW raised more than \$1.6 million for 21 partner agencies and approximately 30 health and human service programs that serve the City of Williamsburg, James City County, upper York County and surrounding areas. UWGW and its network of partner agencies served more than 30,000 local residents (including repeat recipients) in 2002.

FRANKLIN-SOUTHAMPTON AREA UNITED WAY

Franklin-Southampton Area United Way (FSAUW) began in 1940 as a Community Fund. The first campaign raised more than \$8,600. During the late 1980s, the board of directors decided to restructure and hire a part-time executive director. In 1988, FSAUW funded 15 agencies with a total amount of \$69,000. Today, the organization funds 26 agencies with an annual outlay of more than \$289,000.

Following the floods produced by Hurricane Floyd in 1999, which occurred during the week of the FSAUW campaign kick-off, 182 Franklin businesses were declared complete losses. Only four were substantially insured. More than 400 homes and other businesses in Franklin and Southampton County were damaged or destroyed during the flood. The major area industry, International Paper, was shut down for many days. Telephone service was out for as long as three weeks, and utility service was spotty, especially in the county. The Franklin Post Office was flooded and mail service was halted for several days.

Other local United Ways reached out to help in this crisis. United Way of South Hampton Roads agreed to help process Franklin's bulk mail and also held a fund-raiser to assist the flooded community. Approximately \$75,000 was raised to assist agencies involved in disaster relief (American Red Cross, Salvation Army, Foodbank of Southeastern Virginia, etc.). In addition, the executive director of the United Way of Virginia sent out a plea for assistance statewide. Nearly \$30,000 in unrestricted donations poured in from sister United Ways across the state. These funds helped Franklin-Southampton Area United Way meet overwhelming needs.

At one time during the flood, the original FSAUW office, located in downtown Franklin, was submerged under 20 feet of water. Luckily, the United Way office had recently moved from the first floor to the second floor. Although untouched by floodwater, the office was uninhabitable for a period of 14 months due to the loss of utilities and subsequent reconstruction on the first floor.

Currently, there are 26 member agencies in the Franklin-Southampton Area United Way. Executive Director Mary DePuy states, "We reach across age, socioeconomic, race and gender lines to provide a wide range of services."

Where Does United Way Funding Come From?

Table 4 demonstrates sources of funding from 1998 to 2001 for all United Way organizations located in Hampton Roads. This information is derived from IRS 990 Forms, which are available to the public upon request to the agency or via www.guidestar.com.

According to the Chronicle of Philanthropy, United Ways across the nation suffered their worst fund-raising decline in three decades in the 2002-03 campaign season. A stagnant national economy is cited as the major reason that gifts dropped more than 3 percent. For example, the campaign goal for FSAUW in 2002-03 was \$300,000, but gifts amounted to only about 81 percent of that total. As a result, states DePuy, "We were forced to reduce funding to our agencies; however, we hope basic services will remain the same across the board. We did not fund any new agencies. "

TABLE 4
SOURCES OF FINANCIAL SUPPORT
FOR THE UNITED WAYS OF HAMPTON ROADS

	Franklin	Williamsburg	Peninsula	South Hampton Roads
Year Ending 2001				
Direct Public Support	\$374,290	\$1,315,686	\$7,267,820	\$13,876,629
Program Services		\$ 21,000		
Investment Income	\$ 7,620	\$ 23,840	\$ 121,619	\$ 217,584
Non-Inventory Sales				
Special Events (Net)				
Other Income	\$ 68	\$ 20,676		\$ 501,549
Year Ending 2000				
Direct Public Support	\$278,196	\$1,389,823	\$6,086,458	\$13,214,461
Program Services		\$ 18,000		
Investment Income	\$ 10,095	\$ 27,996	\$ 229,930	\$ 232,398
Non-Inventory Sales	\$ (130)		\$ (36,429)	
Special Events (Net)		\$ 3,550		
Other Income		\$ 1,101		\$ 415,588
Year Ending 1999				
Direct Public Support	\$422,162	\$1,161,662	\$5,117,249	\$11,174,423
Program Services		\$ 13,500		
Investment Income	\$ 5,178	\$ 26,676	\$ 247,536	\$ 245,799
Non-Inventory Sales	\$ 636		\$ 46,380	
Special Events (Net)		\$ 4,332	\$ 20,318	
Other Income	\$ 200	\$ 3,373		\$ 405,350
Year Ending 1998				
Direct Public Support	\$266,302	\$1,035,232	\$5,180,457	\$10,934,648
Program Services		\$ 12,000		
Investment Income	\$ 4,907	\$ 30,289	\$ 225,531	\$ 255,569
Non-Inventory Sales			\$ (3,713)	
Special Events (Net)		\$ 2,073	\$ 50,241	
Other Income	\$ 150	\$ 9,370		\$ 577,348
Totals	\$1,025,893	\$5,120,179	\$26,647,968	\$52,051,346

Note: Direct public support does not include funds from the Combined Federal Campaign or the Commonwealth of Virginia Campaign.

United Way of South Hampton Roads, on the other hand, has bucked this trend. UWSHR's fall 2001 campaign raised more than \$18.8 million for area charities (107.6 percent of goal) and the 2002 campaign collected \$18.7 million (103 percent of goal). These amounts include funds raised through the United Way Combined Federal Campaign, the United Way and Combined Charities Campaign, and the Commonwealth of Virginia Campaign. The success of the UWSHR campaigns may reflect the impact of increased defense expenditures and military pay increases – economic factors that were generally not present in the rest of the country.

How much do the citizens of Hampton Roads give relative to their ability to do so? **According to the Chronicle of Philanthropy, in 1997, the Hampton Roads region was the 10th-highest nationally in charitable giving relative to the ability to give.** After individuals who earned \$50,000 or more annually had paid their basic bills, they made charitable contributions averaging 8 percent of their incomes. In 1997, Portsmouth residents gave 9.8 percent; Norfolk, 9.7 percent; Chesapeake, 8.4 percent; Virginia Beach, 8.2 percent; and Suffolk, 7.2 percent (The Virginian-Pilot, May 1, 2003). UWSHR spokesperson Katherine Overkamp stated, "That really speaks well for this area. Recent studies have shown that citizens of Hampton Roads are extremely generous in their giving when compared to other cities in the United States."

United Way of South Hampton Roads has experienced a 27 percent growth in campaign receipts from 1999 to 2001. This growth of campaign funds has enhanced the ability of UWSHR-certified agencies to provide increased services to their respective constituencies. UWSHR has embarked on several new initiatives to help ensure continued growth of its program. Its Young Leaders Society promotes "the spirit of philanthropy and civic-mindedness" among young professionals and leaders of South Hampton Roads and its Women's Initiative recognizes and seeks to empower women as philanthropists.

Meanwhile, on the Peninsula, UWVP experienced a 33 percent increase in gifts from 1998 to 2001, with the most significant gains occurring in 2001. This is an impressive performance.

How Are United Way Funds Disbursed?

United Way funds are disbursed to approved agencies through a funding process that has similar components in each of the other local United Ways, except for UWVP. The funding and evaluation process typically requires an agency to submit a comprehensive proposal for funding that includes documentation of progress in achieving outcome measures or targeted goals. Submitted materials include a current, independent audit and the organization's IRS Form 990, plus its operating budget and program narratives. Agency requests are examined by panels composed of community volunteers recruited by the United Way staff. Site visits by panel members to the agencies take place, and agency representatives, including board members, make a formal presentation to their panel for funding.

United Way of South Hampton Roads has moved to a multiyear funding method in which agencies participate in the formal process of requesting funds every other year. However, each agency participates in an annual recertification process that includes a review of financial materials and program outcomes. UWSHR's "2002-2003 Community Funding Summary Report" provides the following description: "Agencies compete for funding available to the panel on the basis of: (1) real need as outlined in the Vision and Indicators and the Needs Assessment, which are substantiated with measurable data; (2) the agency's capability to absorb reductions; (3) quality of governance, financial and management practices; and (4) implementation of Outcome Measures; i.e., evidence of measurable results which focus on program and service outcomes and client or customer satisfaction."

How Well Do Services Work?

Are There Result-Oriented Measures?

The past decade has brought increasing demands for accountability. Central to these demands is the need for measurable outcomes that indicate whether programs and services are doing the job. UWSHR contracted with the Planning Council of Norfolk to provide training to agencies in the development of outcome measures. The process began in the FY 1997-98 budget cycle. All agencies are now requested to submit outcomes measurement progress reports based upon six to 18 months of their service provision. Mark Johnson, UWSHR vice president of community funding, describes these efforts as “an evolving and ongoing process and providing another dimension of community impact.”

A positive example of outcome measures in use is the YWCA's Women in Crisis Program, a shelter program that works with battered women. Its target indicator stated that 75 percent of 175 women in the program would become self-sufficient upon exiting the shelter. In March 2001, it reported the following results to the United Way: “Seventy-eight percent of women leaving the shelter (164 of 214) were self-sufficient; 136 found employment; 25 received Temporary Assistance to Needy Families; and 16 received child support.”

Embracing the Policy Governance Model, United Way of the Virginia Peninsula uses “ends” rather than outcome measures to determine accountability. The organization has released the following policy statements as measurement tools for the coming year.

- *People in our community have adequate food and shelter.*
- *People in our community are safe from abuse and violence.*
- *People in our community are healthy.*
- *People in our community do not use illegal drugs or abuse legal substances.*
- *Children in our community become happy, well-educated, productive adults.*
- *Elderly people in our community live a dignified life.*

Conclusions

Clearly, United Way of South Hampton Roads is the dominant United Way umbrella organization in a region that boasts several highly professional and successful United Ways. UWSHR provides an excellent example for others to imitate. Its ability to implement successful annual fund-raising campaigns is impressive. But, in addition, UWSHR posts its annual report, the results of its audits, and its financial controls and data concerning its overhead costs on its Web site, www.unitedwayshr.org. UWSHR demonstrates awareness of transparency issues and provides critical information to members of the public who want to know how their gifts will be managed.

UWSHR and the other United Ways have demonstrated that they are dynamic and innovative organizations that support and build our communities. It is almost axiomatic that most of us pay attention to our United Ways only when we make our annual gifts, or when we need their services. But, these services touch nearly everyone in the region.

Yet, in all our counting and measuring, we would do well to remember the sense of mission that motivates the United Ways. In the end, everything comes down to people seeing others in need and wanting to help. Adrienne Rich, poet and essayist, reminds us, “We have all seen attempts to graph numerically ... numbers of people who have slid from apartments or rented rooms or splintered households into the streets; a population of working people is more than a body to be counted: each is a mind and a soul. Each of these people is more than a pinpoint on a chart: each was born to her or his own usefulness and uniqueness.” This, then, is why our regional United Ways are important to us.



military retirees in
hampton roads

Military Retirees In Hampton Roads: Who, How Many And Their Impact

*"[Military] Retirees are increasingly being viewed
as a growth industry."*

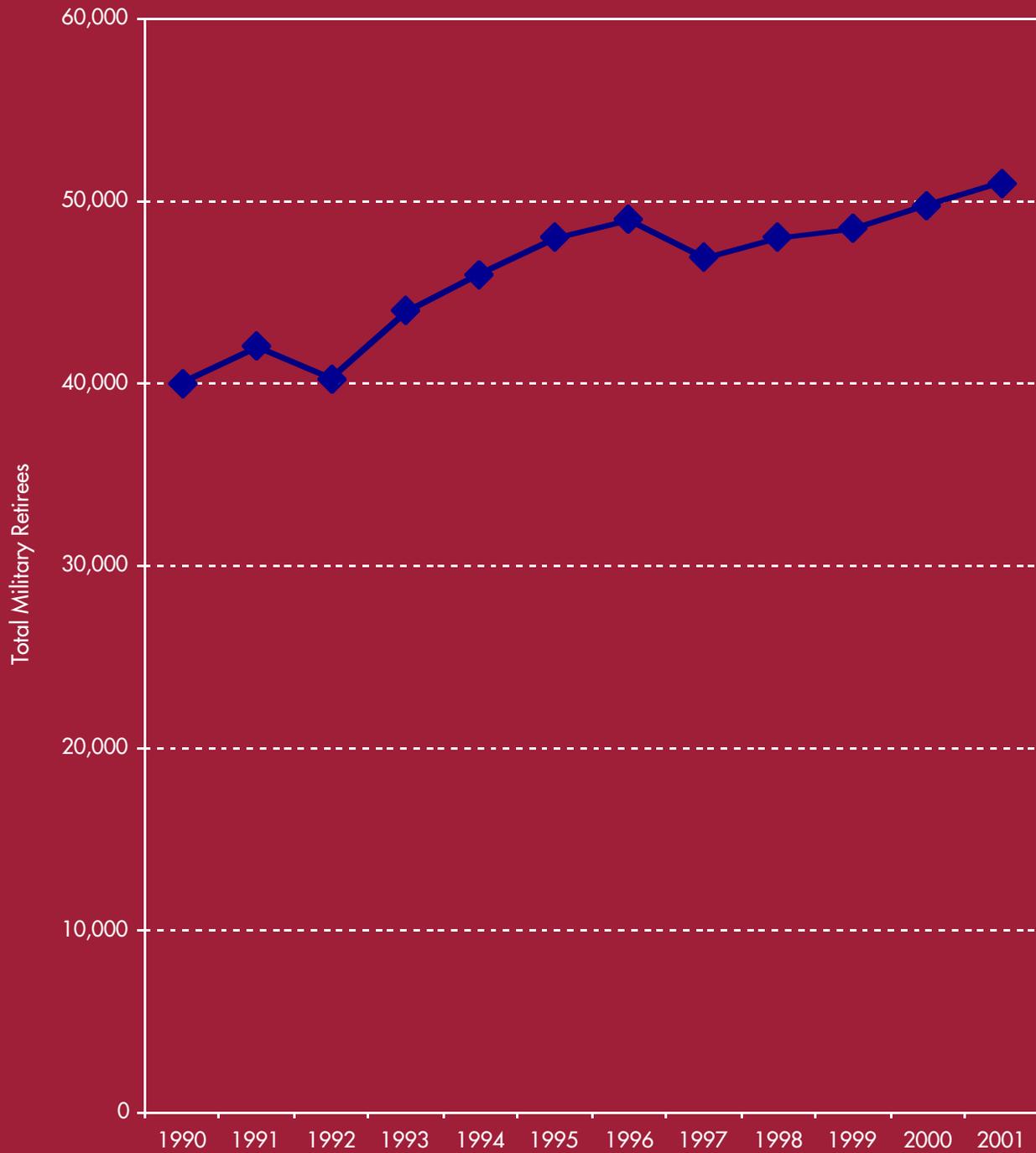
– Frank Hefner (Armed Forces and Society, spring 1992)

The Hampton Roads area boasts a rich military history involving all four branches of the services. Much has been written about the active duty and reserve personnel and families assigned to the area. We see their ships leaving and returning and we see their planes flying overhead. But what happens to these military personnel and their families once they retire from service?

The Department of Defense doesn't track military retirees' activities closely, nor does it collect much statistical information about them. It does acquire some data in order to ensure that retirement pay is accurately budgeted and distributed, and still other data to project usage rates for military hospitals, clinics and related services. Beyond those needs, however, relatively little is known about the large and growing military retiree community nationally, or in Hampton Roads.

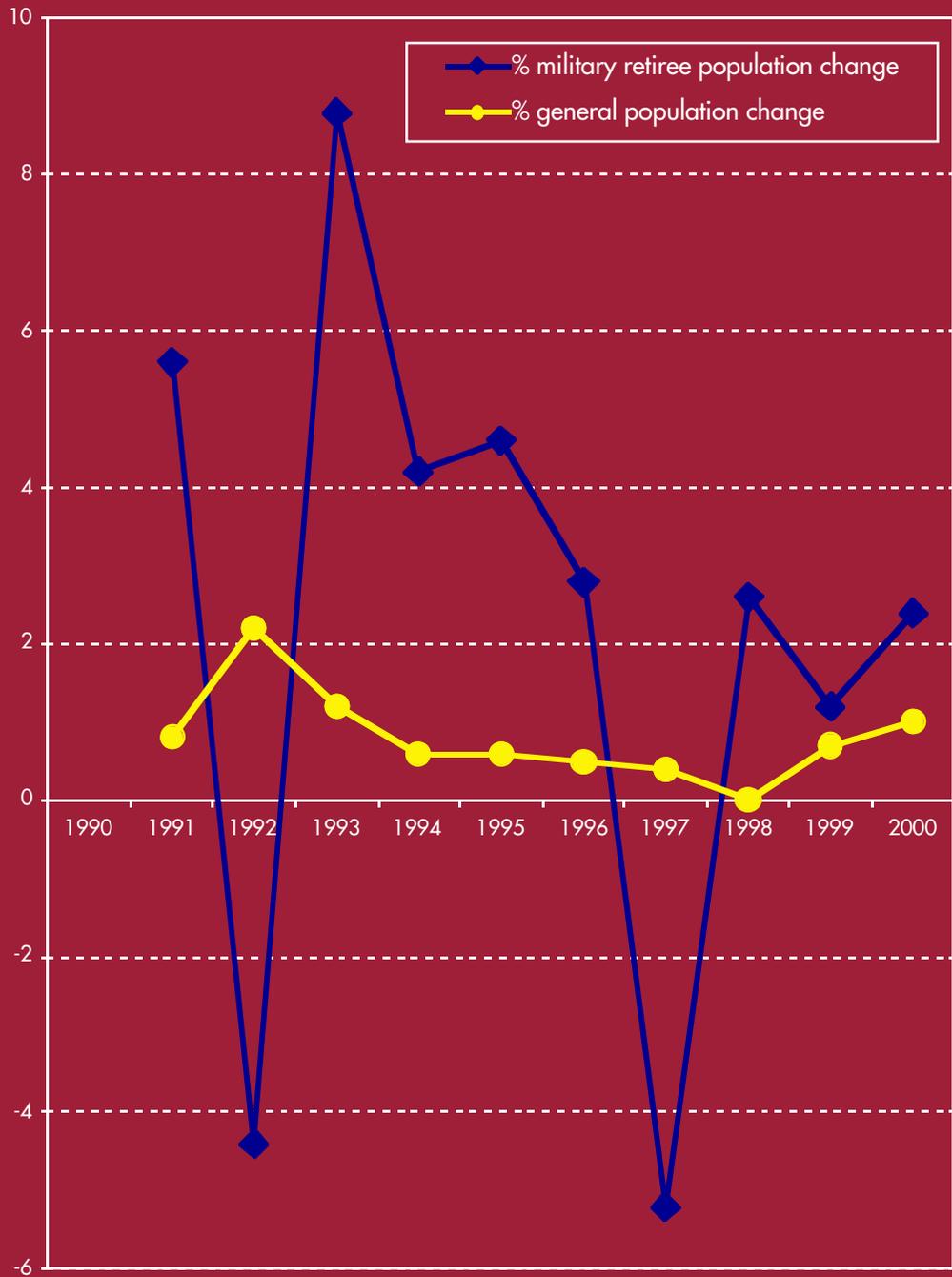
Nonetheless, as Graphs 1 and 2 illustrate, **approximately 53,000 retired military personnel reside in Hampton Roads and that number has grown by 24.5 percent since 1990, a pace far greater than the 8.5 percent growth in the overall population of the region.** These military retirees provide a continual influx of new residents and a skilled labor pool.

