The Regional Economy Downshifts
THE REGIONAL ECONOMY DOWNSHIFTS

The first few years of this decade collectively were among the best Hampton Roads has experienced since World War II. Between 2000 and the end of 2003, our economy grew more than 4 percent annually in real terms (after inflation). However, as Table 1 reveals, economic growth has slowed in our region and has been well below 2 percent in 2008.

In 2008, economic growth in Hampton Roads, measured by Gross Regional Product (GRP), is likely to be constrained by at least four negative economic trends that are affecting the nation as well as our region. These are: (1) rising oil prices; (2) financial credit constraints; (3) falling house prices; and (4) the depreciation of the dollar. Regional economic growth in 2008 has approximated 1.7 percent, well below our 35-year average Hampton Roads economic growth rate of 3.4 percent.

Output, Employment and Compensation

Table 1 also reports that the region’s GRP has approached $77 billion in 2008. This is a very large number. If we take into account differences in foreign exchange rates and what foreign currencies actually will buy, then our region’s gross product is greater than that of two-thirds of the nations in the world. Hampton Roads’ economy is similar in size to U.S. metropolitan areas such as San Antonio, Austin, Nashville and Hartford.

The decline in our regional economic growth rate reflects state and national trends. Graph 1 shows that the growth rates of the Hampton Roads, Virginia and national economies have been below 2 percent in 2008.

Regional employment growth averaged about 9,000 jobs per year from 2000 through 2005. However, between 2006 and 2008, job growth fell approximately 25 percent to about 6,000 new jobs per year (see Graph 2). Job growth tends to lag economic growth and hence, we should expect even lower regional job growth in 2009.

Where are new jobs being created? In 2007, Hampton Roads’ education and health sectors led in the creation of new jobs. As Graph 3 discloses, port-related activities and tourism also were important sources of job creation. Note that the total number of regional construction jobs fell for the first time in a decade, even though major commercial construction projects continued to be large and numerous. The falloff in residential housing construction drowned out this favorable trend.

Manufacturing employment in the region fell once again in 2007, by 1,000, but actually this is not such a bad result. The Ford Motor Co. closing occurred in June 2007 and this cost the region 2,000 manufacturing jobs. This means that growth in other manufacturing areas, such as shipbuilding and repair, was broadly positive and canceled out approximately half of the job impact of the Ford truck assembly plant closing.

While the growth rate of regional employment in 2007 was very close to the national average (see Graph 4), it trailed that of other Southeast metropolitan areas such as Charlotte, Jacksonville and Raleigh. We forecast that employment growth in Hampton Roads will fall to about .8 percent in 2008; however, the national average is likely to be even lower.

### Table 1

<table>
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<tr>
<th>YEAR</th>
<th>NOMINAL GRP BILLIONS $</th>
<th>REAL GRP (2000=100) BILLIONS $</th>
<th>REAL GRP GROWTH RATE PERCENT</th>
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<tr>
<td>2000</td>
<td>48.36</td>
<td>48.36</td>
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<td>2001</td>
<td>51.16</td>
<td>49.96</td>
<td>3.3</td>
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<tr>
<td>2002</td>
<td>54.83</td>
<td>52.63</td>
<td>5.3</td>
</tr>
<tr>
<td>2003</td>
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<tr>
<td>2007</td>
<td>74.14</td>
<td>61.96</td>
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<tr>
<td>2008</td>
<td>76.93</td>
<td>63.01</td>
<td>1.7</td>
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</table>

GRAPH 1
RATE OF GROWTH OF GDP (US), GSP (VA) AND GRP (HR)

Source: Old Dominion University Economic Forecasting Project
GRAPH 2
NET NEW PRIVATE-SECTOR WAGE AND SALARY JOBS CREATED IN HAMPTON ROADS, 2000-2008

Sources: U.S. Department of Labor and the Old Dominion University Economic Forecasting Project
GRAPH 3
EMPLOYMENT GAINS AND LOSSES IN HAMPTON ROADS, 2007

Lose (jobs)  Gainers (jobs)

