THE STATE OF THE MILITARY

What impact has military downsizing had on Hampton Roads?

From the sprawling Naval Station Norfolk, home port of the Atlantic Fleet, to Fort Eustis, the Peninsula's largest military installation, Hampton Roads has long been known for its sizable population of Department of Defense personnel and diversity of military bases. In all, more than 100,000 active-duty personnel are stationed in Hampton Roads, approximately 80 percent of whom serve in the U.S. Navy. While Norfolk is no longer considered solely a "Navy town," it continues to be home to the largest naval base in the world.

Given the diversification that has occurred in the region's economic base in recent decades, it would be incorrect to state that the Department of Defense (DOD) expenditures determine the prosperity of Hampton Roads. Nonetheless, more so than nearly any other large metropolitan area in the United States, the fortunes of Hampton Roads are tied to the military and to the Department of Defense. As demonstrated in an accompanying section describing the area's economy, the region's economic prosperity is closely related to defense expenditures and trends. The relative decline in military spending by the U.S. government in the '90s (at least relative to other things such as education and the environment) has had a significant impact on this region. An examination of these expenditures and trends offers some interesting findings regarding their import for Hampton Roads and its economic future.

Military Expenditures in Hampton Roads

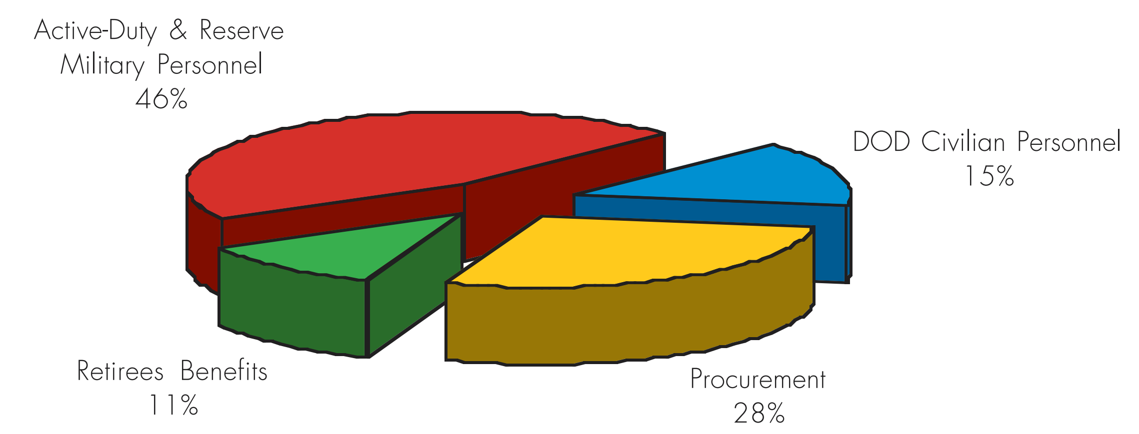
U.S. Department of Defense expenditures are the largest, single source of economic activity in Hampton Roads. In 2000, direct DOD expenditures and their resulting spinoff purchases accounted for an estimated 29 percent of the region's Gross Regional Product (GRP). This proportion far exceeds that of defense spending nationally, where DOD expenditures account for roughly 7 percent of the Gross Domestic Product (GDP). **In terms of the proportional effect of defense spending on U.S. regional economies, Hampton Roads is about four times more dependent on DOD expenditures than the average metropolitan area.**

Currently, the region absorbs roughly 2.4 percent of the nation's annual defense budget. Sixty cents of every dollar spent by DOD in the region is for active and reserve military and civilian personnel who serve in or for the Air Force, Army, Marines and Navy. DOD spends 28 cents of every dollar on private-sector procurement (see Graph 1), purchasing from private firms such goods and services as ship construction, ship repair, ship maintenance, construction of facilities, consulting services, materials, utilities, equipment and transportation. In addition, retirement and disability benefits account for slightly more than 11 cents of every defense dollar spent within the region.

Arguably, the most important economic issue of the '90s in Hampton Roads has been the decline in defense spending. Throughout much of the '80s, defense spending as a proportion of regional economic activity accounted for approximately 42 percent of the region's GRP. As seen in Graph 2, this proportion was at its '90s peak in 1990 and 1991 during the Persian Gulf War, roughly three years after the end of the Reagan administration military build-up. From 1990, when defense spending accounted for 42 percent of Hampton Roads' GRP, the proportion fell dramatically to a projected 29 percent in 2000.

This decline has also affected the growth rate of the region's economy. Had the defense industry maintained its share of regional economic activity throughout the '90s, year-to-year economic growth in the region would have been an estimated 1 to 3 percentage points higher for each year after 1991. Thus, although the region's overall economic growth rate since 1991 has lagged behind that of the nation, the nondefense portion of the region's economy has grown slightly faster than that of the nondefense sector of the nation.