**GRAPH 1
NUMBER OF MILITARY RETIREES IN HAMPTON ROADS: 1990-2001**



Sources: U.S. Department of Defense, DoD Statistical Reports on the Military Retirement System, Fiscal 1990-2001, ADA402804

GRAPH 2
CHANGES IN THE POPULATION OF HAMPTON ROADS AND
THE NUMBER OF MILITARY RETIREES IN THE REGION



Sources: DoD Statistical Reports on the Military Retirement System, Fiscal 1990-2001, and the 2000 U.S. Census

The Demographics Of Military Retirees

The 53,000 military retirees living in Hampton Roads in 2001 accounted for nearly 10 percent of all households in the region. Who are these retirees?

- 54 percent of military personnel retire after they have served 20 years.
- The mean number of years of service is 20.9 for enlisted members and 23.4 for officers.
- There are eight times as many retired enlisted military members than there are retired officers.
- The mean age of a military retiree is 43.
- As Table 1 demonstrates, the majority of retirees work full time after retiring and 78 percent either work or go to school.

**TABLE 1
THE ACTIVITIES OF RECENTLY RETIRED MILITARY PERSONNEL**

	Percent selecting category
Working full time (including self-employed)	52
Working part time (including self-employed)	4
Working part time but looking for full-time work	7
Not working, but looking for work	18
Not working and not looking for work	7
Going to school full time	11
Going to school part time	4

Source: DoD Statistical Reports on the Military Retirement System, Fiscal 1990-2001

What occupations do the retirees fill? The data presented in Table 2 show that the most common position taken by a military retiree is managerial or administrative in character.

**TABLE 2
THE OCCUPATIONS OF MILITARY RETIREES**

	Percent in category
Executive, administrative and managerial occupations	18
Professional specialty occupations	12
Precision production, craft and repair occupations	16
Technical and related support occupations	6
Sales occupations	12
Administrative support occupations including clerical	11
Service occupations	12
Farm, forestry and fishing occupations	1
Machine operators, assemblers and inspectors	4
Transportation and material-moving occupations	5
Handlers, equipment cleaners, helpers and laborers	3

Source: DoD Statistical Reports on the Military Retirement System, Fiscal 1990-2001

Are the jobs of retirees related to their military training and service? Table 3 indicates that 46 percent of retirees feel that more than half of their military skills and training were useful in their jobs.

TABLE 3

	Percent in category				
	None or zero %	1-25%	26-50%	51-75%	76-100%
For that first full-time job, please estimate the percent of the training skills and education acquired during your military service that was useful or applicable on this job	19	20	15	17	29

Source: DoD Statistical Report on the Military Retirement System, Fiscal 1996

Table 4 discloses that when military retirees do take a job after retiring, typically they intend to work until a normal retirement age (60-69 years old).

TABLE 4

PLANNED RETIREMENT AGES FROM CIVILIAN EMPLOYMENT FOR MILITARY RETIREES

	Percent in category
0 - 49 years old	2
50 - 59 years old	19
60 - 69 years old	73
70 - 79 years old	4
80+ years old	1

Source: DoD Statistical Report on the Military Retirement System, Fiscal 1996

What levels of education have military retirees attained? As Table 5 reveals, a much higher percentage of military retirees has completed high school than is true for the U.S. population, but a much lower percentage has earned baccalaureate or graduate degrees.

TABLE 5

EDUCATION LEVELS: COMPARING MILITARY RETIREES TO THE GENERAL POPULATION

Highest Education Attained	Military Retirees	General Population (>25 years old)
High school diploma/GED	85%	61%
BS/BA degree	9%	15%
Postgraduate degree	4%	8%

Sources: Extracts from the databases of the Defense Manpower Center and the 2000 U.S. Census

However, there is a significant dichotomy between enlisted and officer retirees in terms of their education, as Table 6 demonstrates.

TABLE 6
ENLISTED VS. OFFICER RETIREES: EDUCATIONAL LEVELS

Highest Education Attained	Officer	Enlisted
High school diploma/GED	14%	94%
BS/BA degree	49%	3%
Postgraduate degree	37%	<1%

Sources: Extracts from the databases of the Defense Manpower Center and the 2000 U.S. Census

One last item should be considered when discussing the labor impact of military retirees in the Hampton Roads area – that of military retirees’ spouses. U.S. Department of Labor data reveal that the labor force participation rate of women has risen sharply since 1970. The spouses of military retirees reflect this trend. Fifty-three percent of military retiree spouses work either full or part time (see Table 7).

TABLE 7
MILITARY SPOUSES’ EMPLOYMENT AND ACTIVITY

	Percent selecting category
Working full time (include self-employed)	41
Working part time (include self-employed)	12
Working part time, but looking for full-time work	3
Not working but looking for work	1
Not working and not looking for work	6
Going to school full time	1
Going to school part time	1
Taking care of home or family	31
Other	4

Source: DoD Statistical Report on the Military Retirement System, Fiscal 1996

There is an additional characteristic of military retirees and spouses that is highly valued by employers. Military retirees are, in general, recognized as more mature and disciplined, have a better work ethic and possess better interpersonal skills than many of their peers. “They show up for work on time and they don’t shy away from taking responsibility,” a representative regional employer commented. “They know how to work in teams and take orders,” said another employer. Hence, as the CEO of one large firm put it, “We tend to exhibit preference in our hiring in favor of military retirees because that’s what our experience tells us.” These are among the reasons why regional economic development authorities often tout the military retiree component of the region’s labor force when they talk to firms that might locate here. It is a distinct plus for the region.

The Military Retirement Pay Of Residents Of Hampton Roads

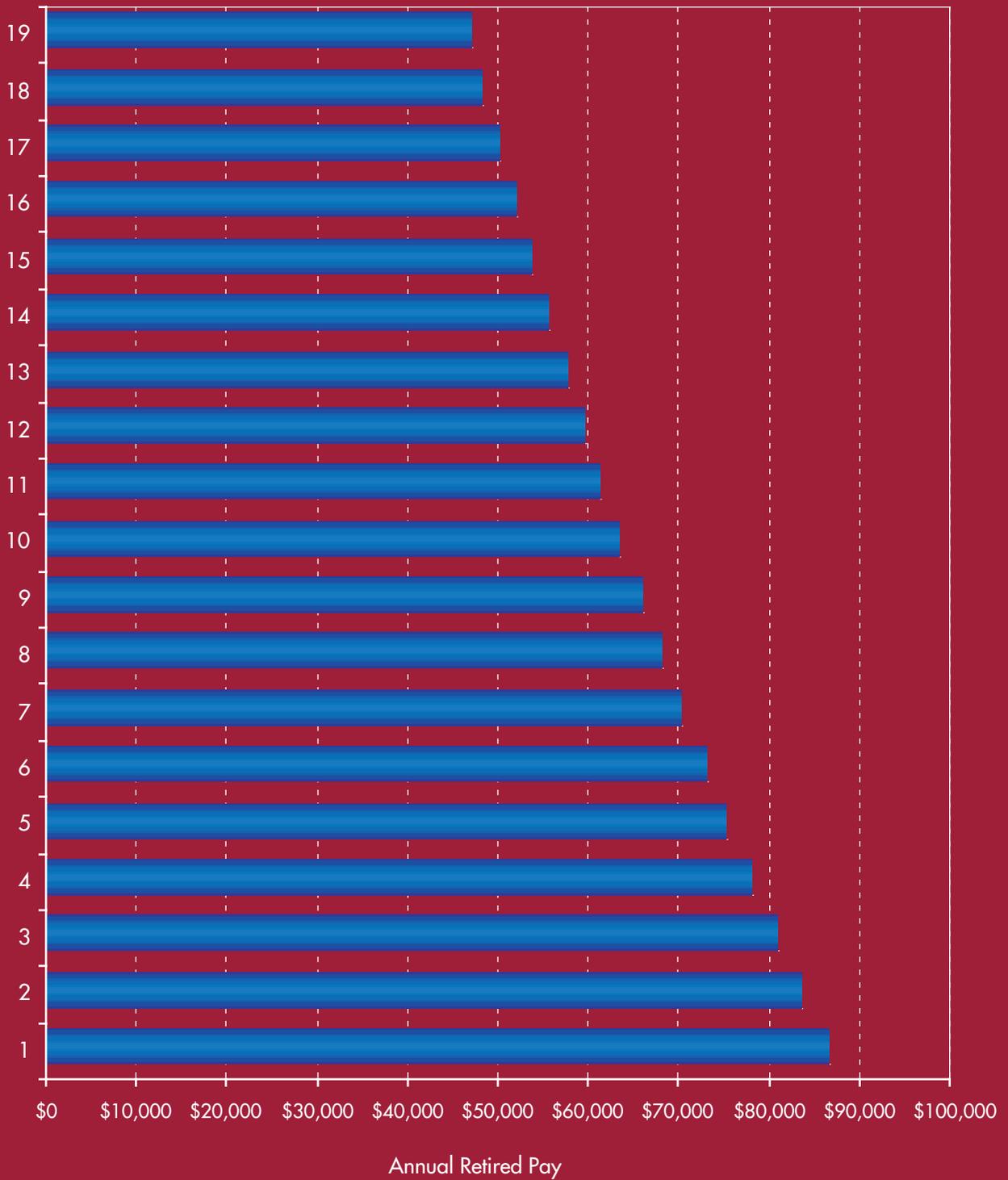
How do veterans fare economically when they retire? A 2003 study by the U.S. Census Bureau disclosed that the poverty rate for veterans is about one-half that of all Americans (6 percent vs. 11 percent). **The Department of Defense reports that it pays military retirees in the Hampton Roads region \$83.9 million monthly, or more than \$1.05 billion annually. This is an economic engine of impressive size for Hampton Roads.** However, even this sum does not include the income received as disability compensation from the Department of Veterans Affairs (VA), or income received by surviving spouses as part of the Survivor's Benefit Plan, an optional income insurance program available to retiring military members. Together, VA disability and Survivor's Benefit payments annually add \$45.5 million more to the spending power of military retirees in the region, making the total \$1.053 billion annually. These payments are not subject to the business cycle and thus provide a great deal of economic stability to the region.

In addition, retirement stipends are adjusted for inflation via a formula keyed to the Consumer Price Index (CPI). Thus, the real purchasing power of military retirees is unlikely to decline significantly in the future.

To illustrate this, consider the examples provided by typical enlisted and officer retirees. A typical enlisted person might retire as an E-7 after 21 years of service. His initial before-tax, annual compensation will be \$19,866. Assuming the annual compounded increase in the CPI is a bit more than 3.3 percent annually, then his before-tax annual military retired pay at age 65 will have increased to \$46,948. If he lives to age 80, his annual retirement stipend will have grown to \$76,738.

A typical officer might retire as an O-5 after 24 years of service. Her initial before-tax annual compensation will be \$46,484. At age 65, her annual retirement income will be \$86,343 (see Graph 3). If she lives to 80, her annual retirement paycheck will rise to \$141,131.

GRAPH 3
ILLUSTRATION FOR AN O-5 RETIRING AFTER 24 YEARS SERVICE
(Projection to Age 65)

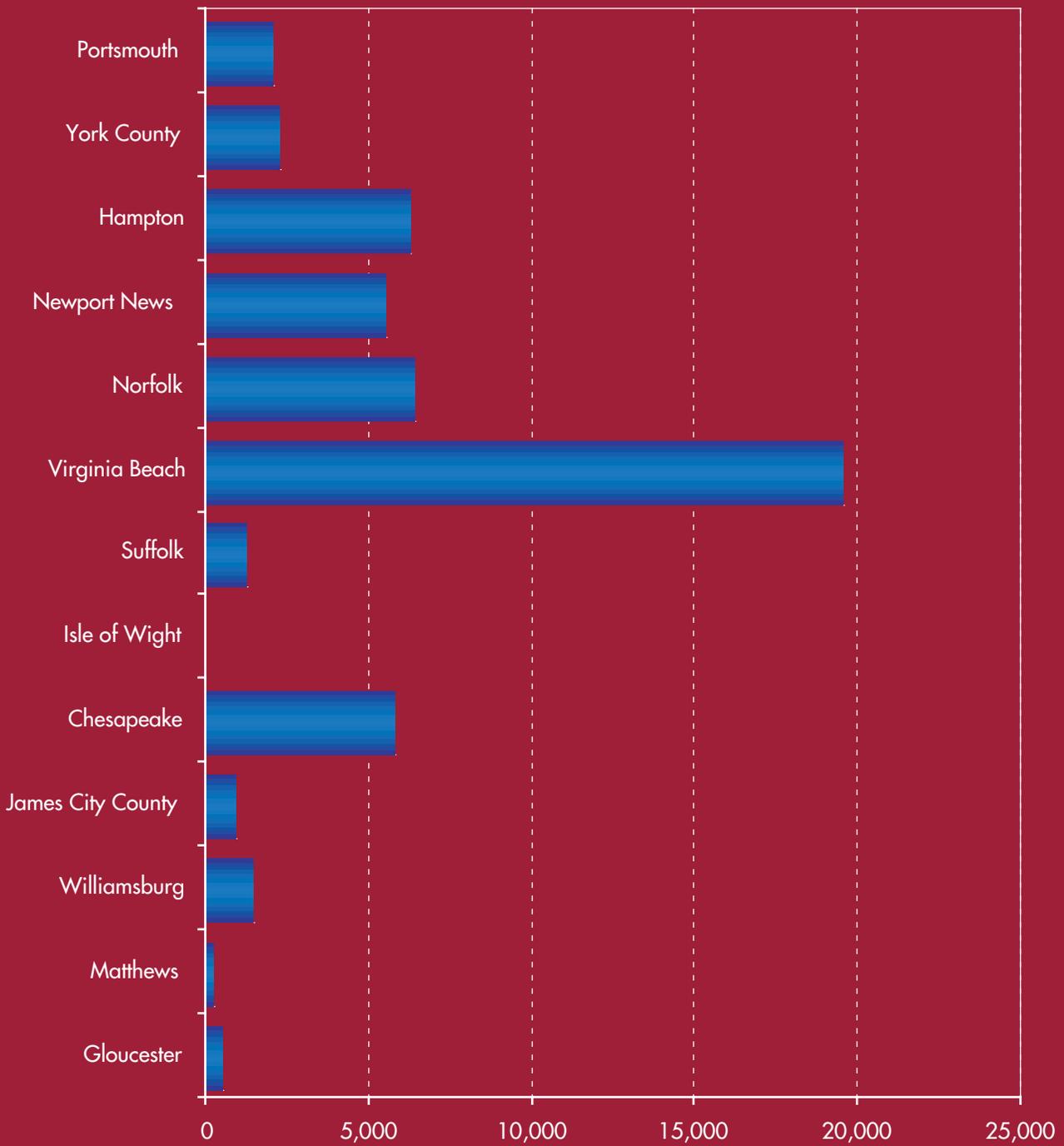


Where Do Military Retirees Reside In Hampton Roads?

As Graph 4 indicates, far more military retirees (approximately 20,000) live in Virginia Beach than in any other city in the region. In fact, **Virginia Beach has more military retirees living within its borders than the second-, third- and fourth-place cities (Norfolk, Hampton and Chesapeake) combined.**

This relative picture of where military retirees reside within the Hampton Roads region has been consistent over several years. The number of military retirees in Norfolk, Hampton and Newport News is related to their proximity to major military installations. But why do a relatively large number of military retirees live in Virginia Beach and Chesapeake? The answer depends upon a variety of factors that we examine in the next section.

GRAPH 4
THE RESIDENCES OF MILITARY RETIREES IN HAMPTON ROADS



Source: DoD Statistical Report on the Military Retirement System, 1999

What Factors Affect The Decisions Of Military Retirees In Terms Of Where They Live?

The only systematic data on military retirees are those collected in the 1966 Department of Defense (DoD) Survey of Military Retirees (which, unfortunately, was lost by the DoD), the 1977 DoD Retiree Survey (DRS) and the 1996 Retired Military Personnel Survey (RMPS). The 1996 RMPS target population consisted of retirees from active duty who had 20 or more years of creditable service, who retired between 1971 and 1994, who lived in the United States and who did not have severe disabilities. Approximately 80 percent (19,484) of the 25,000 surveys sent out were returned and considered usable. One of the key questions was, "How important is each of the following in your decision to live at your current location?" It listed 20 reasons for choosing one city over another and provided the retirees with the possibility of indicating one of five different levels of importance for each reason.

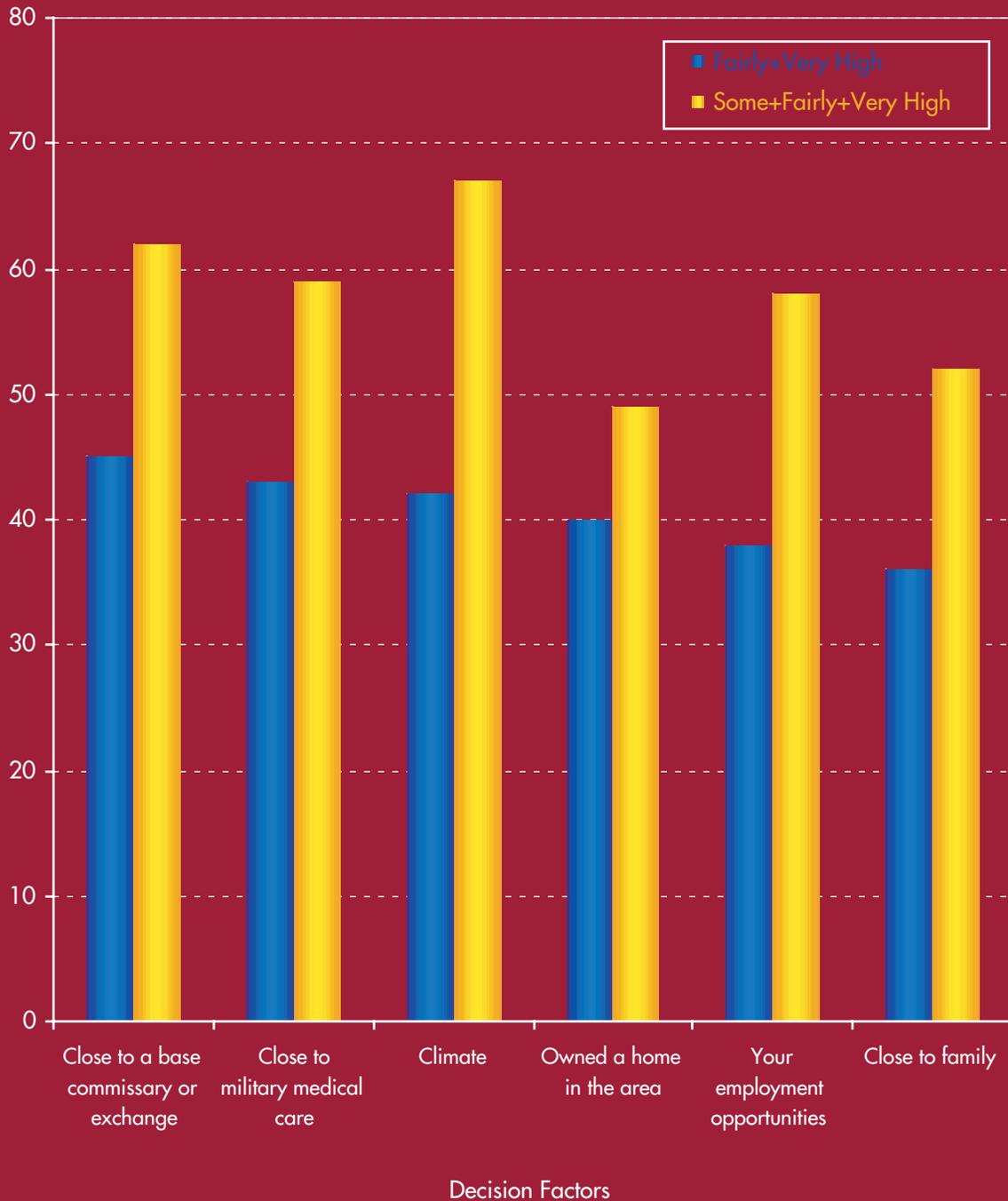
Graph 5 depicts the six most important factors, according to retirees, in determining where they would reside. Of note, while all six factors appear to play a significant role in this decision process, climate stands out when all three positive responses (some, fairly, high importance) are added. This finding would correlate to Jackson and Day's study (Professional Geographer, 1993) that found, "Military retiree concentrations are especially closely correlated with base location in the coastal states, the Ozark Plateau/Ouachita Mountains, the southern Appalachians and the desert Southwest," all areas of mild winters. In addition, they found many military retirees preferred to locate near a familiar military base (although this factor was not as strong for older retirees). The availability of higher education, lower population density, growing incomes and low tax rates also were important.

Interestingly, a retiree's pre-service experiences and residences show little correlation with choice of retirement location. That is, if the military retiree grew up in Chicago, this fact had little impact on where he chose to retire. By contrast, the location of his military postings is quite important. If he served a portion of his military career in Hampton Roads, then Hampton Roads becomes an important retirement alternative. **Why, then, do so many retired military personnel choose to retire in Virginia Beach? It's the combination of the city's location near familiar military facilities, low tax rates, reduced population density, moderate climate, low crime rate for a city of its size, and the nearness of the oceanfront and other amenities.**

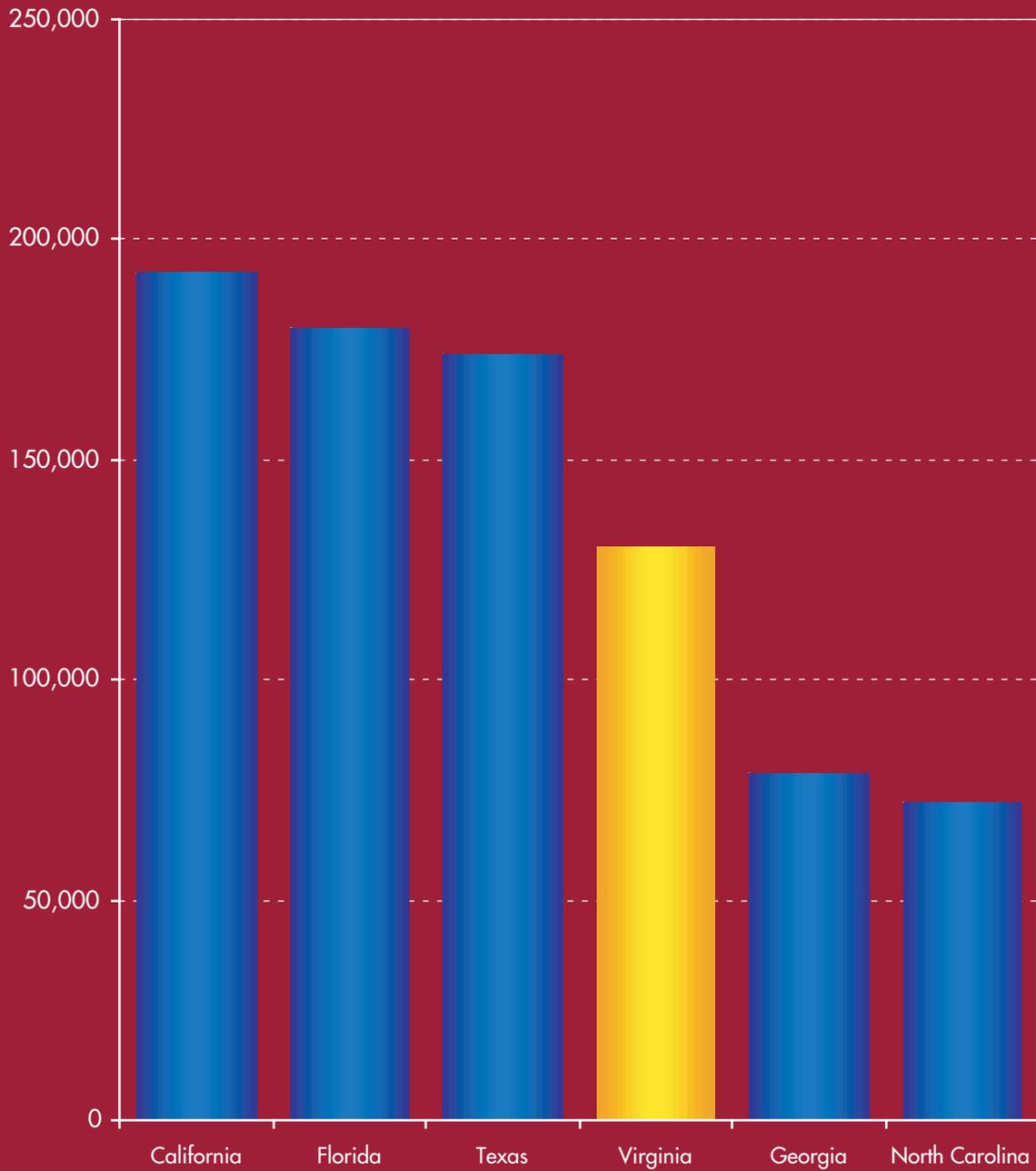
If these are the important factors in determining where retired military members and their families live, which states attract the most military retirees? William Snyder's study (Armed Forces and Society, 1994) determined that, "... retirees tend to settle in a relatively small number of states," and found "... considerable concentrations in the southern half of the country." California, Florida, Texas, Virginia, Georgia, Washington and North Carolina were the most popular states. These findings are consistent with 2001 data that are presented in Graph 6. The six states with the most military retirees account for nearly 44 percent of the 1.89 million retirees living in the United States. All six states have a large population of active duty personnel assigned and host large military infrastructures. However, Florida, Texas and Washington also do not have state income taxes and this is an important factor, according to many retirees.

GRAPH 5
THE SIX MOST IMPORTANT FACTORS DETERMINING
WHERE MILITARY RETIREES LIVE

Retirees' percentage ratings of the importance
of factors in deciding where to live



GRAPH 6
THE SIX STATES THAT HOST THE MOST MILITARY RETIREES: 2001



Source: DoD, Atlas/Data Abstract for the U.S. and Selected Areas, (LO3) abstracts from 2001

As Table 8 demonstrates, the retired military population of California actually has decreased by 10 percent since 1990, while the other five states have increased their retired military population from 17 to 37 percent. Some of this is due to the fact that the number of military personnel stationed in California has declined and hence the number of personnel who retire while stationed there (an important factor, as noted above) has dropped significantly. Beyond this, however, even while California has experienced a significant influx of immigrants in recent decades, simultaneously it has experienced a steady outflow, sometimes almost a torrent, of people leaving the state. Tax rates, crime, employment and quality of life issues have been paramount.

By contrast, Virginia and Hampton Roads have fared very well. **More than 99 percent of military personnel who retire while serving in Virginia were stationed in Hampton Roads. They know the region; they like it and they often choose to retire here.**

TABLE 8
CHANGES IN THE POPULATION OF MILITARY RETIREES IN SELECTED STATES, 1990-2001

State	1990 Retiree Population	2001 Retiree Population	Percent Change
California	213,821	192,535	-10
Florida	151,718	180,819	19
Texas	148,677	174,263	17
Virginia	94,255	125,595	33
Georgia	58,475	78,322	34
North Carolina	53,144	72,546	37

Source: DoD, Atlas/Data Abstract for the U.S. and Selected Areas, (L03) abstracts from 1990 and 2001

Policy Implications

Military retirees form a group of significant and growing economic importance in Hampton Roads. The region’s attractions to military retirees are self-evident – many retirees have familiarity with the area; the Hampton Roads population is “military friendly,” at least compared to certain other areas of the country; there is easy access to DoD medical facilities; tax rates are not high in a national context; and the climate and amenities are appealing. Nonetheless, attracting and maintaining a larger group of retirees would have an even greater impact on the region’s economy. What policy options are available to draw more military retirees to the region?

Most of the meaningful public-policy options involve the expenditure of resources. Both Commonwealth and local taxing systems could be made more attractive to retirees, although Virginia’s state income tax already provides significant tax relief to individuals age 62 and older. It’s not clear that tax preferences directed only at military retirees would be constitutional, but the Commonwealth could opt to extend its general tax preference for the elderly.

Most military retirees choose to retire between the ages of 38 and 46. Thus, they are potential candidates for postsecondary education and may well have family members who are interested in the same. Virginia is one of only eight states in the country that does not provide all military spouses and dependents with automatic in-state tuition benefits at its public colleges and universities. Of course, for most states, the loss in revenue is relatively small to the states themselves or their public colleges and universities when they provide in-state tuition to military and spouses and dependents. In Virginia, however, it is estimated that the revenue loss would exceed \$10 million annually (at current rates of attendance and not counting veterans) and an institution such as Old Dominion University might lose one-third of that amount. For Old Dominion, that would be a bitter fiscal pill to swallow, given the financial reductions it recently has suffered. **Thus, to be equitable, the Virginia General Assembly would have to regard such a tuition benefit as an expenditure like any other and allocate increased funding to support it. That seems unlikely, due to Virginia’s tight financial circumstances and the opposition of many legislators to providing such a benefit.** “Why should we provide in-state tuition to someone who is a resident of Florida, mostly because he doesn’t pay any income tax there?”

opined one legislator. Hence, it seems probable that in order for this benefit to be established, it would have to be tied in some way to the actual establishment of formal residency. “But, that’s effectively the way it is now,” said the same legislator, who represents a district in southwestern Virginia.

For most retirees, buying a house is one of the most important financial transactions of their lives. The Commonwealth might consider various financial incentives (perhaps in the form of income tax credits) to spur them to purchase their home in Virginia. Of course, cities and counties could do the same and rebate some portion of first-year property taxes to veterans who purchase a home in the region.

Cities and counties within the region might also consider establishing a Military Transition Center to cultivate and service military retirees. Such a center might offer “one-stop shopping” for veterans who are considering where and how to live, how to connect with job markets, how to utilize recreational, cultural and social services, and how to connect with other veterans and families who might provide sage advice. Personnel from the center might move from base to base and actively engage potential retirees.

Each of the previous suggestions would cost money and in the current anti-tax climate might not be attractive, notably among current resident veterans who by reputation often are “anti-tax” in sentiment. Others may say, “Well, we’re already doing rather well in attracting retirees, so why do we need to do more?”

Nonetheless, the economic stakes are large. In 2001, military retirees in Hampton Roads received \$1.05 billion in retirement pay. Thus, each retiree brings an annually renewable \$20,000 as a type of dowry, even before he or she enters the job market or purchases a home. There are very few other groups so attractive in terms of their economic impact. **Might it not make sense for a city such as Virginia Beach, which has one of the highest concentrations of military veterans in the country, to consider spending \$1,000 per new military retiree (on a one-time-only basis) in order to acquire this \$20,000 per year income stream (plus any other income earned by retirees, most of whom enter the work force) for decades to come?** The numbers become even more attractive if one were to focus on veterans who were middle-grade officers and retired with 20 years of service. Currently, they are worth about \$46,000 per year in retirement income even before they take a job in the civilian sector. It would appear to be good business for Virginia Beach and other Hampton Roads cities to consider how and what incentives they can provide to increase their share of this tasty economic pie.





research and
development at
eastern virginia
medical school

Research And Development At Eastern Virginia Medical School

Eastern Virginia Medical School (EVMS), founded in 1973, is distinctive among medical schools in the United States. In the usual model, a medical school is attached to a university and/or owns a teaching hospital. Neither is true in the case of EVMS, which nonetheless has built very strong community attachments within Hampton Roads. It was founded by a diverse group of regional leaders who perceived the need for a medical school and is governed by a 17-member Board of Visitors, which includes 11 members appointed by seven of the region's cities. One of the hallmarks of EVMS is the cooperative relationships it has developed with regional hospitals and clinics as well as with many doctors.

An independent institution, EVMS is funded by a variety of sources. It does receive some funding from each city, though these dollars accounted for only 1.1 percent of its budget in 2001. It receives a greater share of funds (10.7 percent) from the Commonwealth, in recognition of the number of medical doctors EVMS trains that stay and practice in Virginia.¹ But EVMS is not a public entity in the usual sense of an Old Dominion University or a Jefferson Laboratory.

Prosperous medical schools have a tremendous economic impact upon their regions. An important aspect of this impact is research and development (R&D) activity, which generates an impressive number of attractive, high-paying jobs. An illustration is Johns Hopkins University, which spent almost \$1 billion on R&D in 2001, most of which was medically and life sciences-related ("Academic Research and Development Expenditures," National Science Foundation, 2003).

Because EVMS is a young institution that still faces daunting budgetary challenges, its research and development numbers are not yet in the Johns Hopkins class. EVMS recorded \$26.25 million in R&D expenditures in 2001 (183rd nationally), while neighboring College of William and Mary accounted for \$35.82 million (158th) and Old Dominion University, \$24.66 million (186th). Together, the three institutions would have finished 114th nationally. (All data come from the National Science Foundation.) Clearly, the region currently is not an R&D hotbed, though over time it could improve its performance dramatically. This chapter focuses on research and development at EVMS and the ways and means by which it and the region might improve their performances in this critical area.

The Major R&D Thrusts At EVMS

EVMS, like most higher education institutions, directs the majority of its R&D expenditures toward basic and clinical research. Its most extensive and successful projects can be divided into four broad areas: Cancer, Reproduction, Systemic Diseases and Infectious Diseases (see Graph 1).

¹ Interestingly, this is a slightly higher proportion of state support than the University of Virginia will receive as a proportion of its FY 2004 budget! The convergence between independent and public institutions of higher education is occurring more rapidly than many are aware.

**GRAPH I
MAJOR EVMS RESEARCH AREAS**

EVMS AREAS OF RESEARCH STRENGTH

Basic, Translational and Clinical

Cancer

Prostate
Breast
Leukemia
Head & Neck
Lung

Reproduction

**Jones
Institute**

CONRAD

**Systemic
Diseases**

**Strelitz
Diabetes
Institute**

Thomas Lee
Center for
Ocular Pharm.

**Infectious
Diseases**

Center for
Pediatric
Research

New Areas:

- Epidemiology
- Clinical Outcomes

**Sleep
Disorders
Center**

Glennan Center
for Geriatrics

Perhaps the best-known center at EVMS is the Jones Institute for Reproductive Medicine. Established 20 years ago, the center was the nation's first in vitro fertilization site and is unduplicated in Virginia. It has generated six patents that range from oral contraceptives to new 4-D fetal ultrasound diagnostic software.

The Jones Institute is also responsible for the first EVMS intellectual property to be marketed, "Seasonale," a three-month oral contraceptive that reduces women's menstruation cycles from 13 to four annually. It has been licensed to Barr Laboratories and is expected to earn FDA approval by the end of 2003.

Another well-known institution at EVMS is the Leonard R. Strelitz Diabetes Institute, which annually sees about 10,000 patients. The institute strives to discover a cure not only for diabetes, but also for problems such as diabetic neuropathy. The Diabetes Institute has discovered a gene named INGAP (Islet Neogenesis Associated Protein), which is responsible for regenerating the beta-islet cells that make insulin and other important hormones in the pancreas. This peptide has been licensed to GMP Companies Inc., which, in collaboration with Procter & Gamble Co., will produce a drug that may reverse diabetes.

The Center for Pediatric Research is working with electrical engineers at Old Dominion, Harvard University and the University of Washington to determine the effects of very short radio frequencies on human cells. Grants from the Air Force Office of Scientific Research and the Health Services Research Administration have facilitated the construction of a new Center for Bioelectrics. Researchers are optimistic that these pulse electromagnetic fields may provide a way to fight and kill cancer cells from "the inside out"; speed the healing of wounds (especially for soldiers and civilians injured in battle); treat contaminated water sources, and kill bacteria and spores to sterilize hospital and daycare equipment. The patented technology is the basis for a company that may generate attractive biotechnology jobs for the region. As Dr. Stephen Beebe, co-director of the project at the Center for Pediatric Research, has observed, "When you combine a physicist or engineer with a molecular biologist, the possibilities are endless."

The fourth major example of EVMS "hotbed" technology concerns the prostate cancer research conducted by the EVMS Department of Microbiology and Molecular Cell Biology. **EVMS researchers have initiated a method of "proteomic profiling" to develop early detection for prostate cancer, a disease that affects 4,300 Virginia men and kills almost 1,000 each year.** Working with the Virginia Prostate Center and the National Cancer Institute, researchers are optimistic that applications relating to breast and prostate detection, diagnosis and prognosis will be identified. The technology has resulted in 10 patents, nine pending patents, and 13 licensing and contractual agreements. This science potentially might allow doctors to screen for still other types of cancer, such as ovarian, bladder, neck and even leukemia.