GRAPH 1
Distribution of Defense Expenditures in Hampton Roads
Projected for 2000



Sources: U.S. Department of Defense and U.S. Department of Commerce

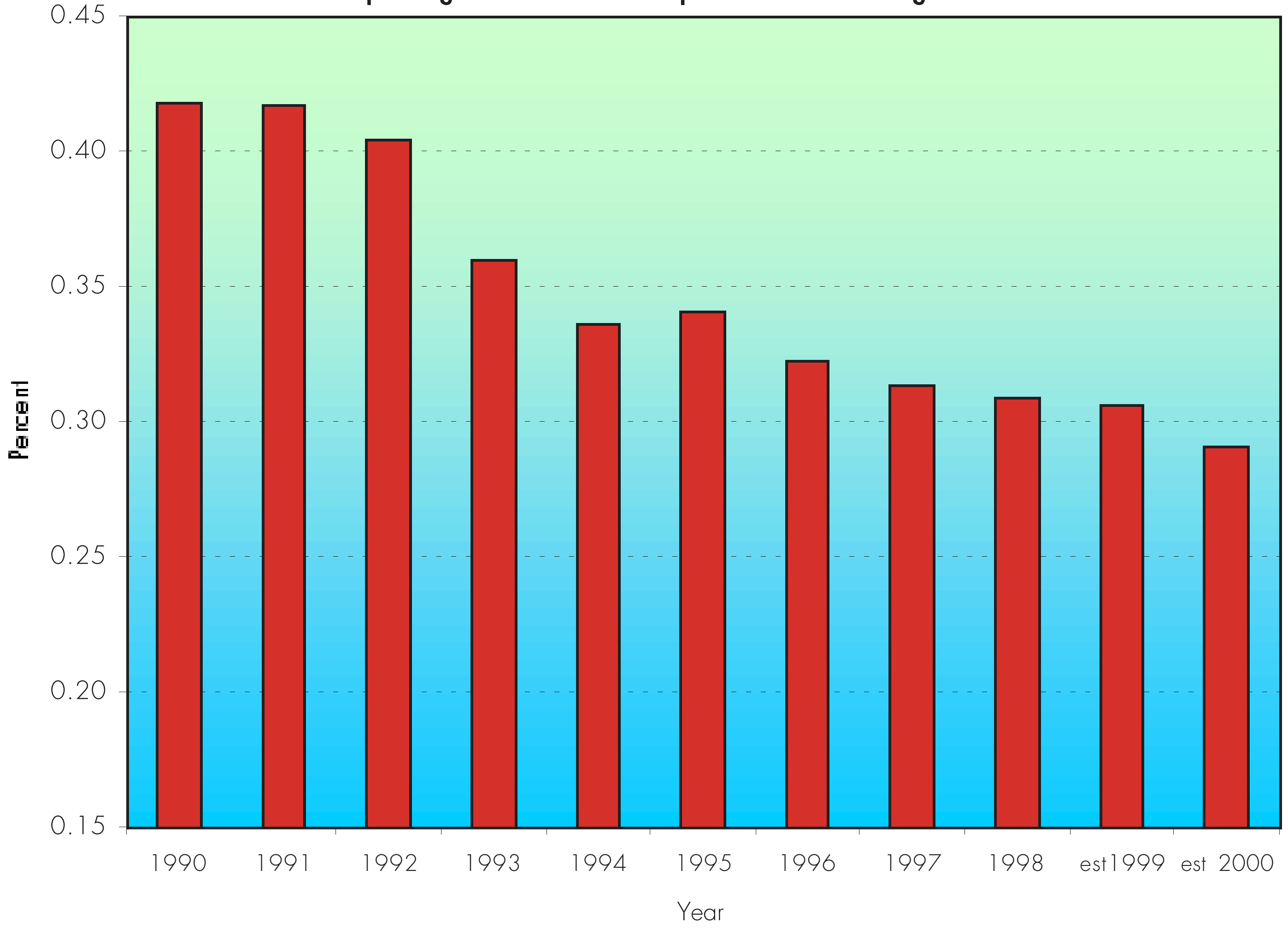
Compensation of Active-Duty Military Personnel

The slightly more than 100,000 active-duty military personnel who serve in Hampton Roads currently earn approximately $3.4 billion in aggregate pay and allowances. Uniformed military employment accounted for 13.7 percent of the region's workers and an estimated 15 percent of the regional wages and salaries paid in 1999. When compared to the average U.S. metropolitan area, these figures are 1.1 percent and 1 percent, respectively.

The average soldier or sailor stationed in the region earned about $33,500 in 1999, or about 5 percent less per year than the estimated $35,500 in wages and salaries paid to the average full-time person working in other domestic U.S. industries. **In addition to personnel reductions, one of the most significant factors dampening Hampton Roads' GRP and per capita income growth in the '90s was the relatively slow growth in military pay over the period when compared to pay increases for private-sector workers.** Congress deliberately held military pay increases to 50 basis points (.5 of 1 percent per year) below that of the national mean in the private-sector mean since 1990.

This situation will dramatically change over the next six years, for two reasons. First, Congress in its fiscal 2000 Defense Authorization Bill allocated a staggered series of military pay raises in 2000 that will amount to an estimated 6.7 percent increase over 1999 in average military compensation. This increase should exceed compensation for private-sector workers by about 2 percentage points in 2000. Second, Congress has further mandated that, starting in 2001 and continuing through

GRAPH 2
DOD Spending as a Portion of Hampton Roads' Gross Regional Product



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

2006, average military pay raises will exceed average private-sector wage growth by 50 basis points (.5 of 1 percent) per year. The sum total of the government's actions on military compensation over the next six years should raise average pay in the military to parity with the private sector by 2006.

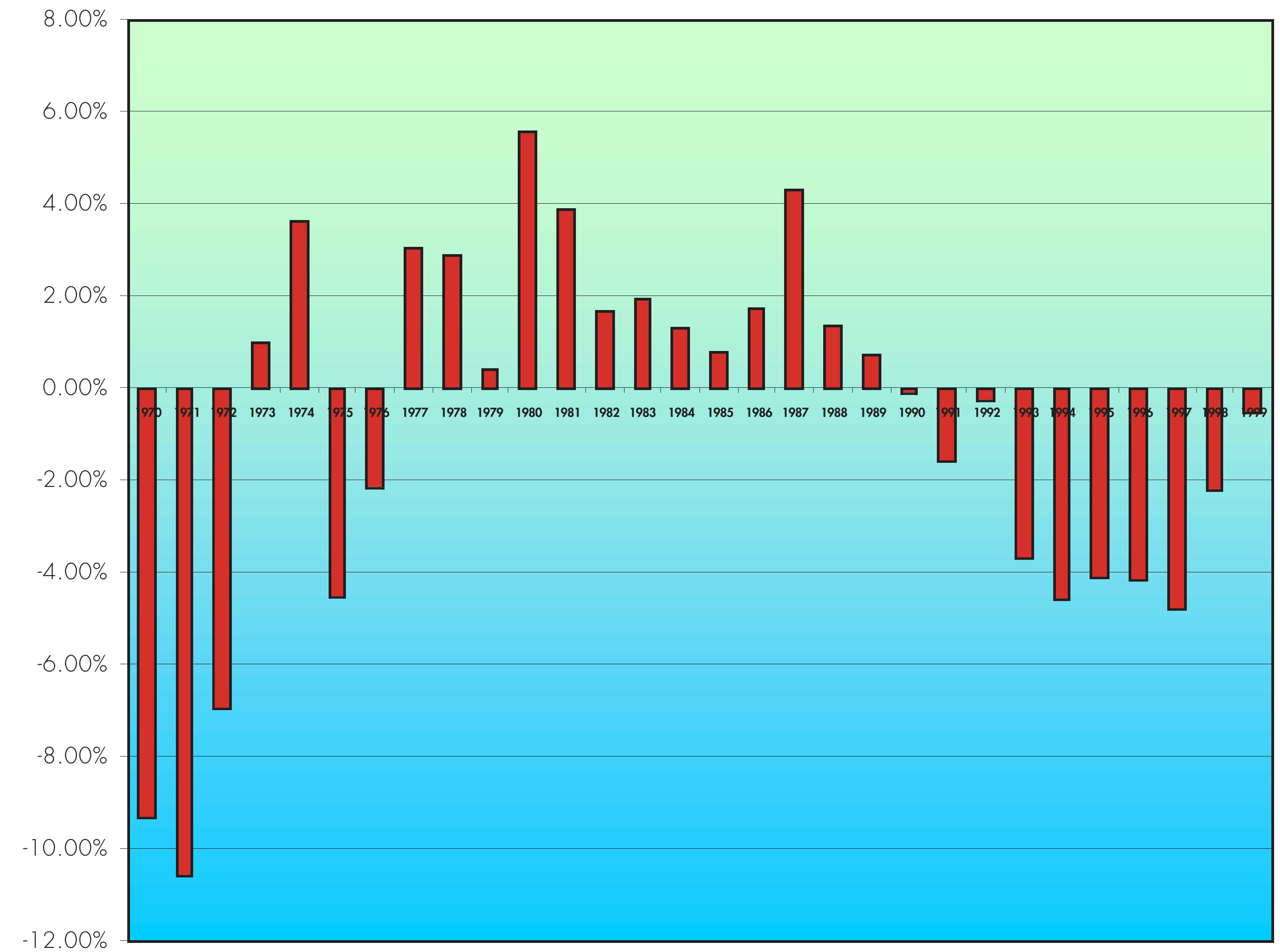
The Old Dominion University Forecasting Project estimates that the scheduled 2000 boost in military pay will add an additional $230 million in direct pay increases to the regional economy and lead to a subsequent increase of roughly $320 million in the Gross Regional Product. **In terms of its effect on GRP, the 2000 pay raise is greater than the economic equivalent of the recent move of the Cecil Field F-18 squadrons to Oceana Naval Air Station, and has the same impact as the creation of 6,600 new full-time jobs paying $35,000 annually.**

Active-Duty Force Levels

The number of active-duty military personnel based in Hampton Roads fell from an estimated 135,000 in 1990 to approximately 100,000 in 2000. The regional force reduction of about 26 percent over the '90s was less than for the nation as a whole (32.2 percent), however. This reflects the consolidation of forces in this area that resulted from various rounds of base closures around the nation in the '90s.