Although these four examples are representative of EVMS's areas of expertise, it is important to note that EVMS research is more diverse. Two other interesting examples include the development of drugs to treat hyphema (bleeding into the front of the eye) and a partnership with Old Dominion University's Center for Medical Modeling and Simulation for research in virtual medical and surgical training.

Research And Development Spending Patterns At EVMS

Because Eastern Virginia Medical School is a much younger and smaller institution than other Virginia universities and colleges, it is no surprise that EVMS does not lead the state in research and development expenditures. As Table 1 indicates, EVMS trails the “Big Three” (University of Virginia, Virginia Commonwealth University and Virginia Tech) substantially in R&D expenditures. However, only Virginia Tech, at 49th, finished in the Top 50 in the United States in 2001. After EVMS, the next two top-ranking independent institutions in Virginia were Hampton University (251st) and the University of Richmond (416th).

Graph 2 illustrates the upward trends in various types of R&D funding at EVMS since 1975. While the U.S. government is the largest sponsor of EVMS research, private and foundation sources are almost as important.

Table 2 shows that support from the U.S. government is vitally important to research and development. The National Institutes of Health (NIH) is a particularly big player.

**TABLE 1
RESEARCH AND DEVELOPMENT RANKINGS:
TOP 200 INSTITUTIONS IN VIRGINIA**

Institution	Annual Expenditures	National Ranking
Virginia Tech	\$216.3 m.	49th
UVa	\$149.5 m.	78th
VCU	\$ 99.2 m.	104th
William and Mary	\$ 35.8 m.	158th
EVMS	\$ 26.3 m.	183rd
Old Dominion	\$ 24.7 m.	186th

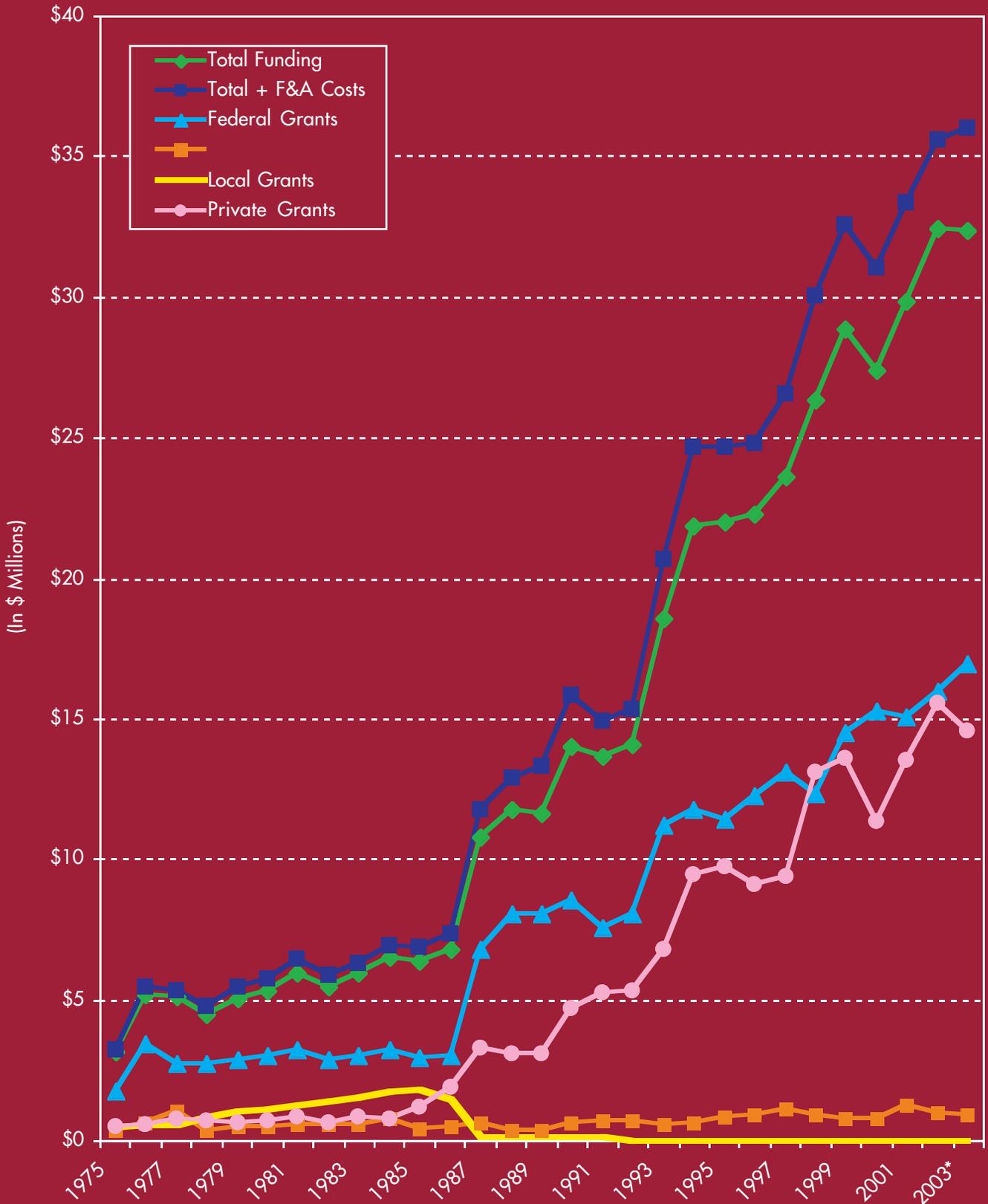
Source: “Academic Research and Development Expenditures: Fiscal 2001,” National Science Foundation, 2003

**TABLE 2
PERCENT OF RESEARCH FUNDING RECEIVED
FROM THE U.S. GOVERNMENT**

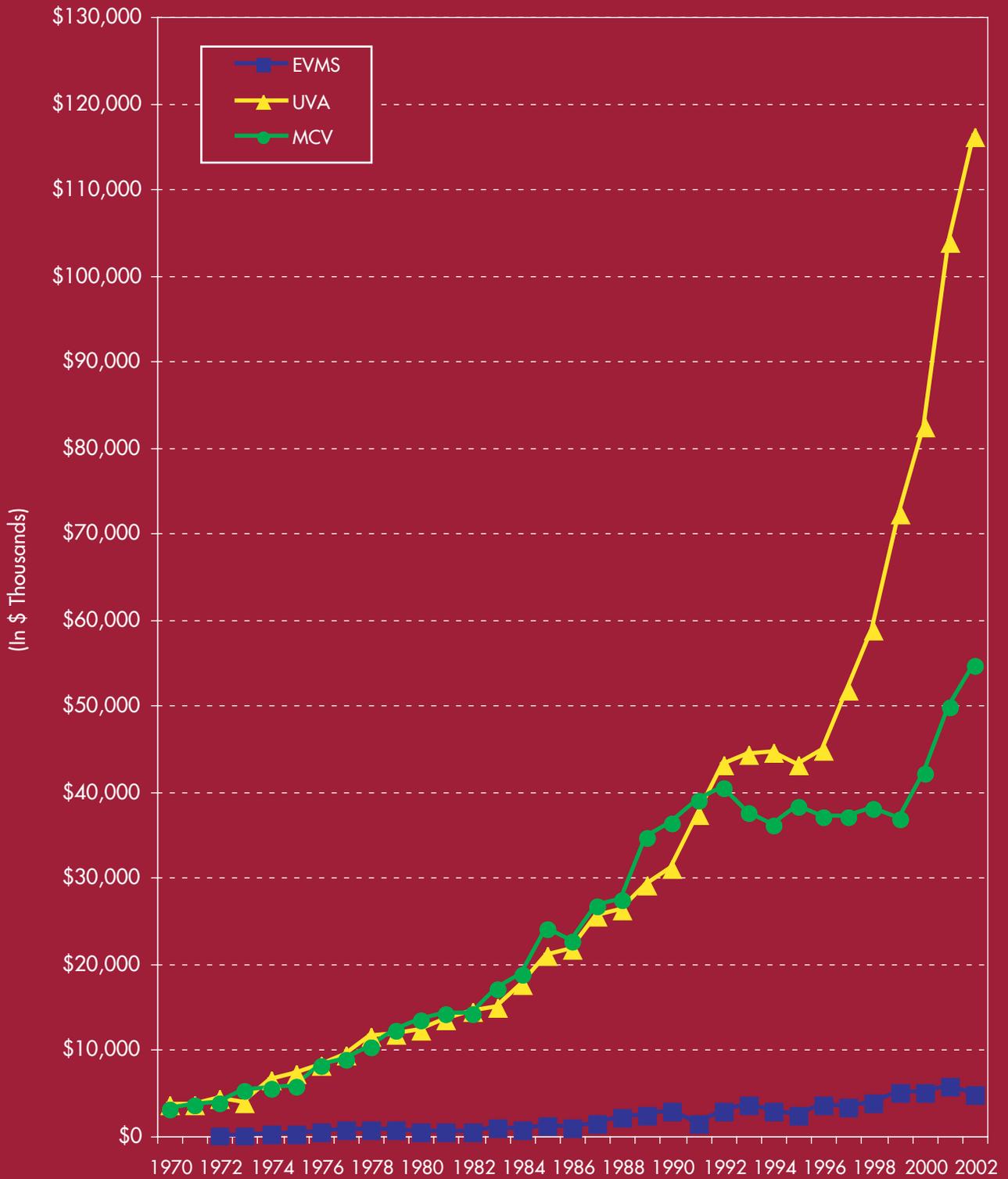
Institution	Percent of R&D Funds Received from U.S. Government
UVa	66%
VCU	60%
EVMS	56%
Virginia Tech	40%

Source: State Council of Higher Education for Virginia, “2002 Condition of Research at Virginia Colleges and Universities”

**GRAPH 2
GROWTH IN EVMS RESEARCH FUNDING**



**GRAPH 3
NIH FUNDING AT THREE VIRGINIA INSTITUTIONS**



The three Virginia medical schools (UVa, VCU, EVMS) and Virginia Tech dominate NIH funding, which is the staple of medical and biotechnology research. Graph 3 demonstrates that EVMS's funding from NIH has grown over the past two decades, but is dwarfed by NIH funding granted to the two other medical schools. UVa's funding from NIH, for example, is about 20 times larger than that at EVMS. However, EVMS's rate of success for its NIH proposals has exceeded 20 percent in recent years, a commendable achievement in light of the 8.6 percent approval rate nationally.

When EVMS is compared to all medical schools in the country, it clearly ranks in the bottom one-half in terms of R&D funding. However, as the data in Table 3 illustrate, when EVMS is compared to a cohort of 16 similar, small, community-based medical schools established within the past 40 years, its ranking improves substantially. And, in terms of NIH funding, EVMS ranked sixth among this cohort in 2001.

Since its founding, EVMS has received 42 patents. It currently has 31 patents pending with pending licensing fee income of \$30 million. The institution also has 10 licensed technologies that have led to the formation of three companies, with another two pending.

A general rule of thumb is that an institution should have at least one scientific disclosure for every \$1 million to \$2 million in research income generated each year. EVMS has recorded an average of two disclosures per year, or one per \$1.5 million of research. As

Table 4 reveals, during FY 2001, EVMS recorded 15 disclosures and filed 22 patent applications. Locally, Old Dominion University recorded 22 disclosures and filed eight patent applications, while William and Mary recorded eight disclosures and filed one patent application. Together, the three institutions recorded 45 disclosures and filed 31 patent applications, which is encouraging. Even so, this level of activity is only a fraction of that occurring at UVa, VCU and Virginia Tech. Their activity, in turn, is only a fraction of what one observes in a particular neighboring state, North Carolina.

**TABLE 3
NATIONAL BENCHMARK MEASURES FOR MEDICAL SCHOOLS**

Institution	Total Expenses and Transfers, FY 2001	Research Grants and Contracts, FY 2001
EVMS	\$148.1 m.	\$21.4 m.
National Average for All Medical Schools	\$363.1 m.	\$74.4 m.
Average for Community-based Medical Schools	\$ 94.8 m.	\$ 8.5 m.
EVMS National Rank	100th	86th
EVMS Community-based Rank	2nd	1st

Source: Eastern Virginia Medical School, "Report on Performance Trends," January 2003

Note: The community-based medical school group includes: Texas A&M, East Carolina, Southern Illinois, Mercer, Wright State, Northeastern Ohio, East Tennessee, Nevada, South Carolina, Morehouse, Michigan State, Marshall, Hawaii, South Dakota, North Dakota and EVMS.

**TABLE 4
TECHNOLOGY TRANSFER ACTIVITY IN VIRGINIA FY 2002**

Institution	Number of Disclosures Recorded	Number of U.S. Patent Applications	Number of U.S. Patents Received	Number of Licenses Signed	Number of Start-up Companies
EVMS	15	22	3	7	0
GMU	24	10	1	1	0
ODU	22	8	5	5	2
UVA	135	186	17	37	1
VCU	93	69	11	15	0
VA TECH	134	91	23	28	7
W&M	8	1	1	0	0
Total (VA)	434	387	61	93	0
Total (U.S. and Canada)	13,569	6,812	3,721	4,058	494

Sources: Virginia's Center for Innovative Technology, 2003, and the Association of University Technology Managers' "Licensing Survey, FY 2001"

Regional And State Policy Considerations

By most standards, then, our region is not a big-time national player in terms of R&D expenditures that occur outside of federal laboratories. When the R&D efforts of all of the region's institutions of higher education are combined, they approximate \$100 million annually, which would rank the region 102nd nationally if it were generated by a single institution. Compare this to the approximate \$750 million in R&D generated by the three universities (Duke University, North Carolina State University and the University of North Carolina) in the Research Triangle of North Carolina.

Nor does the entire Commonwealth of Virginia stack up well. In 1999, southeastern competitor states such as Florida, Georgia, Maryland and North Carolina all outperformed Virginia in terms of university R&D, and they did so by significant margins. According to the State Council of Higher Education for Virginia's "2002 Condition of Research at Virginia Colleges & Universities Report," Virginia ranked only 16th in the nation in terms of its academic R&D spending. Virginia accounted for only 2 percent of all academic R&D expenditures in 2002. On a per capita basis, Virginia ranks only 37th.

Gov. Mark Warner has set a bold goal for the state – to nudge three of its academic institutions into the ranks of the nation's top 50 research universities by 2010. Given current levels of higher education funding in the Commonwealth, this is a pipe dream. Of course, the Commonwealth could increase its higher education and R&D investments. However, just to bring the funding of Virginia's public colleges and universities to the average levels of their peer institutions would cost about \$300 million annually. Even then, it's not clear that "average" funding levels would be sufficient to match the performance of other states such as North Carolina. Further, as the North Carolina and Texas experiences demonstrate, the payoff to such investments would not be immediate, though the rates of return would be impressively high. Those who expect investments in higher education and research and development to generate immediate economic growth benefits are likely to be disappointed.

Alternatively, the Commonwealth could focus its efforts on R&D areas where it might capitalize on existing strengths. The existing scientific and technological strengths of Virginia include federal R&D laboratories located in the Commonwealth (for example, NASA Langley Research Center, the Jefferson Laboratory, and the Joint Training, Analysis and Simulation Center). These laboratories engage in extensive, high-level R&D, though usually it is not directed at commercialization. In addition, the Commonwealth boasts impressive information technology assets, primarily in Northern Virginia, the presence of the federal government and the defense establishment in Washington, D.C., and Hampton Roads, and promising pockets of R&D

activity at several of its universities and medical schools. Capitalizing on these strengths makes eminently good sense. It seems plausible that a winning long-term strategy for Virginia would be centered on its existing assets and strengths.

The economic theory of comparative advantages applies not only to nations, but also to states and regions. There are fundamental economic reasons why Virginia does not grow its own bananas, but has become a center for Internet traffic and services. States and regions that ignore their comparative advantages suffer because they end up supporting high-cost scientific enterprises. Hence, it would be foolish for the Commonwealth to ignore the reality of its federal laboratories and the Northern Virginia information technology complex as it develops its own strategy. Not so coincidentally, such an approach would favor Hampton Roads, which boasts many of the federal installations upon which a critical mass of R&D activities might be constructed.

Third, Virginia could look into the future, identify the scientific specialties and technologies that it believes will be most important in the future, and then invest in them. Both the Commonwealth of Virginia and the Hampton Roads Partnership already have undertaken this exercise (see Table 5). Unfortunately, neither has backed its deliberations with anything more than minimal resources. Regardless, such a “pick the winners” approach requires a degree of skill (or luck) in prognostication that experience suggests most governments do not have. The failure of meticulously planned “industrial policies” internationally, most visibly in the Soviet Union and Eastern Europe, but also in Japan, should make Virginians very wary of attempts to supercede either legitimate scientific processes or the signals provided by capital markets.

TABLE 5
UNIVERSITY AND MEDICAL SCHOOL COMPETENCE IN PRIORITY RESEARCH AREAS

Statewide Priority Areas

Bioinformatics	VCU, VT, GMU, UVA, W&M
Information Security	JMU, GMU, HU, UVA
Nanotechnology	UVA, VCU, W&M, VT
Modeling and Simulation	ODU, GMU, UVA, HU, W&M
Advanced Materials	UVA, VCU, VT, JMU, ODU, NSU, W&M, VSU

Hampton Roads Priority Areas

Bioinformatics and Data Management	W&M, ODU
Marine Biology and Biotechnology	W&M, ODU, Jeff Lab, NASA
Proteomics	EVMS (with ODU, W&M)
Biomedical Instrumentation and Imaging	Jeff Lab (with W&M, HU, EVMS)
Atmospheric Biology and Sensors	NASA, HU
Bioelectrics	ODU (with EVMS)
Cells, Cancer and Infectious Disease	EVMS, ODU
Nanotechnology	NASA, Jeff Lab (with ODU, W&M, HU)

Sources: Statewide Priorities from “VRTAC Briefing to Virginia’s Congressional Delegation, 2002,” and SCHEV. Hampton Roads Priorities from Virginia Biotech Meeting in Hampton Roads, Oct. 7, 2002.