Although the military presence in Hampton Roads is often cited as having a stabilizing effect on the region's economy, it can be observed in Graph 3 that, taken over long periods, the military tends to be a drag on the regional economy or spur to it, depending on shifts in national defense policy. For example, from 1970 to 1979, the number of military personnel in the region fell by 13.3 percent. During the significant defense spending increase of the 1980s, the number of military personnel stationed in Hampton Roads rose by 19.3 percent. In the post-Cold War '90s, the number of active-duty soldiers and sailors based in the region fell by 22.8 percent. **Hampton Roads, then, has its own economic cycles that are not necessarily in sync with the**

GRAPH 3
Year-to-Year Percentage Change in Hampton Roads Military Employment



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

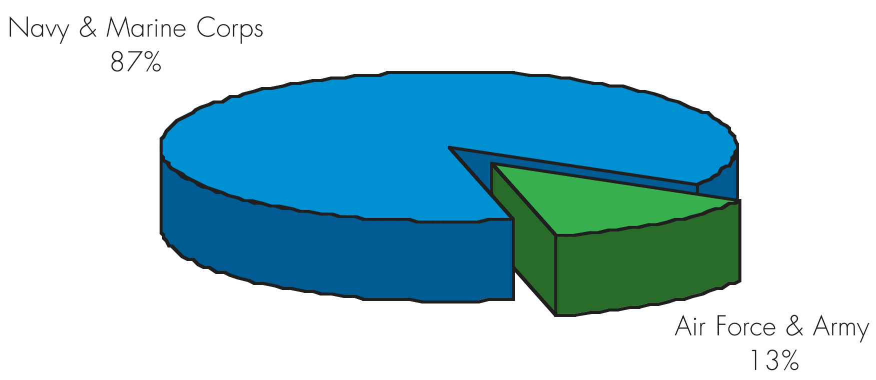
national economy. Here, the Department of Defense often has had more of an effect on the regional economic cycle than the national economy.

Over the 30-year period of 1970 to 2000, the United States has experienced three national recessions: 1974-75, 1980-82 and 1991. Based on data from the Old Dominion University Forecasting Project, there have been two recessions in Hampton Roads: 1974-75 and 1991. During these two periods, military force reductions in the region were pro-cyclical; that is, the reductions added to the severity of the local recession. On the other hand, the region was able to avoid entirely the spread of the 1980-82 national recession because of the counter-cyclical effect of military force increases.

Currently, active-duty military employment in Hampton Roads has stabilized. Based on military force projections from DOD, the Office of Management and Budget, and the Navy's Mid-Atlantic Command, the number of military personnel assigned to Hampton Roads will, assuming that the F-18 Super Hornet squadrons stay in the region, remain fairly stable over the next five years. **Given the lack of foreseeable change in the level of military personnel, the effect of military employment changes on the growth rate of the region's GRP should be neutral at least until 2006, something the region has not experienced in at least 30 years.**

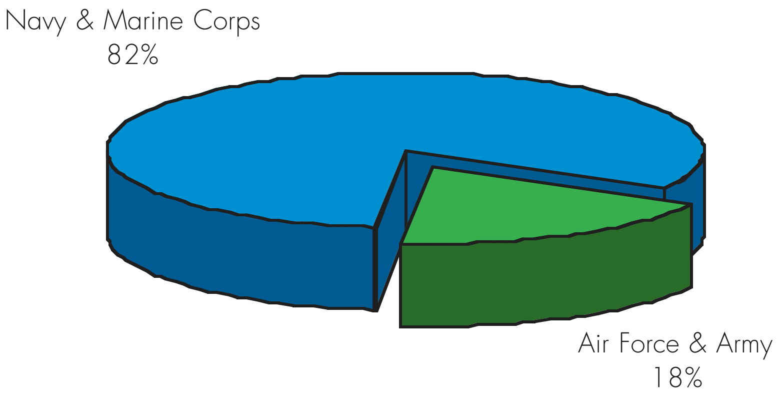
Although the Navy remains the "big kid on the block," measured in terms of the composition of the military services represented in Hampton Roads, a subtle, but substantial, change in this distribution has taken place over the past decade. As seen in Graphs 4A and 4B, the Army and Air Force share of military personnel in the region has risen from slightly less than one in eight to nearly one in five. This shift is particularly notable on the Peninsula, where Army and Air Force personnel accounted for about 80 percent of active-duty military personnel in 1999.