One can “blue sky” almost endlessly about R&D in Virginia and scores of interesting conferences can be held. However, it must be recognized up front that the major problem associated with R&D in Virginia is under-investment. **The Commonwealth has attempted to reap major-league scientific and economic benefits from minor-league levels of investment. The discouraging national R&D rankings reported previously are visible evidence of the fruits of this approach.**

But, if under-investment is generally true in Virginia as a whole, it is dramatically apparent within Hampton Roads. The region’s medical school, EVMS, is small in a national context and has faced continual funding challenges. It does not receive large amounts of public funding, faces critical shortages of R&D space, does not have a formal affiliation with a university, and experiences high unit costs for many of the administrative and support services it provides to its researchers. While it has

done rather well in light of these limiting circumstances, EVMS will not realize its potential unless these circumstances are changed. A plausible agenda for improvement would include:

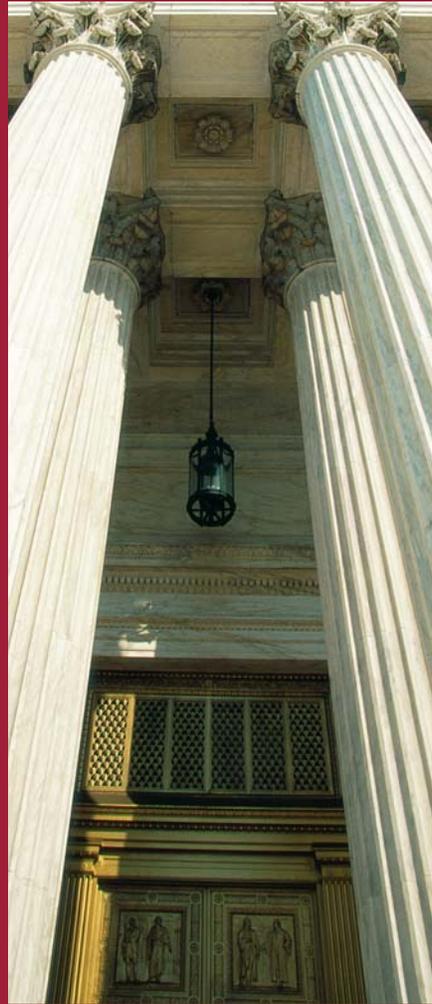
- Increasing EVMS's funding from the Commonwealth (In FY 2002, EVMS received \$13.2 million; a reasonable goal for Virginia should be to double this by 2010.)
- Increasing the size of the medical school so that it might realize some economies of scale (UVa and Virginia Tech have seven to 10 times the number of investigative faculty as EVMS.)
- Having the Commonwealth subsidize or pay for the construction of R&D facilities at EVMS (This might be most plausible in partnership with regional state universities; EVMS has only 35 percent of the square feet it should for the size of its R&D establishment, according to SCHEV, Virginia's higher education commission.)
- Focusing R&D efforts at EVMS on selected disciplines and problems where promise is great, economies of scale are possible and partnerships with other institutions are feasible
- Negotiating a limited university affiliation (Old Dominion University is the obvious candidate) to promote greater sharing of services and to achieve lower administrative and operational costs
- Developing additional cooperative efforts with other institutions throughout the region (EVMS's small size often means that it has difficulty achieving a critical mass of researchers in specific research areas, and joint R&D proposals to the Commonwealth and U.S. government agencies often are attractive.)
- Including EVMS in statewide scientific initiatives such as the legislature-appointed Joint Commission on Technology and Science and the Virginia Bioinformatics Consortium, which currently do not invite EVMS to their conferences and meetings (The SCHEV 2002 report on the "Condition of Research at Virginia Colleges and Universities" failed to mention or include EVMS in any of its analysis and rankings; these oversights need to be reversed.)
- Developing more research-friendly local and regional governmental attitudes (Numerous studies reveal that an entrepreneurial atmosphere is critical to productive R&D.)

To some extent, the progress of research and development at EVMS depends upon the prosperity of the region's two public universities that generate credible amounts of research. Their presence and cooperative activities are vital if the region is to achieve critical mass in specific scientific disciplines. Like EVMS, Old Dominion University and the College of William and Mary are substantially under-funded relative to their national peer institutions, according to several recent legislative studies. Therefore, it should not come as a surprise that neither is a major R&D player in an overall national sense, though both have developed selected areas of expertise that might be enhanced. More is the pity. **Numerous studies (most recently, by the Milken Institute, 1999) found that areas characterized by rapid economic growth have one thing in common – the presence of at least one nationally prominent research university. Hampton Roads may never have that single dominating university entity, but it can approximate those effects by investing in institutions that already have established R&D legitimacy.**

The truth with respect to regional research and development is inescapable and brutal. Over time, the region's legislative delegations did not place a high priority upon either higher education funding in general or R&D funding in particular. Most legislators have never understood or perceived the long-term regional benefits associated with R&D activities. Hence, EVMS, Old Dominion and William and Mary never were accorded the legislative priority that metropolitan institutions such as George Mason University and Virginia Commonwealth University received from their legislative delegations. All too often, where regional R&D support is concerned, some Hampton Roads legislators have attempted to reap where they have not sown. Many have been more interested in tax cuts (read "service cuts") and small pieces of local pork than in long-term investments in the region's future. Perhaps we should not blame these legislators, given the apparent tenor of the electorate. Nonetheless, in 2003, the impact of these misplaced priorities is abundantly clear, and the malaise of the region in the R&D arena cannot easily be cured. **Just as the Commonwealth's faulty approach to banking legislation and mergers proved within a decade to be very costly, so also its approach to the support of R&D over the past decade is now revealed to have had disastrous effects.**

EVMS's promising, though inadequately funded, R&D efforts are a prime example in this regard. Using as a base the 1997 Economic Impact Study of EVMS conducted by Old Dominion University, we estimate the current annual economic impact of the medical school to approximate \$630 million. **The medical school's involvement in R&D is directly and indirectly responsible for \$71 million of that economic impact and 1,051 jobs in the region. This is an impressive contribution and one that begs for expansion.** That goal – expanding research and development at EVMS – should be adopted now both by regional leadership entities and by the Hampton Roads legislative delegation.





consolidation of
public services

Consolidation Of Public Services In Hampton Roads: Would We Save Money And Enhance The Service We Receive?

I refuse to join any club that would have me as a member.

— Groucho Marx

Would we save money in Hampton Roads and would we receive better governmental services if the various cities and counties merged their provision of some of those services? This question has been asked many times, most recently in the February 2003 issue of Hampton Roads Monthly. The argument proffered in the article was not only that we might save money and receive better services to boot, but also merger might reduce internecine competition within Hampton Roads and as a result, enable us to adopt more of a regional identity. This, in turn, might enable Hampton Roads to attract major league sports franchises, large conventions and more corporate headquarters.

Few would argue against the proposition that our cities and counties often are at odds with each other on major policy proposals and that this adversely affects the quality of life in the region. The cities have scrapped over transportation, water, economic development and many other issues. This was in evidence in the Hampton Roads Monthly article. **When area leaders were asked their views on consolidation, not one of the county chairs or city mayors supported a regional government. They cited uncertainty over taxes and revenues and the differing tastes and needs of one city relative to another.**

Such views are hardly surprising, since the consolidation of cities is quite rare. Epple and Romer, in a 1989 Journal of Urban Economics article, concluded that 98 percent of all boundary changes in the 1970s were by cities and counties annexing otherwise unincorporated land that did not involve the merger of existing cities. Hence, though some might disagree, we take it as a given that a merger of the cities and counties in Hampton Roads into a single governmental unit is politically impossible. Therefore, in this chapter, we focus on the issue of whether the consolidation of specific services (police, fire, etc.) might make us better off.

Consolidation of services is an important issue in Virginia because, unlike other states, in our Commonwealth every location resides either within a city or a county, but not both. Hence, we have no overlapping regional elected political bodies that operate as another tier of government above our cities and counties. There are, of course, some agencies that provide services on a regional basis, for example, the Hampton Roads Sanitation District. In this chapter, we explore this fundamental question: Should we have more of this type of cooperative effort, or would it be a waste of time?

In recent years, cooperative regional entities have encountered funding problems. Many Virginia newspapers editorialized that it would be a mistake to reduce funding for the Urban Partnership because it is one of the few institutions that specifically address regional issues, but the General Assembly paid no heed and wiped out that funding earlier this year. The Virginian-Pilot (March 19, 2003) reported that the City of Virginia Beach had discussed cutting its contribution to the Hampton Roads Economic Development Authority (HREDA) because it was uncertain of the benefits it received relative to the costs incurred. The HREDA funding formula requires each city to contribute one dollar per citizen. The Pilot also editorialized (March 23, 2003) that Virginia Beach receives a large share of the benefits from regional employment growth, even if jobs are located in other cities. And, indeed, the 2001 "State of the Region" report demonstrated that Virginia Beach receives more benefit from the Port of Hampton Roads than any other locality, despite the fact that the port's facilities are situated in other cities.

I. ISSUES

Four issues are critical when determining the appropriate level of provision of public services by local governments. First, we must consider the possibility of economies of scale (lower costs per unit may result from a larger output) and economies of scope (it may be proportionately less expensive to offer five services rather than four because a governmental unit already is paying for the necessary infrastructure and personnel). If either economies of scale or economies of scope are present, then consolidation of services will result in lower tax revenue requirements than if these services were provided by each municipality separately.

Second, we must consider the tastes of citizens for diversity in their public services. If residents of Norfolk have a greater demand for cultural activities than their counterparts in Newport News, then Norfolk might subsidize cultural activities more than Newport News. Charles Tiebout, in a now-classic 1956 *Journal of Political Economy* article, coined the catchy phrase, "Vote with your feet," to reflect the reality that citizens may choose their place of residence based upon their taste (or distaste) for particular services.

Third, we must consider the impact of externalities ("spillover effects"). Sometimes, what one city does affects the well-being of residents in another city. Illustrations include the port, the Norfolk Tides, the Virginia Beach oceanfront and NASA in Hampton. What happens at these locations affects the other cities, whether or not the other cities are aware of this, or agree to it. The problem that develops in these situations is that the decisions made by one city may not take into account the effects of those decisions on the citizens of other communities.

Fourth, improvements in the quality of public services may result from specialization. Thus, it may be that Hampton Roads needs only one or two police officers to investigate cyber crimes, as there may be only a few such crimes per city. In theory, if the region's cities and counties joined together, they might be able to afford such specialized police personnel and the result would be improved service.

The question of consolidation of services, then, depends on the relative importance of the above issues. For example, if we consider a city such as Poquoson (population 11,566), plausibly there might be economies of scale associated with the provision of its police services if it were served by a larger, regional police force. On the other hand, if the regional police force did not seem to meet the needs of Poquoson residents because they prefer or require their own local investigative team, then an obvious tradeoff exists – scale economies vs. their diversity in demand. It is tradeoffs such as these that we must consider when weighing the costs and benefits of service consolidation.

In general, the greater the degree of homogeneity between cities and counties, the greater will be the willingness of citizens to accept consolidation of public services across municipal boundaries. The more unlike the communities are, the more interest there will be in diverse, tailored services and there will be less cooperation. How much homogeneity is there among cities and counties in Hampton Roads? Consider Table 1, which presents the population, geographic size, family income, racial composition and percentage of population below poverty for each of the area's cities and counties.

The data indicate significant diversity across Hampton Roads. City and county population varies from almost 425,000 (Virginia Beach) to several under 12,000 (Franklin, Poquoson, Surry, Williamsburg). The region has densely populated cities (Hampton, Newport News, Norfolk, Portsmouth) and rural counties (Southampton). In some localities, per capita family income is well above national averages (York and Poquoson), while in others per capita income lags behind (Franklin and Norfolk). The income differences are echoed in the poverty statistics. Racial diversity is prevalent in some areas, with whites being the minority in Portsmouth, while in other areas racial diversity is hardly present at all (Poquoson). Thus, **the cities and counties within Hampton Roads are hardly identical and this diversity is a factor that militates against the consolidation of services.**

**TABLE 1
DEMOGRAPHIC DATA**

City/County	Population	Sq. Miles	Population Density	Median Family Income	Percent White/Black	Percent Below Poverty
Chesapeake	199,184	340	586	\$56,302	67/31	7.3
Franklin	8,346	8	1,043	40,299	46/54	19.8
Hampton	146,437	52	2,816	46,110	54/43	11.3
Newport News	180,150	68	2,649	42,520	59/37	13.8
Norfolk	234,403	54	4,341	36,891	53/43	19.4
Poquoson	11,566	16	723	65,460	97/1	4.5
Portsmouth	100,565	33	3,047	39,577	47/52	16
Suffolk	63,677	400	159	47,342	50/49	13.2
Virginia Beach	425,257	248	1,715	53,242	77/16	6.5
Williamsburg	11,998	9	1,333	52,358	78/19	18.3
Gloucester	34,700	225	154	51,426	86/13	7.7
Isle of Wight	29,728	316	94	52,597	64/35	8.3
James City	48,102	153	314	66,171	78/20	6.4
Southampton	17,482	600	29	41,324	49/50	14.6
Surry	6,829	279	24	41,234	40/60	14.3
York	56,267	106	530	64,892	79/18	3.5

Source: Hampton Roads Planning District Commission, www.hrpd.org

III. A LOOK AT EMPIRICAL EVIDENCE

In this section we consider in turn each of the major spending categories of the cities and counties in Hampton Roads and then discuss their potential for consolidation. Of course, in order to talk about the merger of services, one has to define what is being served or produced. One of the most difficult issues surrounding the investigation of governmental services is how the output of services is measured. For example, should we measure police output by the number of crimes investigated, the number of crimes cleared or solved, or the number of crimes prevented? Is educational output best measured by success rates on a standardized examination, dropout rates, graduation rates or something else?

TABLE 2
SPENDING PER CAPITA FOR PUBLIC SERVICES IN HAMPTON ROADS

City/ County	Law Enforcement	Fire	Education	Solid Waste	Mental Health	Library
Chesapeake	\$123.26	\$110.17	\$1,258.06	\$63.77	\$46.4	\$25.64
Franklin	276.86	95.99	1,541.18	90.85	120.7	46.06
Hampton	138.65	88.12	1,120.99	83.03	110.55	18.06
Newport News	159.52	114.46	1,278.53	39.17	72.17	16.94
Norfolk	206.95	122.40	1,175.00	58.28	62.27	23.96
Poquoson	112.88	113.26	1,252.67	33.30	52.05	37.54
Portsmouth	174.48	148.40	1,212.36	80.85	87.84	16.59
Suffolk	112.85	117.96	1,114.59	25.62	63.90	11.46
Virginia Beach	144.15	67.15	1,172.51	54.12	56.47	24.42
Williamsburg	221.39	164.28	1164.20	34.65	106.11	60.55
Gloucester	108.02	26.23	1,192.01	1.78	81.74	11.17
Isle of Wight	25.63	46.87	1,157.94	39.09	83.47	19.72
James City	96.50	106.86	1,164.20	22.29	75.46	67.52
Southampton	61.29	24.22	1,046.32	55.65	66.92	14.21
Surry	94.52	31.75	1,978.07	63.88	214.80	26.92
York	64.11	105.03	1,215.71	63.77	54.58	27.15

Source: "Comparative Report of Local Government for the Fiscal Year Ending June 2001," Auditor of Public Accounts. Note that Williamsburg and James City County have consolidated school districts.

We will rely on per capita spending as the basis for most of the comparisons among municipalities. The advantage of per capita spending is that it takes into account the size of each community and highlights the willingness of each to commit resources to a particular public service.

Table 2 data show per capita spending on selected public services for all the cities and counties of Hampton Roads. The highest spender in each category is in bold. Cities and counties that are above the median in each category are in green and those below the median in each category are in red. Several patterns emerge from the data in Table 2. First, cities spend more per capita than counties for law enforcement and fire services. This is not surprising given the greater population density in cities. Second, the largest cities do not make the highest per capita expenditures in any category. This suggests some economies of scale may be present in some services. Third, education is the largest spending category for each city, usually followed by law enforcement. The analysis that follows discusses these and other public services in detail.

LAW ENFORCEMENT

Miles Finney, in a 1997 article in *Contemporary Economic Policy*, found that the provision of police services in Los Angeles was subject to increasing unit costs. This suggests that consolidation would increase costs and therefore be inefficient. Another study (Savitch and Associates, 1998) examined the consolidation of police services in Louisville and Jefferson County, Ky., Las Vegas and Jacksonville, Fla., and concluded that per capita costs increased with size. They found evidence that expenditures per officer declined only after a population exceeded 1 million. In Hampton Roads, this would mean that all of the police departments on the Southside would have to be merged before economies of scale would begin.

There are other problems associated with consolidation of police departments. In the early 1970s, Las Vegas and Clark County, Nev., consolidated their departments. Numerous problems resulted, including cultural clashes between officers, differences in long-established policing techniques and funding.

Consider Table 3, which provides specific data on the distribution of crimes across Hampton Roads and the number of police officers.

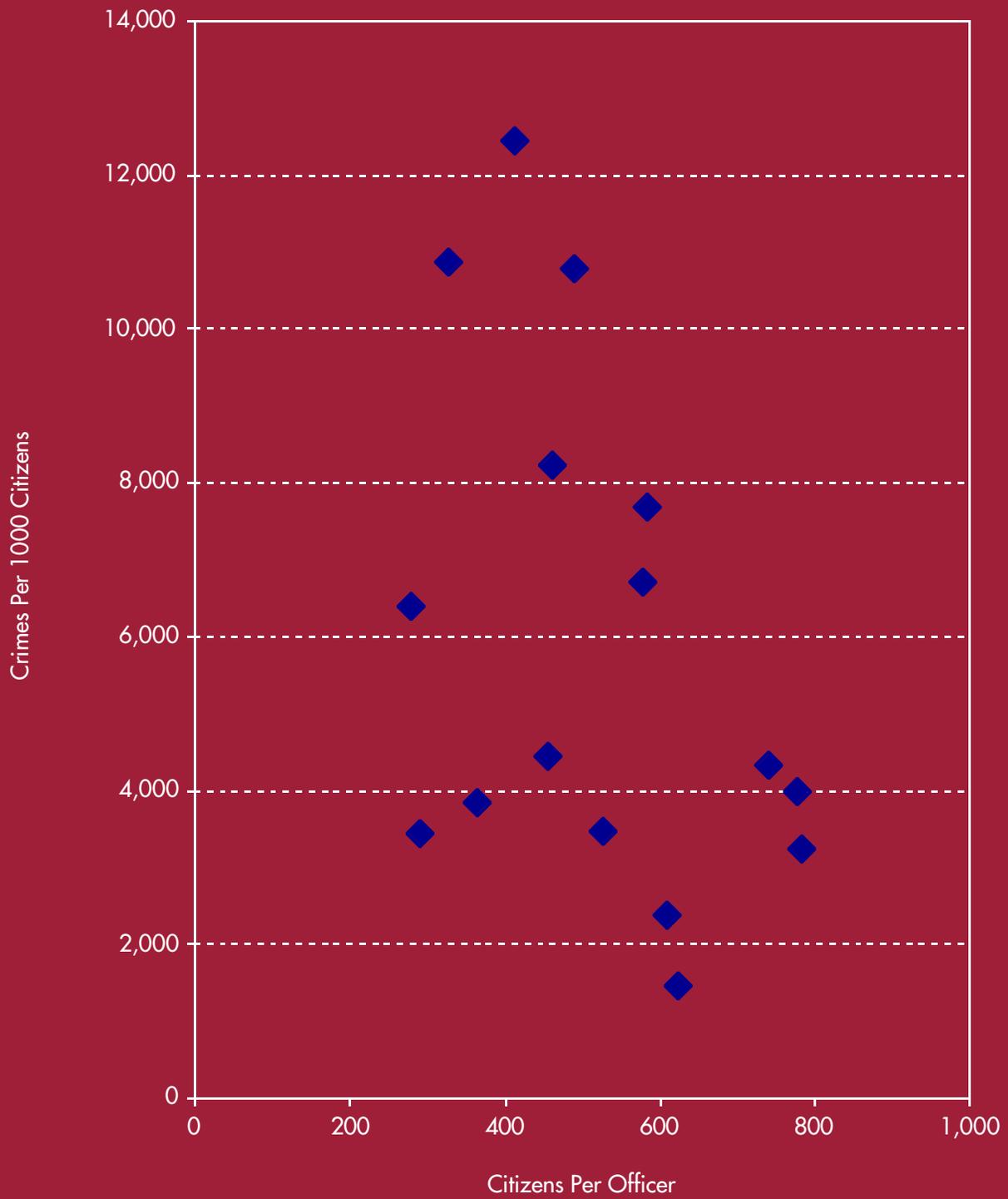
**TABLE 3
POLICE AND CRIME DATA**

City or County	Sworn Officers	Citizens Per Officer	Incidents Per 1000 Population	Law Enforcement Costs Per Incident
Chesapeake	320	622.3	1468.5	\$123.26
Franklin	30	278.2	6390	276.86
Hampton	253	578.7	6713.5	138.65
Newport News	369	488.3	10,794	159.52
Norfolk	716	327.3	10,881	206.95
Poquoson	19	608.6	2386.3	112.88
Portsmouth	244	412.2	12,462	174.48
Suffolk	138	461.5	8227.5	112.85
Virginia Beach	727	584.8	7676.1	144.15
Williamsburg	33	363.6	3850.6	221.39
Gloucester	76	456.6	4448	108.02
Isle of Wight	38	782.5	3255.9	25.63
James City	62	775.8	4006.1	96.50
Southampton	60	291.4	3456.9	61.29
Surry	13	525.2	3485.1	94.52
York	76	740.2	4327.1	64.11

Source: "Uniform Crime Reports of the United States," 2000, Federal Bureau of Investigation, U.S. Department of Justice, Washington, D.C.

Assume that the number of crimes is used as a measure of police services in Hampton Roads in a given year. In Graph 1, the relationship between the number of crimes and the number of citizens per officer is presented. We can see a weak negative relationship between the two, suggesting only mild economies of scale in the delivery of police services in the region. Hence, **a reasonable inference is that there do not seem to be strong enough economies of scale that would motivate the consolidation of police services in Hampton Roads.**

**GRAPH 1
CRIME DATA**



FIREFIGHTING

While research does not seem to suggest that there are economies of scale in the delivery of police services, there is evidence that economies of scale exist in the delivery of fire services. Brueckner, in the *Journal of Public Economics* (1981), used a sample of 100 municipalities in Midwest states and found that increases in population typically increased fire protection. One reason for this is that fire protection may easily be extended to additional people without seriously diminishing the protection already given to existing residents. Thompson, in the journal *American City and County* (1992), evaluated the consolidation of three metropolitan fire departments near Portland, Ore. She found significant consolidation benefits, including the use of regionalized hazardous material teams, more efficient use of reserve equipment and reduced response times for fires. Thus, there may be efficiency gains from consolidation of fire services.

What about Hampton Roads specifically? Table 4 provides information on the number of fires and the amount spent per fire for each of the region's municipalities.

Interestingly, the costs per fire are low for the smaller municipalities, but also relatively low in the region's largest city, Virginia Beach. Therefore, local data do not permit us to draw any conclusions with regard to economies of scale.

**TABLE 4
THE COST OF FIGHTING FIRES**

City/County	Number of Fires	Fire Expenditures Per Capita	Total Fire Costs	Cost Per Fire
Chesapeake	9,932	\$110.17	\$21,944,101	\$2,209.43
Franklin	932	95.99	801,132.5	859.58
Hampton	7,603	88.12	12,904,028	1,697.23
Newport News	6,007	114.46	20,619,969	3,432.66
Norfolk	14,657	122.40	28,690,927	1,957.49
Poquoson	520	113.26	1,309,965	2,519.16
Portsmouth	717*	148.40	14,923,846	20,814.29
Suffolk	3,551	117.96	7,511,339	2,115.27
Virginia Beach	21,462	67.15	28,556,008	1,330.59
Williamsburg	2,626	164.28	1,971,031	750.58
Gloucester	500	26.23	910,181	1,820.36
Isle of Wight	1,186*	46.87	1,393,351	1,174.83
James City	5,036	106.86	5,140,180	1,020.69
Southampton	NA	24.22	423,414	NA
Surry	NA	31.75	216,820.8	NA
York	4,691	105.03	59,09723	1,259.8

Source: "Monthly Incident Counts, National Fire Incident Reporting System, Year 2000

* Indicates data obtained from calling public officials

EDUCATION

For most communities, spending on public education is their greatest expense. It follows that the potential savings from consolidation could be substantial. Research by Chakraborty, et al., in Contemporary Economic Policy (2000) suggests that there are economies of scale in the provision of education, meaning there may well be efficiency gains from school district consolidation.

Table 5 reports the relationship between the number of students in Hampton Roads school systems and the percentage of students passing the Standards of Learning (SOL). Using a statistical technique known as multiple regression,¹ we find that a 10 percent increase in the number of students increases the percentage of students passing the mathematics examination by 1.6 percent and also generates a 2 percent increase in the success rate on the English examination. Control variables for each of the cities and counties included educational spending per capita, median income and percentage of the population with bachelor's degrees. **These results indicate that in Hampton Roads there are returns to scale in the provision of education.**

**TABLE 5
EDUCATION DATA**

City/County	Total Education Expenses	Number of Students	Exp. Per Student	English SOL Pass Rate	Math SOL Pass Rate	Education
Chesapeake	\$247,837,572	47,417	\$5226.77	69.36	46.64	\$ 1,258.06
Franklin	12,637,703	8,442	1,497.00	71.95	39.35	1,541.18
Hampton	152,678,398	31,298	4,878.22	74.73	48.81	1,120.99
Newport News	230,007,371	43,001	5,348.88	78.97	44.61	1,278.53
Norfolk	265,196,744	47,440	5,590.15	69.40	44.04	1,175.00
Poquoson	14,280,383	2,605	5,481.91	84.09	55.28	1,252.67
Portsmouth	117,841,750	21,208	5,556.48	59.26	14.52	1,212.36
Suffolk	70,776,575	15,469	4,575.38	63.36	15.39	1,114.59
Virginia Beach	493,628,650	94,268	5,236.44	78.90	54.87	1,172.51
Williamsburg	6,997,534	767	9,123.25	72.50	43.83	1,164.20
Gloucester	41,124,322	8,179	5,028.04	N/A	N/A	1,192.01
Isle of Wight	34,275,156	6,130	5,591.38	75.79	38.17	1,157.94
James City	53,669,661	9,943	5,397.73	72.50	43.83	1,164.20
Southampton	18,624,441	4,347	4,284.44	65.56	21.77	1,046.32
Surry	12,659,630	1,342	9,433.41	72.34	14.29	1,978.07
York	69,903,546	13,132	5,323.15	85.04	55.12	1,215.71

Source: "2000 Census of Population and Comparative Report of Local Government for Fiscal Year Ending June 2001," Auditor of Public Accounts. SOL pass rate data are for 1999. James City County and Williamsburg SOL data are the same because of consolidation of education services.

WATER

The availability of water has been one of the most divisive issues in Hampton Roads. This has been especially true for Newport News and Virginia Beach.

The laws of physics dictate that there are likely to exist economies of scale in the transfer and distribution of water ("throughput"). The water throughput of a pipe is strongly related to the circumference of the pipe.² A pipe with a circumference of 16 inches will have four times the throughput of a pipe with a circumference of only eight inches. Thus, water throughput quadruples when the circumference of a pipe (which measures cost) doubles. So, economies of scale exist. **What does this mean for Hampton Roads? It suggests that cooperation in the provision of water should be at the very top of the regional agenda because it makes strong economic sense.**

¹ To obtain a detailed copy of these results, contact James V. Koch at Old Dominion University, jkoch@odu.edu.

² If S represents the area of a circle and C the circumference, then $S = C^2/4\pi$.

GARBAGE

Kinnaman and Fullerton, in a 1999 National Bureau of Economic Research study, examined the collection and disposal of trash. Not a very thrilling subject, one might venture, but nonetheless it is a matter that has important economic and tax implications. They found that increases in population density can decrease the average cost of collecting garbage and that franchise agreements tend to be less expensive than municipal collection. Evidence in Hampton Roads is consistent with these findings. In Southside Hampton Roads, garbage is disposed of at sites operated by the Southeastern Public Service Authority (SPSA). In each Southside municipality, garbage is collected and taken to a disposal site run by SPSA. On the Peninsula, however, municipalities dispose of garbage independently, often via private waste management corporations. The City of Hampton sends some waste to NASA Langley Research Center for burning in order to create steam energy.

What difference do these two methods make in terms of cost? The data presented in Table 2 indicate that the average per capita spending on solid waste disposal is \$63.45 in Southside Hampton Roads and \$46.03 (even after excluding the very low figure for Gloucester) on the Peninsula. Of course, this type of comparison must be used with caution because of differing conditions north and south of the James River. Nonetheless, these results are consistent with national data, at least concerning franchising of waste collection.

In addition, the recycling of paper and glass may allow communities to reap economies of scope in the collection of refuse. However, the Kinnaman and Fullerton study found that the economic costs of curbside recycling often exceed the economic benefits. This is relevant because Virginia Beach has left the SPSA recycling system and Portsmouth has considered ending curbside recycling. **Recycling obviously is attractive from an environmental standpoint, but does not necessarily make economic sense.**

TRANSPORTATION

What about the potential consolidation of transportation services and public transit? Public transit has been consolidated in Southside Hampton Roads since the inception of Tidewater Regional Transit (TRT) in 1955. North of the James River, Peninsula Transit (Pentran) has maintained a consolidated service since 1971. In 1999 Pentran merged with TRT to form Hampton Roads Transit (HRT). A 1992 study by Talley and Colburn found that there were economies of scale in the provision of TRT services, though no economies of scope in the provision of add-on services such as dial-a-ride.

The merger and the creation of a major transfer station in the Wards Corner section of Norfolk have made it easier to travel from one side of Hampton Roads to the other. And, while it is too early to identify any significant cost savings from the TRT-Pentran merger, cost-saving possibilities include the sharing of equipment and emergency services. Further, individual commuters may save money and reduce their travel times.

A frequently proposed solution to the transportation problems in Hampton Roads is some version of light rail. A 1978 study by Schroeder and Sjoquist not surprisingly found that support for a rapid rail transit system increases when large numbers of employees work in a central business district. Of course, **in Hampton Roads, there is no central city, a fact that reduces the potential impact of light rail. However, highway congestion throughout the region is likely to make light rail a topic of continuing interest.**

LIBRARIES

The data in Table 2 also reveal significant differences in spending for library services across Hampton Roads. Because libraries serve many different functions, regional cooperation would seem to make sense in some areas. For example, it would seem logical to have one storehouse for academic journals and other specialized material so that multiple copies would not have to be purchased. On the other hand, there is likely a need for multiple copies of the latest best-selling novels at each library branch.

In Hampton Roads today, there is some local coordination for selected library services. One may obtain a library card for a city one does not reside in and there is substantial exchange of materials between libraries. However, currently there is not a single searchable database for the holdings of all public libraries in the region – as there is in Maryland with its *Maryland*

Share system. That's unfortunate, because there are "network" economies of scale associated with searches for library materials, just as there are network economies of scale associated with listing an item for sale on a huge network such as e-Bay.

Within the region, James City County spends the most per capita on libraries, and the City of Suffolk and Gloucester County spend the least. It might be expected that communities that spend more on education would also spend more on libraries, but the data do not support that speculation.

The Virtual Library of Virginia (VIVA) is an organization composed of 39 public and 30 nonprofit colleges and universities in Virginia. It coordinates the purchase of electronic journals and databases in order to achieve cost savings from the elimination of duplicate purchases and savings from large purchases. Its member institutions are able to improve their quality by accessing databases that they otherwise could not afford. VIVA estimates the combined savings from its efforts approximated \$5.5 million in 1997 and that the value added in terms of new material approximated \$11.4 million in the same year. Perry Library at Old Dominion University estimates that its participation in the VIVA system saved the university \$375,000 on a base expenditure for journals of about \$1.4 million in 2002. Here is why this is important to our considerations. **If a VIVA-type operation were used in Hampton Roads and similar savings resulted, then the cities and counties would save \$1.6 million.** Even if this estimate is inaccurate by 50 percent, there would still be substantial cost savings from consolidating elements of library services.

MENTAL HEALTH DELIVERY

Community service boards (CSBs) provide a variety of public mental health and substance abuse services. Some CSBs are consolidated while others are not. Table 6 describes the structure of CSBs in Hampton Roads.

**TABLE 6
SPENDING ON MENTAL HEALTH CARE**

Community Service Board	Consolidated Yes/No	Cities Covered	Per Capita Spending on Mental Health
Chesapeake	No	Chesapeake	\$46.40
Colonial	Yes	James City, York, Williamsburg, Poquoson	\$67.03
Hampton – Newport News	Yes	Hampton, Newport News	\$89.38
Norfolk	No	Norfolk	\$62.27
Portsmouth	No	Portsmouth	\$87.84
Virginia Beach	No	Virginia Beach	\$56.47
Western Tidewater	Yes	Isle of Wight, Southampton, Franklin, Suffolk	\$98.19

Sources: "Comparative Report of Local Government for Fiscal Year Ending June 2001," Community Service Board home pages

More than half of the municipalities in Hampton Roads have joined other cities or counties to deliver their mental health services. The final column of Table 6 reports the average per capita spending of each community service board on mental health services. The consolidated communities spend \$84.87 per capita on mental health while the non-consolidated communities spend \$63.25. On the face of it, this would appear to tell us that consolidation is not cost-effective, though in the case of the smaller communities, costs per capita might have been even higher were they not consolidated. Further, it's not clear whether all of the areas are supplying the same services. **It does appear, however, that the consolidation of mental health services is suspect in terms of its economic benefits.**

III. CONCLUSIONS

Our conclusions are summarized in Table 7. Regardless of the politics involved, it appears there are distinct cost and efficiency gains to be had from the regional consolidation of four services on a regional basis – education, water distribution, transportation and libraries. The evidence is mixed with respect to firefighting. The evidence discourages consolidation in three areas – law enforcement, garbage collection and mental health delivery.

Ultimately, actions speak louder than words where regionalism is concerned. Elected officials and city managers often say kind things about regionalism in public forums, but then undercut or “poor-mouth” efforts in that direction when push comes to shove in their own cities or counties. Nonetheless, **if our leaders are interested in actual financial savings, the evidence in Table 7 should provide them with a firm basis for exploring several consolidation efforts. Consolidation of selected services (such as libraries or water distribution) does not imply regional government or some type of super-regional city council. It does imply increased efficiency and financial savings.** Elected officials and city managers must use their “bully pulpits” to educate their citizens about these possibilities.

**TABLE 7
SUMMARY OF EVIDENCE CONCERNING CONSOLIDATION AND LOCAL EFFICIENCY GAINS**

Service	Potential Local Gains from Consolidation?	Issues
Law Enforcement	No	Efficiency vs. diversity, consolidation does not reduce costs
Fire	Mixed	Less duplication of resources
Education	Yes	Efficiency gains, improvement in SOL scores
Water Distribution	Yes	Natural monopoly, cooperation reduces duplication
Garbage Collection	No	Peninsula less expensive per person
Transportation	Yes	Evidence of economies of scope and scale
Libraries	Yes	Shared resources
Mental Health Delivery	No	Economies of scale due to specialization





the impact of
state mandates

The Impact Of State Mandates On Hampton Roads

State officials around the nation are shedding fiscal tears over the dire financial circumstances of their governmental units and are pointing fingers of blame at everything from economic recession and the collapse of the information technology industry to irresponsible, prescriptive federal programs and legislative excesses. Local government officials, in turn, often blame their fiscal woes on outmoded local government revenue structures, the burden of customs such as the Dillon Rule, and irresponsible and excessive mandated state programs and services. While the causes of the current fiscal situation can be debated, the fact remains that this latter phenomenon – intergovernmental mandates imposed upon one level of government by another – continues to be an important issue.

The debate over mandates is not new, but Virginia only began an attempt to keep track of mandates in 1981. In a recent speech to the annual convention of the Council of State Governments, Gov. Mark Warner chastised the federal government for introducing new, and extending existing, federal programs that have shifted more costs to states. He suggested that the federal government should dramatically reduce programs that: (1) provide federal funds only on a temporary basis; or (2) require matching state monies. Analogously, however, the president of the Virginia Association of Counties (VACo), Gerald Hyland, has asked the Virginia General Assembly to stop introducing new state programs that shift costs to local governments, or to provide full funding for its mandates. Specifically citing the Joint Legislative Audit and Review Committee (JLARC) report on the Standards of Quality (SOQ), Hyland suggested that the state could help localities deal with their fiscal crises if it simply addressed unfunded SOQ mandates.

It is no surprise, then, that “No more mandates” has been a rallying cry for local and state government for nearly two decades. It has become a political catchphrase for those in state and local government who seek relief from higher authority. VACo’s position is clear. Its legislative strategy emphasizes local governments’ inability to meet the requirements of unfunded state mandates.

Local governments criticize state mandates for, among other reasons, pre-empting local authority, being inflexible, neglecting particular or unique circumstances (a one-size-fits-all approach), overlapping regulations, and ignoring the very prominent and important issues of cost and funding. The state often rationalizes its mandates by saying they ensure social equity and the equal treatment of all its citizens. Other arguments for imposing mandates include regulating local actions that may have spillover effects on other cities and regions, and ensuring the proper functioning of local governments.

The mandate issue typically involves the proverbial passing of the fiscal buck: from Washington, D.C., to the states, from the states to the localities and from the localities to their constituents. But, it is with the citizens that the fiscal buck stops. Local governments have no other level of government to which they can pass on the cost of the mandate. **Thus, the cost of mandates is passed on to constituents either in the form of reduced services or in the form of increased taxes to pay for mandated services.** Therein lies one of the most contentious aspects of mandates. Local governments end up bearing the cost of carrying out the policies or programs originated by higher governing authorities.