GRAPH 4A
Distribution of Military Personnel in Hampton Roads by Service in 1990



Source: U.S. Department of Defense

GRAPH 4B
Distribution of Military Personnel in Hampton Roads by Service in 1999



Source: U.S. Department of Defense

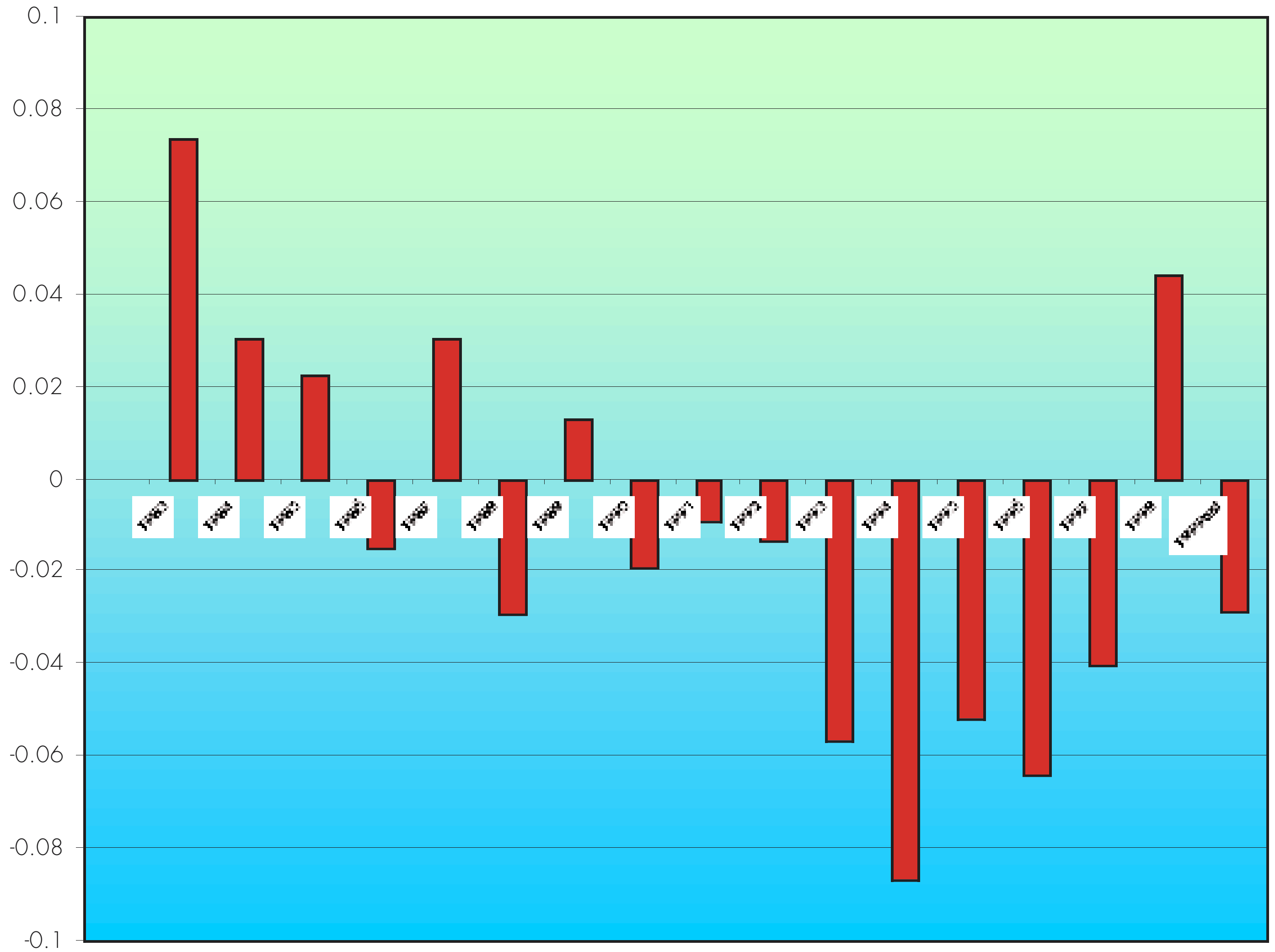
Military Retirees

An estimated 52,400 people, or about 5 percent of the adults living in Hampton Roads, received military retirement benefits totaling almost $1 billion in 1999. Military retirement benefits for that year amounted to 2.6 percent of total personal income earned by residents of the region and were ultimately responsible for more than 3 percent of the region's GRP. These benefits rose slightly in importance with respect to regional economic activity and economic growth during the first half of the '90s, but have been a stable proportion of regional income and product since 1995. Over the next five years the growth rate of military retirement benefits is expected to decline slightly as the growth rate of the number of military retirees tapers off with the stabilization of the level of active-duty personnel.