The irony is that while the Commonwealth often is indignant about the devolution of federal program responsibility and the accompanying lack of fiscal assistance, from the perspective of the local government, there appears to be very little reciprocal compassion from the Commonwealth when it, in turn, mandates programs and services.

This chapter presents an overview of state mandates in Virginia and highlights some specific policy and cost issues for Hampton Roads. First, a working definition of mandates is provided, followed by a review of current state mandates. Second, we explore the costs of mandates for local communities. Third, we offer suggestions concerning how we might obtain a better understanding of cost issues.

Defining Mandates

A mandate can be considered any action by the federal or state government that displaces local government priorities. Most of us are familiar with federal mandates, such as the Individuals with Disabilities Education Act and the Clean Air and Clean Water acts. Many are familiar with state mandates on cities and regions, such as the Chesapeake Bay Preservation Act and the Comprehensive Services Act. While these measures stipulate programmatic and service provisions touted as promoting equity and ensuring environmental safety, they carry a financial burden that taxpayers ultimately must bear. All mandates, whether federal or state, have some costs associated with their implementation.

Within the Commonwealth, mandates were officially defined by the Office of the Governor in Executive Memorandum 1-98 as “a constitutional, statutory, or administrative measure or action that places a requirement on local governments.” Three categories of mandates are noted. *Compulsory Orders*, which require mandatory compliance by localities, are evident, for example, in the Chesapeake Bay Preservation Act, or in the establishment and licensing of community services boards. Other mandates are classified as *Conditions of Financial Aid* because they require local compliance as a condition of receiving either federal or state aid. Thus, in order to receive urban street assistance payments from the Commonwealth, cities and towns must meet Department of Transportation standards for road maintenance.

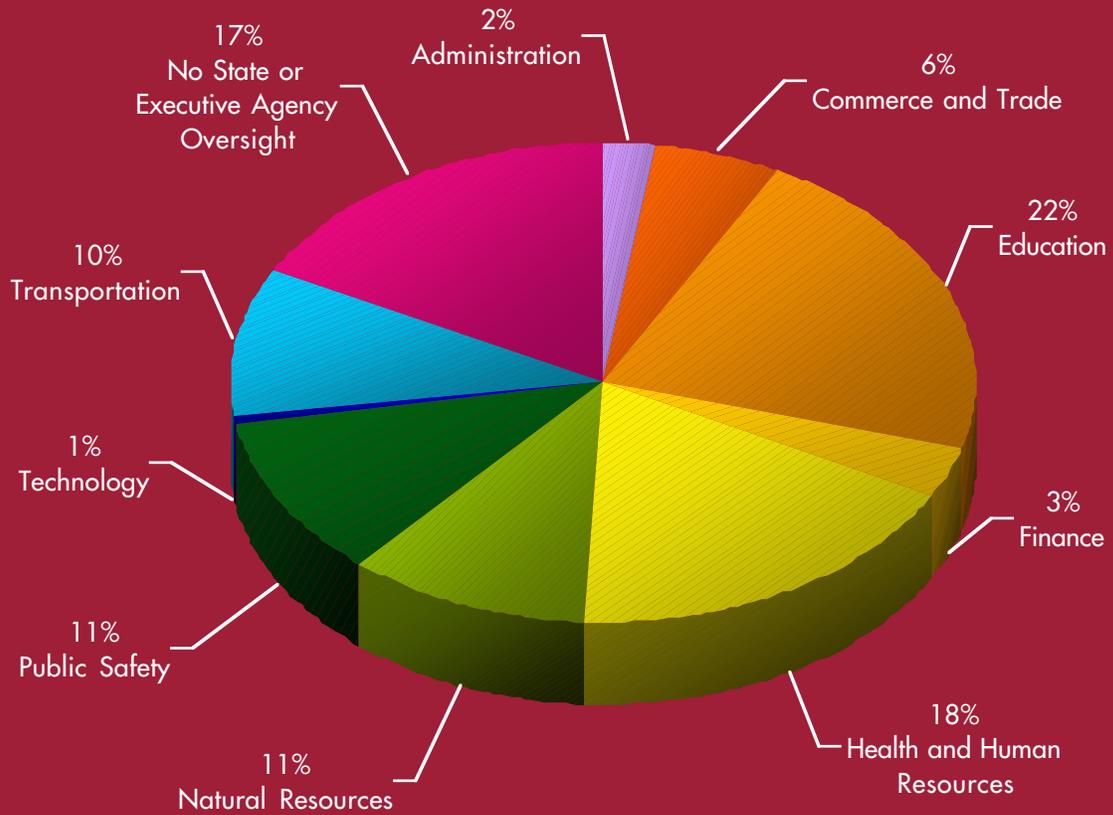
Still other mandates are classified as the *Regulation of Optional Activity*. They require compliance if cities and counties choose to perform or provide certain services. For example, if a community elects to place trash receptacles in a public place, then the community is responsible for removing the litter from those receptacles. Or, if a community has a designated enterprise zone, then it must comply with zone program requirements as well as file periodic reports. Another especially important example of this type of mandate is public water and sewer provision. Any community providing these services must comply with Department of Health regulations. It is important to note that while regulation of optional activities mandates may be classified as optional, many densely populated communities may have no choice but to offer these services.

The Commonwealth’s mandate definition, while specific, is curiously not all-encompassing. For example, it does not include judicial mandates, as where a judge literally will take over a school district. Nor does the definition include state actions that result in reduced funding for programs carried out at the local level without any concurrent reduction in service or program provision.

What Mandates Do We Have?

Mandates are part of the complex intergovernmental arena of state-local relations in which our local governments operate. Virginia’s Commission on Local Government (CLG) is charged with identifying and cataloging mandates on an annual basis. Through September 2002, the CLG had cataloged 535 mandates. Of these, 442 (83 percent) originate within the Commonwealth. The other 93 mandates originate from the federal government or other nonexecutive branch agencies. Education accounts for the largest share of mandates while Health and Human Resources has the next largest share. Natural Resources, Public Safety and Transportation secretariats each account for a little more than 10 percent of the identified total. Figure 1 shows the proportion of mandates imposed on local governments by Commonwealth secretariats.

FIGURE 1
PROPORTION OF STATE AND FEDERAL MANDATES ON LOCAL GOVERNMENT BY SECRETARIAT



In 1991, JLARC identified 338 existing mandates on local government, but that number had grown to 535 by 2003. The difference in the number of mandates (197) is large, but reflects new, expanded and eliminated mandates. Since 1995, the CLG has cataloged 56 new mandates, 76 newly identified mandates and 30 expanded mandates. During the same period, 35 mandates were eliminated and 75 were changed.

The mandate listings sometimes disguise the dynamics underlying the numbers. For example, in 2000, the Governor's Employment and Training Department was eliminated by action of the legislature. Elements of two mandates administered by this department were captured in a new mandate under the supervision of the Virginia Employment Commission. In the 1996 catalog, two mandates originating with the Department of Social Services were reclassified as federal mandates. Within the same department, eight mandates were consolidated into five other mandates because they were deemed to be integral parts of larger programs. Examples such as these represent "a shuffling of the mandate deck." This makes comparisons over time difficult. Further, a number of mandates originate from the federal government and thus are outside the purview of state government actions, making their identification challenging. Nonetheless, there is little doubt that the number of mandates on local communities has grown substantially over the years.

Aside from cataloging mandates every year, the CLG is tasked with coordinating state agency review of existing mandates at least once every four years. To date, 777 assessments of known mandates have been made to determine which might be altered or eliminated without disruption of local services or cause any threat to the health and welfare of Commonwealth citizens. Further, the Code of Virginia stipulates that when any bill introduced in the General Assembly would require local governments to provide additional services or reduce local government revenue, that bill must be subjected to a fiscal impact study by the CLG. The fiscal impact statement is then provided to all legislators so that they may be aware of the likely fiscal consequences. This process of "fiscal noting" in Virginia appears to be helpful, at least if one believes fewer mandates are better. The average number of new state mandates from 1984 to 1991 was 10 per year, but that number fell to six between 1995 and 2003.

While this evidence suggests that the cataloging and review process of mandates has served some purpose, a larger issue looms. Apart from legislation, a state agency may recommend that a mandate be altered or eliminated. Between 1994 and 2001, administering agencies suggested changes to 75 mandates. Of this total, CLG recommended 19 for elimination and 56 for alteration. However, of the 75 mandates reviewed by CLG staff, no action ultimately was taken on 60 of them. In other words, the appropriate authority acted upon only 20 percent of the recommendations.

Mandates: Funded, Unfunded Or Underfunded?

Mandates have multiple effects, some social and others financial. Some individuals focus on the social impact of a particular mandate, for example, a mandate that requires high schools to pursue gender equity in their interscholastic athletic programs. The long-term impact of such a mandate on students and society can be substantial. Yet, predictably, most local governments are interested primarily in the costs of mandates. Thus, when local officials meet with state officials to talk about mandates, the discussion tends to focus on money.

Noticeably absent from the state government's definition of mandates are terms such as "partially funded" or "unfunded." There is unanimity that many state mandates on localities are only partially funded, or not funded at all. The problem is no one really knows to what degree this is true. Over the years, there has been some attempt by statewide organizations such as VACo and the Virginia Municipal League to obtain local cost estimates of state mandates. However, these data are sparse and the information often unreliable, and therefore cannot be used for estimation purposes.

Why are mandate cost data so difficult to find? First, mandates impact each community differently. Hampton Roads communities are very different in population, wealth and urban density. Therefore, the cost of a mandate often varies from one community to the next, and each city has to do its own study. Second, the impact of any one mandate may be low, even though the cumulative cost of all mandates over many years is high. It may not be worthwhile for a city to do a cost study of a single mandate. Third, many mandates are accommodated by using existing local resources more intensively. For example, in 1999, the state mandated all school superintendents to develop an Internet use policy. In most cases, this was accomplished when the superintendent directed a staff member to do so. Therefore, the cost of the mandate was the value of the

staff time, or perhaps the price of what was not accomplished by the staff member. Most local government units are not accustomed to thinking in these terms and don't keep track of staff hours in the same fashion as, say, a legal firm keeps track of the time of its attorneys. Fourth, most mandates impact the administration of local governments. These mandates dictate the "what," but not the "how," of local government programs and services. Hence, cost estimation often reflects subjective interpretations of how much staff time is involved and how efficient the mandate is. In other words, such cost estimations are not precise to the fourth decimal. Fifth, many of the mandate costs quickly become ingrained in local operating budgets and soon cannot be easily identified. After the initial increase in cost of the mandate is absorbed, it becomes part of the ongoing cost of doing business.

Given these challenges to mandate cost estimation, it is not surprising that existing research presents a wide range of cost estimates for implementing federal and state mandates. According to the 2002 Municipal Yearbook, local governments spend anywhere from 20 to 80 percent of their budgets on mandates. However, an informal survey of local government budget offices suggests that very few communities have hard data on the specific costs of mandates.

Given the lack of detailed information at the community level, cost estimating for state mandates is an inexact science. However, if we apply the lower-bound cost estimate of 20 percent to the region's local government operating budgets, this suggests the cost of satisfying these mandates is \$705 million annually. If, however, we use the upper-bound 80 percent estimate, the annual cost to the region of state mandates is \$2.8 billion. On a per capita basis, state mandates cost each and every citizen of Hampton Roads between \$454 and \$1,854 yearly. Whether one prefers the low-end or the high-end estimate, these are not trivial amounts of money. It's no wonder local governments in Hampton Roads are concerned about the costs of mandates.

Final Comments

While "Stop non-funded mandates" is not as catchy a phrase as "No more car tax," it may have even more relevance to local governments. Generally, local government officials recognize the need for most mandates and are willing to assume their responsibilities with compliance. For example, nearly everyone would agree that Virginia should educate its children to a certain level or standard, and this is made explicit in Virginia's constitution.

That said, the relevant issue is: Who is going to pay for mandates? State and local representatives are loath to increase taxes, and many legislators and more than a few local officials campaigned for their offices on a "no new taxes" pledge, or even on a platform of tax reductions. Yet, at the same time, they want to be able to tell their constituents that they have dealt with a problem that has come to the fore. Mandates – non-funded – are an excellent political way to handle this. Elected officials, particularly those in the General Assembly, can tell their constituents that they took care of a problem, when actually they shifted the onus to local officials. The result is a lethal mixture of mandates that appears to address problems, but really doesn't because no funding or inadequate funding is attached to the mandates. This milieu is perfectly suited to finger-pointing and we observe copious amounts of this occurring in the media and in political campaigns.

Of course, some portion of this unfortunate chain of events occurs because legislators honestly do not know the actual costs of the mandates they impose. A pressing problem arises, citizens demand action and legislators feel forced to take timely action even though appropriate cost and impact data may not be available. Needless to say, both the Commonwealth and localities need to sponsor studies to determine, to the extent possible, the actual costs of state mandates. Ideally, these studies would take place before any legislation is written in stone. As a result, localities would be able to provide hard evidence of the burdens they face and legislators would be able to make more rational decisions. These studies should focus especially upon mandates already imposed, as they clearly produce the greatest ongoing fiscal burden. This recommendation may sound like a full-employment proposal for economists and statisticians, but it is essential if the Commonwealth and the Hampton Roads region are to make intelligent decisions. The result will be better (and more realistic) government.





are new housing
and commercial
developments
subsidized?

Are New Housing And Commercial Developments Subsidized In Hampton Roads?

*To grow faster than one is able to manage is
flirting with disaster.*

—An Wang, founder of Wang Laboratories

Most people believe economic growth is good because it produces jobs, tax revenues to support public services, increased amenities and, if Pearl Buck was correct, because it contains a mysterious “germ of happiness.” Population growth is both a cause and a consequence of economic growth. People follow jobs and, to some extent, jobs follow people. Most often, people follow jobs and that is why the population of Hampton Roads did not grow as rapidly as that of the Commonwealth of Virginia during most of the 1990s.

Between 1991 and 2002, the population of Hampton Roads grew by 139,792, or 9.78 percent. As Table 1 illustrates, among the region’s larger cities, only Chesapeake, whose population increased 34.96 percent, and Suffolk, whose population increased 32.72 percent, grew more rapidly than the state average of 14.4 percent. The fastest-growing areas in our region were (in descending order) James City County/Williamsburg, Chesapeake, Suffolk and York County/Poquoson. In these areas, the population grew at least 31 percent between 1991 and 2002. During the first part of this period (1991-96), Chesapeake and York County/Poquoson grew dramatically by 21 percent and 23 percent, respectively. By contrast, growth in Suffolk and James City County/Williamsburg has been a more recent phenomenon, with their populations increasing by 25 percent and 22 percent, respectively, between 1996 and 2002.

The question we address in this chapter is, on the face of it, a simple one. When communities grow and new subdivisions are constructed, do cities and counties subsidize these developments with tax revenues derived from other segments of the community? Or, alternatively, does economic growth pay for itself by generating tax revenues at least equal to the tax revenues expended to support the development? Roads must be constructed, schools built, public safety provided, parklands and recreation facilities created, and a variety of utility, health and sanitation services provided. Do developers and new residents pay their own way? Or, do others subsidize them? That is our focus in this chapter.

TABLE 1
CHANGES IN POPULATION IN HAMPTON ROADS, BY CITY AND COUNTY, 1991-2002

Area	1991	2002	Percent Change
Chesapeake	151,976	205,100	34.96%
Hampton	133,793	145,200	8.53%
Newport News	170,045	179,300	5.44%
Norfolk	261,229	234,100	-10.39%
York/Poquoson	53,427	70,400	31.77%
Portsmouth	103,907	98,400	-5.30%
Suffolk	52,141	69,200	32.72%
Virginia Beach	393,069	428,400	8.99%
James City/Williamsburg	46,389	64,400	38.83%
Gloucester	30,131	35,000	16.16%
Isle of Wight	25,053	30,500	21.74%
Mathews	8,348	9,300	11.40%
Hampton Roads	1,429,508	1,569,300	9.78%
Virginia	6,189,197	7,078,515	14.4%

A considerable literature exists in urban planning that uses value-laden terms such as “urban sprawl” and “smart growth.” Because to some extent growth is inevitable, the manner in which such growth is accommodated becomes very crucial. Will growth result in urban sprawl (characterized as “bad”), or will it be smart growth (synonymous with “good”)? Of course, what to one person is obnoxious, uncontrolled sprawl may to another person be smart, efficient growth. In this chapter, we will concentrate upon the tax revenue and expenditure implications of growth, although we recognize growth generates other effects as well.

In a keynote speech at Brookings Symposium on the “Relationship Between Affordable Housing and Growth Management” (May 29, 2003), real estate authority Anthony Downs stated, “Growth management means specific regulatory policies aimed at influencing how growth occurs, mainly within a locality. These affect density, availability of land, mixtures of uses and timing of development. Growth management seeks to accommodate growth rationally, not to prevent or limit it. That is growth control.” He continued, “Smart growth refers to an overall set of broad goals designed to counteract sprawl. These usually include (1) limiting outward expansion; (2) encouraging higher-density development; (3) encouraging mixed-use zoning; (4) reducing travel by private vehicles; (5) revitalizing older areas; and (6) preserving open space. Promoting more affordable housing can be a goal, but usually is not.”

According to Jan Brueckner (International Regional Science Review, 2000), urban sprawl, as opposed to smart growth, is the result of three market failures. The first is a failure to take into account the social values of open space when land is converted to urban use. The second is a failure on the part of individual commuters to recognize the social cost of congestion created by their use of road networks. The third is a failure on the part of developers to take into account public infrastructure needs (roads, schools, etc.) and similar costs generated by their projects. To remedy these market failures, Brueckner proposed: (1) a development tax on each acre of land converted from an agricultural to an urban use; (2) congestion tolls on automobiles; and (3) a system of impact fees to cover infrastructure costs. Brueckner noted that growth inevitably generates costs, which are not necessarily reflected in housing prices and tax rates. In other words, some costs of this growth are passed on to others. For the most part, this occurs because builders and local authorities fail to take into account the governmental operating infrastructure and public service costs generated by new residential developments, but also because developments also may impose other kinds of costs on citizens, for example, traffic congestion and crime.