Civilians Employed by the Military

Approximately 4.4 percent of civilians employed by the Department of Defense work in Hampton Roads. DOD civilian employment represents 3.8 percent of the region's workforce, as compared to .5 percent in the average metropolitan labor force. Civilian DOD employment in Hampton Roads experienced 30-year lows in the latter part of the '90s, with an estimated 27,800 workers in 1999. As Graph 5 illustrates, with the exception of 1998, civilian DOD employment has decreased consistently since 1987 at a mean rate of 3.3 percent per year, with job losses totaling nearly 12,000 positions. Almost half of the eliminated positions have been at the Portsmouth Naval Shipyard.

GRAPH 5
Year-to-Year Percentage Change in Civilian Employment



Sources: U.S. Department of Defense, U.S. Navy Mid-Atlantic Command and Old Dominion University Forecasting Project

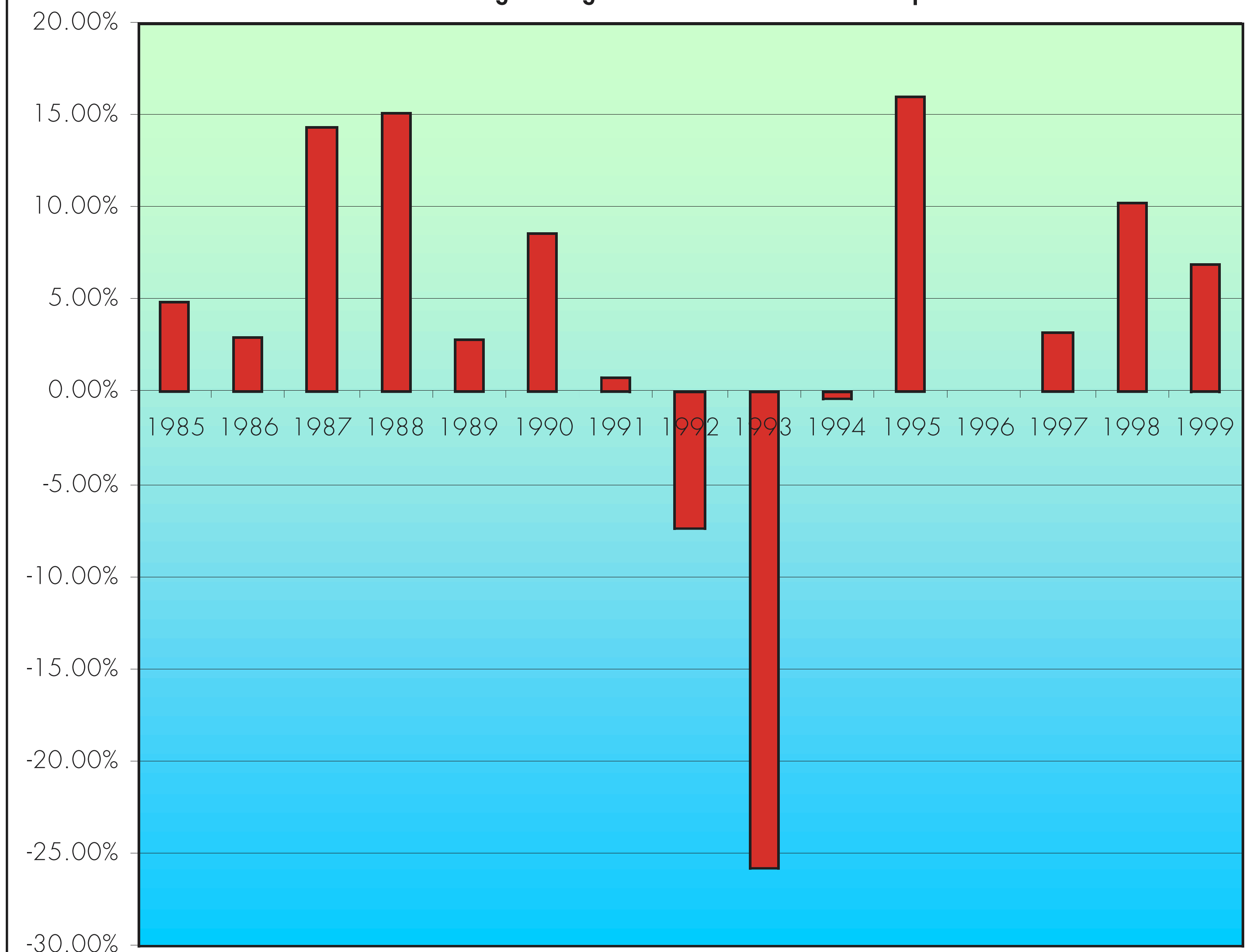
The year-to-year reduction of DOD civilian employment has acted as a drag on regional economic growth. The Old Dominion University Forecasting Project estimates that at the peak of the employment reductions from 1993-97, DOD civilian employment reductions retarded regional economic growth by an average of 30 basis points (.3 of 1 percent) per year. Further, the $50,000 average yearly wage of DOD civilian employees in Hampton Roads is about 40 percent above the $35,500 average wage of a full-time employee in the United States. The loss of these comparatively high-paying jobs has accounted for as many as 50 basis points in the decline of the region's per capita income relative to that of the nation since the late 1980s.