Increasing awareness of the costs of sprawl has triggered an intense debate about growth around the country. Legislatures in several states have begun to take initiatives to create what they believe to be smart-growth frameworks. Bruce Katz, in an analysis done for the London School of Economics in 2002, points out that these initiatives generally appear in five distinct and yet complementary forms. Some jurisdictions have:

- Created new forms of metropolitan governance to handle transportation, environment, waste management, cultural amenities and economic development. [Here in Hampton Roads, we have the Hampton Roads Sanitation District and Hampton Roads Transit.]
- Instituted land-use reforms to manage growth at the metropolitan fringe. [The “Green Line” and the “Transition Area” in Virginia Beach are examples.]
- Used their resources to preserve tracts of land threatened by sprawl. [Additional parks in cities and counties throughout the region provide illustrations, though they have not always been connected to developments.]
- Directed infrastructure investments toward specific areas. [Provision of land for the Virginia Beach Higher Education Center is an example.]
- Considered tax reforms to reduce fiscal disparities between jurisdictions. [By and large, this has not occurred within the region, though some action has been taken at the state level. Once again, however, that action has not necessarily been connected to new developments.]

Many high-growth states have established impact fees charging developers for the cost of infrastructure associated with new developments. These fees are applied regardless of whether the property owner has the necessary zoning in place to develop the property. The Code of Virginia prohibits the use of impact fees in the Commonwealth. As we shall see, this is a legal prohibition that has generated significant problems.

However, the Commonwealth does permit localities an opportunity to establish a conditional zoning ordinance. Such an ordinance allows localities to obtain a voluntary proffer (cash or in-kind contributions that can be applied to offset the cost of infrastructure) from developers seeking to upgrade zoning of land. A typical example involves a developer seeking to rezone agricultural land, which has a low impact on city services, to residential land, which will have a much higher impact on services. Note that if the developer owns land that already has appropriate zoning, then no proffer can be required and there is little a Virginia city or county can do to prevent that developer from developing that land and thereby imposing costs on other individuals. **The key in Virginia, then, is zoning decisions. This is where the rubber meets the road insofar as development costs are concerned.**

Many studies of the fiscal impact of development (revenues vs. expenditures) suggest that residential growth has a negative fiscal impact on a locality. Single-family homes generate the largest deficit, primarily due to the cost of educating the children who inhabit these homes. Apartments and townhouses, on the other hand, often are fiscally neutral or even slightly positive. Most nonresidential uses (businesses) usually generate more tax revenues than they require. Yet, as we will see, much depends upon individual circumstances.

If a community can demonstrate a sufficient backlog of infrastructure needs and documents its difficulty in providing the anticipated services needed for a development, then it can deny a rezoning request. Because this is often the case in some communities, developers often will include a proffer in their request for a rezoning. However, experience suggests city and county authorities often exhibit a tendency to approve rezoning requests without examining the precise fiscal consequences of the growth the rezoning will produce.

Some Clarifying Examples

The fundamental question remains: Are communities in Hampton Roads subsidizing residential and commercial development, or do those developments represent cash cows for the cities and counties? In order to clarify the circumstances, we will present contrasting examples involving Chesapeake, James City County and Virginia Beach.

CHESAPEAKE

In February 1994, the Chesapeake City Council adopted policies pertaining to acceptable level of service (LOS) standards that focused on three critical growth infrastructure areas: education, road capacity and sewer capacity. If a developer applied for rezoning, perhaps to change a parcel of land from agricultural to residential use, and the city's analysis determined that the public infrastructure was insufficient to meet the needs generated by the proposed development, then the policy suggests the rezoning application should be denied. Of course, an alternative in such a case is for the developer to make a proffer (cash or in-kind contributions to offset infrastructure costs) along with his or her request for a rezoning. Indeed, in the minds of many, stimulating proffers was the express purpose of the policy.

A proposed rezoning triggers the *education* version of the LOS standards if the schools that will service the proposed development are already operating at 120 percent or more of their rated capacity. The standards relating to roads require that the traffic on the nearest major roads and/or existing signalized intersections that will carry the majority of traffic generated by the proposed development receive a grade of "D" or better, as determined by the Department of Public Works. The sewer standard is simple – all the property proposed for rezoning must be located wholly within the current boundaries of the Hampton Roads Sanitation District service area.

In making projections about education, traffic and sewer requirements, Chesapeake's city planners are required to take into account only the proposed project, existing homes and other projects where the city has received final construction plans for approval. Planners are not permitted to take into account any approved developments for which final construction plans have not yet been submitted to the city. The apparent rationale for this provision is that it avoids a situation where one developer could be held hostage by another, slow-moving developer whose project had been approved and has appropriate zoning, but has not been initiated. On the other hand, this rule has the effect of putting analytical blinders on Chesapeake's city planners, who often are quite confident other developments are on the near-term horizon, but nonetheless cannot take them into consideration.

Consider a recent example. In June 2002, the Chesapeake City Council approved rezoning of a 105-acre parcel for the construction of 180 single-family homes along Mount Pleasant Road. The land within this project, usually referred to as the Miller Property, received the lowest passing grade, "D," on one intersection, and grades of "C" on two others. The developer also proffered to dedicate one-half of a 120-foot road right-of-way along Mount Pleasant Road.

According to the report on the effect of the project on education, the schools serving the proposed development were expected to be operating at less than 120 percent of their rated capacity. However, the report pointed out that consideration should be given to property already zoned for residential development for which construction plans had not yet been submitted. Further, the report estimated that the development of this project would entail approximately \$1.8 million in initial capital costs and \$300,000 yearly in continuing operational costs. However, since the developer did not make any proffers to offset the capital costs, these will have to be funded (subsidized) from other tax revenues.

The Chesapeake Planning Commission eventually recommended approval of the Miller Property development after the developer made two proffers. The developer agreed to limit the number of homes to 180 and to phase the development such that, at any time, the number of active building permits would be 75 or fewer. Meanwhile, other development projects, such as the 258-home Edinburgh project, previously approved in October 2001, were not counted in making projections and meeting LOS standards. The rationale was that since actual building plans had not been submitted for these developments, according to the established rules they were irrelevant to this request.

Current enrollment at four of the six high schools in Chesapeake exceeds the standard of 120 percent of rated capacity. This excess demand is being met by means of a large number of portable classrooms. Five of the six high schools have a total of 95 portable classrooms; another 50 will be needed at these schools by 2007 if current projections hold. In 2002-03, high schools in the city had 1,456 students in excess of rated capacity; this number is expected to rise to 2,144 for 2003-04. The number of students in Chesapeake's high schools is expected to increase by another 2,000 over the next five years. The Chesapeake School Board has estimated that the school system will require another \$162 million during this period to meet projected increases in enrollment.

It is clear that Chesapeake has been struggling to meet its educational needs. Between 1991 and 2002, Chesapeake's "real" (inflation-adjusted) per capita expenditures on education increased from \$1,031 to \$1,152, or 11.8 percent. Even that increase, however, was not sufficient to take care of the city's K-12 enrollment bulge, and Chesapeake's rate of increase was substantially lower than those of Hampton, Newport News and Virginia Beach. A major culprit here has been the inability (or the reluctance) of the city to impose the true total costs of development and expansion upon those who develop and occupy these new projects, most of which require additional operational and infrastructure expenditures.

The city's school-crowding problems and the consequent impact on the LOS already have had a significant effect on the rezoning application approval process. On Nov. 26, 2002, Robert McCabe of The Virginian-Pilot reported that three zoning applications were withdrawn, three were denied in October, and another denied in November.

Recognizing the mismatch in residential developments and the infrastructure needed to support this growth, the City of Chesapeake has for several years sought "slow growth" legislation from the Virginia General Assembly. One proposal is labeled an Adequate Public Facility (APF) ordinance. With an APF, fast-growing communities would be in a better position to control residential growth and ensure the availability of public infrastructure, even if the land is already zoned residential. As it happens, Chesapeake already has approximately 4,000 acres that were rezoned for residential use in the 1960s; however, it cannot currently take such approvals into account. Thus, APF provisions could allow a better management of growth. An alternative form of the legislation would permit the cities to charge impact fees (Robert McCabe, Virginian-Pilot, Feb. 28, 2003). This would ensure that the developers pay the costs of public infrastructure needed. However, impact fees are not legal in the Commonwealth. In any case, neither the APF nor the impact-fee proposals appears to have sufficient legislative support to become law, and the (in)famous Dillon Rule prevents cities from acting on their own in these areas.

JAMES CITY COUNTY

Two major developments have been approved in James City County since 2000. These are the Colonial Heritage Williamsburg Planned Active Adult Community approved in 2000 and the New Town Development approved in 2001. Both projects are currently being developed.

The Colonial Heritage development is a 740-acre, age-restricted community (at least one member of every household must be 55 or older). Two thousand housing units, a golf course and a clubhouse for residents are part of the plan. The proposed residential mix is 1,200 single-family detached homes valued at about \$300,000 each, 600 single-family attached homes valued at \$220,000 each and 200 multifamily units valued at \$175,000 each. The developers also proposed 350,000 square feet of commercial space consisting of retail and office space and assisted-living facilities. This project is to be developed over a period of 20 years, with total construction investment estimated at \$607 million.

The fiscal impact study for this development concluded that the project would have a substantial positive fiscal impact on James City County. During the construction phase, the project would provide the county with about \$117 million in additional net revenues. Further, the development would provide the county with an estimated \$13 million in additional revenues per year after the project is completed. Because it is an adult community, the educational costs associated with it are minimal. At the same time, the residents of such developments tend to have higher than average incomes and often spend more on goods and services in the community. These actions generate more tax revenue for James City County; per capita, inflation-adjusted local government revenue in the county increased by 20.2 percent between 1991 and 2002. This is a community that has had considerable additional "real," inflation-adjusted local government revenue to spend over the past decade because of the nature of its residential and commercial developments.

The New Town Development entails construction of 263 multifamily apartments, 262 multifamily condominium units, 602,500 square feet of commercial space and 122,500 square feet of Class A office space on approximately 79 acres. The development will be completed over the next six years. The developer agreed to a proffer of \$750 per dwelling unit to help offset the cost of new schools in the county. The project will yield positive cash flow to James City County during the construction phase, but the county will realize a net loss per year after the project is completed. However, the net value of the cash flow for the first 20 years is estimated to be \$2.3 million. That is, the county estimates that the initial positive cash flow will outweigh the subsequent losses associated with the project.

VIRGINIA BEACH

The "Transition Area" of Virginia Beach represents a 9,600-acre buffer between the city's densely populated north and its more rural south. This area lies below the "Green Line," a boundary city leaders drew in 1979 to slow or stop the southward growth of the city. In 1997, when the city revised its comprehensive plan, it called for the Transition Area "to be seen as an open space and recreation mecca with residential development present only to the extent it would support the primary purpose of advancing open space and recreational uses." Further, the plan called for development to take place only if it is at least fiscally neutral.

The Transition Area Technical Advisory Committee (TATAC) was formed by City Council in August 2002. One of the responsibilities of the committee was to suggest a plan for developing an overall funding scenario for future development in the area. On Feb. 25, 2003, the council adopted the committee's recommendations and currently uses them as interim guidelines. The committee's recommendation on infrastructure and funding is:

"The staff should develop a multi-year infrastructure improvement plan, emphasizing those elements highlighted by the committee, including funding for their construction and ongoing maintenance. The funding should not place tax burdens on taxpayers outside the Transition Area for improvements whose benefit is unique to the Transition Area. Instead, it should derive its funding primarily from the substantial differential between the cost of new houses constructed in this area and the average cost of a new home built in the community. [It should] Earmark an appropriate amount of the increased revenue for construction and maintenance of public facilities in the Transition Area. Should individual developments not generate sufficient funds to cover their impact on the Transition Area infrastructure, other strategies such as proffers may be employed to make up the difference."

A detailed fiscal analysis conducted by the city revealed that single-family homes valued at approximately \$203,000 currently provide a fiscal break-even point for governmental operating costs, meaning that the revenues from this home ownership would cover operating (not infrastructure) costs of city services. During 2002, the average value of a new single-family home in Virginia Beach was about \$230,000, an amount that exceeds the operating break-even value. Therefore, at least in 2002, the typical new home in Virginia Beach was generating more in taxes than the operating costs of the city services the residents of the home were receiving. Of course, infrastructure costs (schools, roads, sewers, etc.) are not included here, nor are non-governmental costs associated with congestion, etc.

Interestingly, the average value of new single-family homes constructed in the Transition Area has been approximately \$400,000. Thus, these homes generate tax revenues in excess of anticipated operating costs. The relevant question is this: Will this \$170,000 increment in housing values be sufficient to fund the necessary infrastructure? On the basis of Virginia Beach's current real estate tax rate, each home in the Transition Area would bring in about \$2,000 more per year in real estate taxes than the typical home in the city. The city suggests that approximately 53 percent of this amount should be used to provide funds to the school system and the remaining 47 percent should be used to address the infrastructure costs. The

fiscal analysis conducted by Virginia Beach concludes that if the average value of a home in the Transition Area were to equal or exceed \$381,750, the Transition Area would pay for both operating and infrastructure costs, even given any pessimistic assumptions about the future.

Current plans forecast the development of 3,000 new homes in the Transition Area over the next 20 years. The City Council, within a month of approving the interim guidelines, voted to rezone two agricultural parcels to residential use. These two developments call for building 129 homes. The homes are expected to pay sufficient taxes to cover all associated costs of services and some or all of the infrastructure costs.

According to a *Virginian-Pilot* editorial dated Feb. 24, 2003, Virginia Beach recorded nearly \$500 million of development in 2002. Most of this development occurred in areas where services such as schools, roads, fire protection and city water were already in place. Hence, infrastructure costs were not large. Virginia Beach's city manager, James Spore, stated, "We had in-fill growth, a lot of remodeling, a lot of additions, a lot of tear-downs and replacements. All of those kind of things, from a municipal standpoint, are the good kinds of growth."

This kind of growth is the result of a policy turnaround that occurred in the 1990s. Prior to that time, the Virginia Beach city councils had approved many housing subdivisions without taking into account additional infrastructure needs. "If it meant growth, they approved it, sometimes almost without considering the costs," commented a veteran, and somewhat cynical, observer. Succeeding councils have been much more careful and adopted the Green Line to slow, or even block, development to the south. This has caused a slowing of population growth in Virginia Beach, but has averted many (but not all) of the infrastructure challenges that have afflicted neighboring Chesapeake. One evidence of this is the 22.9 percent real, inflation-adjusted increase in the Beach's per capita expenditures on K-12 education between 1991 and 2002, almost twice the comparable increase of Chesapeake.

Subsidized Or Not?

What answer can we now provide to our basic question: Are new residential and commercial developments in Hampton Roads subsidized by people not involved in their construction and who do not live and work in those developments? Our answer is, "It depends." Some cities (for example, Virginia Beach) have become much more vigilant in computing the governmental operating and infrastructure costs associated with new residential and commercial developments. Virginia Beach deserves a metaphorical gold star for becoming much more rational about its expansion. This approach has reduced the city's rate of population growth (the Beach grew less than the Virginia average between 1991 and 2002), and has avoided school crowding and road problems of the magnitude that have afflicted some other cities.

Other cities (such as Chesapeake) have not moved in this direction as vigorously and find themselves in the position of approving developments that exacerbate already severe infrastructure problems. It appears that older, more established residents and businesses in Chesapeake are subsidizing newer residents and businesses in that city.

In still other cities, the character of new developments has tended to reduce infrastructure costs and avoid subsidization. James City County is a case in point. Both James City County and the City of Williamsburg have positioned themselves to become quite attractive as living sites for mature adults and retirees. Such individuals usually do not bring many school-children with them and hence educational infrastructure costs are minimized. Further, these individuals often have above-average incomes and hence are able to construct upscale homes and condominiums that generate considerable streams of income and taxes.

The verdict is still out with respect to rapidly growing areas such as Suffolk and York County/Poquoson. It is not yet clear the extent to which they intend to attempt to control or shape growth and development.

Meanwhile, older cities such as Hampton, Newport News, Norfolk and Portsmouth, for the most part, find themselves in very different situations. Their basic infrastructure is largely in place, though perhaps in need of maintenance. For these cities, their focus often is on renewing and rehabilitating housing, or on projects that once were labeled "urban renewal." The financial mathematics of such developments is different, as is true of large-scale commercial developments such as MacArthur Center in Norfolk.

This brings us to the subject of “affordable housing,” which is an oft-stated goal of many people. Though citizens and elected officials often talk of the need for affordable housing, the truth is the development of affordable housing often is subsidized by the taxes of others in the community. A rough rule of thumb is that any development is subsidized if it consists of homes with average values of \$200,000 or less. Usually, it is the remaining citizens and businesses of that city that subsidize such developments by means of their taxes. However, it is possible that the citizens of other cities also may subsidize such developments if they incur costs associated with traffic jams, crime and the like.

Thus, on the face of it, most affordable housing developments do not pay their own way in terms of governmental operating and infrastructure costs. Of course, some argue that newly constructed affordable housing nonetheless may be a good idea because it may replace dilapidated housing complexes that required even larger operating and infrastructure subsidies from other taxpayers. Thus, an elected official who was motivated only by economic considerations might vote for an affordable housing development that must be subsidized because it will reduce the amount of an ongoing subsidy to citizens who already live in that city. The same argument, however, cannot be made for new developments that attract new residents from other cities or even other states.

Thus, some subsidized residential and commercial developments may make economic, political and social sense, especially if one takes a longer-term point of view. Subsidies may reflect our societal concern for each other, a desire to help others who are less fortunate and a desire to improve the perceived quality of life. Yet, it is not clear how a subsidized, new residential development in what once was a suburban field meets those standards. What is clear is that many such developments require people utterly unassociated with these projects to pay for them. Additionally, to quote a disappointed elected official, there is a certain “sneaky” character connected to such situations because most people in the community don’t understand what has occurred until it is too late.

How can this situation be improved? First, changes in legislation at the state level are needed. If the Dillon Rule cannot be modified, then the General Assembly must make it possible for cities and counties to assess impact fees and, as they choose, to take into account the entire development picture of a city in a dynamic sense – not just the development in question and not just at this precise moment. Second, even if better legislation is not forthcoming, cities and counties must do a much better job evaluating the true costs associated with residential and commercial developments. Too many city and county bodies vote on proposed developments in ignorance of their actual costs and benefits. Third, while the current proffer system is a second-best approach to these concerns, it should be used more extensively, and elected officials should not shrink from requiring generous proffers that take into account the actual costs of developments.

Cover photo: The USS Ronald Reagan (CVN-76), docked at Norfolk Naval Station Saturday morning, July 12, 2003, during her commissioning ceremony. The Reagan is the U.S. Navy's ninth Nimitz-class nuclear-powered aircraft carrier. With a full crew of over 5,000 sailors and aviators, the \$5 billion ship named in honor of America's 40th president will be home ported in San Diego, Calif., as a member of the U.S. Pacific Fleet. (Photo by Mike Heffner)