DOD Procurement

When direct expenditures, indirect expenditures and procurement contract imports from outside the region are accounted for, DOD private-sector purchases of goods and services in Hampton Roads are expected to reach $2.3 billion in 2000. These purchases will amount to an estimated 8.3 percent of the region's GRP. Defense procurement in the region has to some extent followed the year-to-year pattern of military and civilian personnel downsizing during the '90s. However, as seen in Graph 6, the decline of nominal procurement expenditures was concentrated in the years 1992-94.

As the decade of the '90s unfolded in Hampton Roads, DOD goods and services procurement followed two very different stories: one bad and one good, at least as regional economic impact was concerned. These stories centered on the private-sector shipbuilding and repair industry and the policy of government "outsourcing" of functions to the private sector.

GRAPH 6
Year-to-Year Percentage Change in DOD Procurement in Hampton Roads



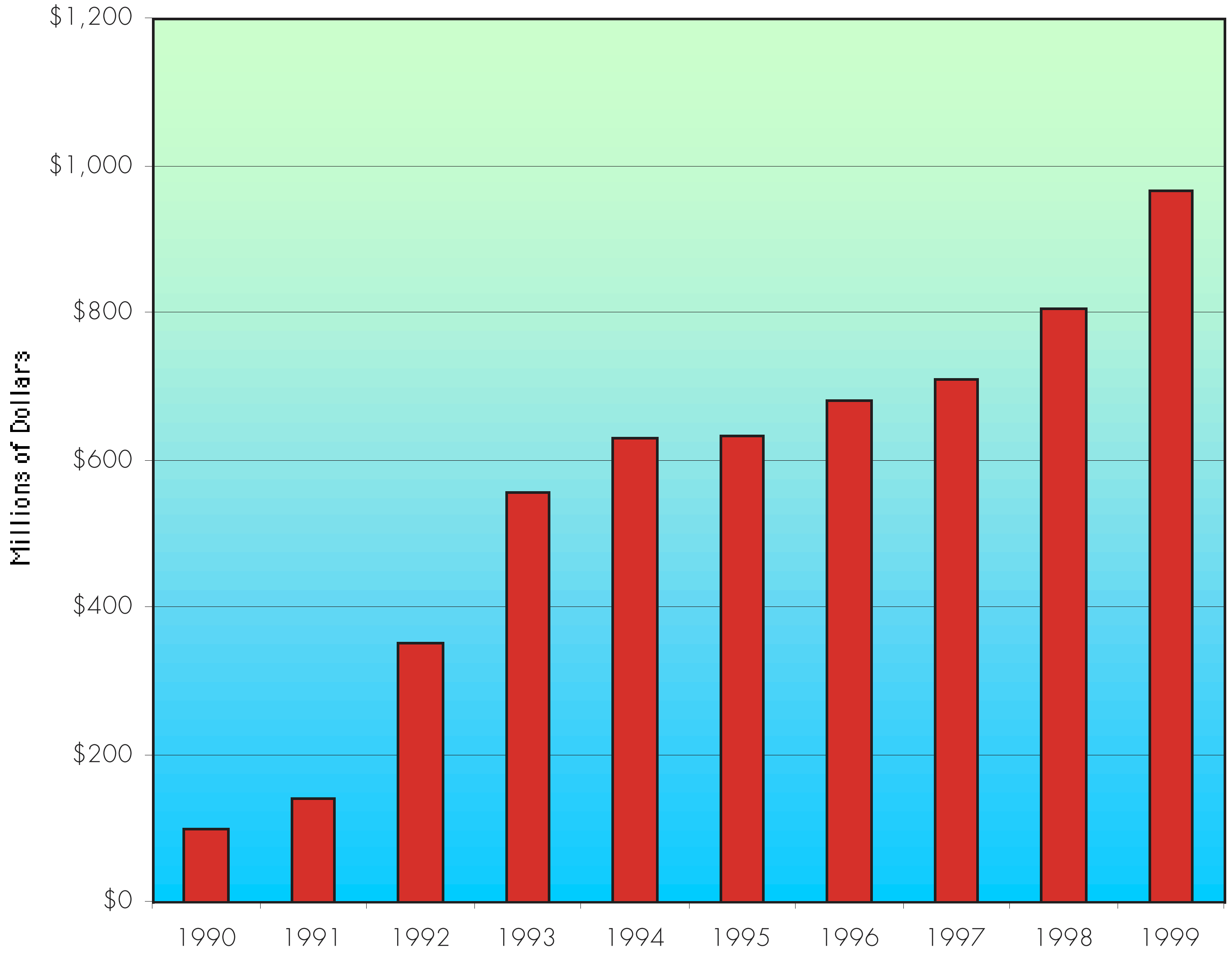
Sources: U.S. Department of Defense and Old Dominion University Forecasting Project

DOD private-sector spending in the region for shipbuilding and repair, after adjusting for inflation, fell by about 52 percent from its height of $2.5 billion 1990 to $1.5 billion in 1999. Employment in the industry followed a similar pattern. In addition, the decline of shipbuilding and repair expenditures has changed the distribution of procurement dollars in the region. In 1990, shipbuilding and repair accounted for an estimated 96 percent of procurement spending in the region; by 1999, this figure had fallen to about 61 percent.

The shipbuilding and repair decline appears to have bottomed out for now, with annual expenditures regionally of about $1.5 billion per year estimated in 2000. However, the construction of a new aircraft carrier notwithstanding, near-term prospects in this industry are less than bright as the Navy struggles with allocating scarce dollars between operational demands and ship repair.

A much more positive story about DOD procurement within the region emerges after subtracting shipbuilding and repair from total procurement expenditures. This "net procurement" involves contracting with the private sector for a gamut of services, such as base infrastructure construction and repair, equipment servicing and technical services, which were previously performed by personnel within the military commands. Graph 7 shows that net procurement rose dramatically during the 1990s, from an estimated $100 million in 1990 to nearly $1 billion in 1999. The almost tenfold rise in spending has been a boon to both the creation of new businesses and expansion of existing businesses in the region's private sector.

GRAPH 7
Estimated Net DOD Procurement in Hampton Roads



Sources: U.S. Department of Defense, U.S. Navy Mid-Atlantic Command and Old Dominion University Forecasting Project. Procurement spending is estimated using five-year moving averages and is net of regional imports. Sources: U.S. Department of Defense, U.S. Navy Mid-Atlantic Command and Old Dominion University Forecasting Project. Procurement spending is estimated using five-year moving averages and is net of regional imports.

The Future

Given that defense expenditures account for 29 percent of Hampton Roads' economic activity, it is obvious that fluctuations in these expenditures can have a significant effect on that activity. As previously mentioned, military personnel can expect increases in pay above those of the national average in the civilian workforce until at least 2006. These raises will play a positive role in increasing per capita income in Hampton Roads. **The cumulative effect of the new military pay-raise legislation could increase price-adjusted personal income, per capita, by as much as 1 or 2 percentage points over the next five years.**

Other potential DOD factors affecting the Hampton Roads economy are more speculative, but each carries its own set of economic consequences. The most significant of these potential factors center around: (1) ship construction and repair; (2) future base realignment and closure committees (BRACs); and, (3) the current Navy Department review of the disposition of its F-18 Super Hornet squadrons.

SHIPBUILDING AND REPAIR

Over the next five years, at least two important events will affect the shipbuilding and repair industry. The first is congressional authorization of the new CVX carrier. The carrier, to be constructed by Newport News Shipbuilding, has not been completely authorized by Congress, although initial funds for research and development and advanced planning have been approved. Second, the Navy plans to conduct major overhauls of its Aegis-class cruisers. Local shipbuilding and repair firms are potential recipients of these relatively large contracts. The total potential economic impact on the region from these projects is estimated at $1.4 billion per year from 2003-07.

A FUTURE BRAC?

It is virtually impossible to predict the actions of any future BRAC. However, it is probable that, should a new BRAC be appointed, Hampton Roads will benefit as the DOD attempts to gain scale advantages through consolidation of forces in this area. There is, however, a possible exception to this optimistic picture, and that is Fort Monroe. Should Fort Monroe be selected for closure, the total economic impact on the region's GRP would be in the vicinity of a negative $200 million per year.

THE SUPER HORNET?

The Navy Department will likely render a decision on the geographical disposition of the new F-18 Super Hornet in 2002. If Naval Air Station Oceana is not selected as the base for all the Super Hornet squadrons, the region could lose as much as $195 million per year of its GRP. For each squadron selected to move out of the region, the total economic impact on the GRP would amount to roughly a negative $14 million per year.

PROSPECTS FOR THE IMMEDIATE FUTURE

Given the long lead times and phase-in requirements of the possibilities described above – congressional defense allocations, the new pay-raise formula for military personnel and Department of Defense projections of personnel levels – it is most likely that over the next three to five years DOD expenditures in the region will increase by an average of only about 2 percent annually. What does this mean for the region? **Unless something unusual occurs, the military's impact on the Hampton Roads economy will continue to decline over the next few years. By 2005, the defense-dependent share of the region's economy could fall from the current 29 percent to 25 percent.**