Education & Health  2,200
Trade & Transportation  1,600
Government  1,300
Leisure & Hospitality  900
Financial Activities  900
Professional & Business Services  200
Construction  -900
Manufacturing  -1,000

Sources: U.S. Department of Labor and the Old Dominion University Economic Forecasting Project (Bureau of Labor Statistics data as of 4/21/08)
GRAPH 4
2007 CIVILIAN EMPLOYMENT GROWTH RATE IN SELECTED MSAs

Sources: U.S. Department of Labor (5/26/08) and the Old Dominion University Economic Forecasting Project
A Closer Look at Our Bread and Butter Industries

THE MILITARY

Given the omnipresent nature of the military in Hampton Roads, the volume of defense spending in the region is central to our economic prosperity. The most important component of defense spending is military compensation, which accounts for 56 percent of defense spending in the region. Graph 5 displays annual percentage changes in compensation and the number of military personnel in our region between 2002 and 2008. Since 2002, the number of military personnel has fallen by 4 percent, even while total compensation of those individuals rose by 63 percent. In a nutshell, a smaller number of individuals has been compensated much better. However, it appears that compensation increases will be more modest over the next several years.

Total Department of Defense (DOD) spending in Hampton Roads, which consists of both compensation expenditures and procurement purchases, rose from an estimated $10.3 billion in 2000 to $18.3 billion in 2008 – an increase of 78 percent (see Graph 6). Let’s break down this increase into its major components: compensation increases for military personnel of $4.3 billion; $.8 billion for DOD civilian employees; and DOD procurement expenditures of $2.9 billion.

We expect an increase in DOD spending of approximately 5 percent over the next year, despite the loss of an aircraft carrier and the first-year implementation of the recommendations of the 2005 Base Realignment and Closure Commission (BRAC). In April 2008, the aircraft carrier George Washington changed its homeport from Norfolk to Japan. Nevertheless, much of the negative economic effect of the ship’s departure should be offset by the 2008 commissioning of the aircraft carrier George Bush, which will be homeported in Hampton Roads.

Looking further down the road, however, we must observe that it is possible that the region will lose yet an additional aircraft carrier. The loss of a carrier and its accompanying task force and support would chop approximately 1 percent from our regional economic growth rate. This translates to almost $800 million annually and would constitute a significant economic blow to Hampton Roads.

The closing of Fort Monroe, scheduled for 2011, is the single most important regional piece of the BRAC decisions and it will cost the region roughly $900 million in lost output. However, this is likely to be spread out over a period of five years. In 2008, BRAC’s cost to Hampton Roads should be $50 million to $100 million, depending upon the speed of implementation.

Graph 7 discloses that DOD expenditures within the region have risen between 4.5 percent and 4.9 percent annually since 2006. These are respectable increases, but there is no sign that the double-digit increases of 2001 and 2002 will reappear. They provided a powerful stimulus to the Hampton Roads economy, but those times are gone.

Department of Defense spending has seldom been more important to the economy of Hampton Roads. DOD spending is responsible for more than 70 percent of the economic growth in Hampton Roads since the start of the new millennium and perhaps as much as 45 percent of our gross regional product. Double-digit growth rates in DOD spending generated our healthy regional economic growth rates earlier in the decade, and now more modest DOD spending likewise is primarily responsible for our much lower current growth rates.

However, even a more modest 4.9 percent increase in DOD spending regionally in 2008 translates into an additional $1 billion in spending. Given the deceleration of the national economy, this easily has been the primary source of economic stimulation for Hampton Roads.
GRAPH 5
ESTIMATED ANNUAL GROWTH RATE OF HAMPTON ROADS MILITARY PERSONNEL AND TOTAL COMPENSATION (2002-2008)

Sources: U.S. Department of Commerce and the Old Dominion University Economic Forecasting Project
GRAPH 6
ESTIMATED TOTAL DOD SPENDING IN HAMPTON ROADS
(BILLIONS OF DOLLARS, 2000-2008)

Sources: U.S. Department of Defense, U.S. Department of Commerce and the Old Dominion University Economic Forecasting Project
GRAPH 7
ESTIMATED ANNUAL GROWTH RATE OF TOTAL DOD SPENDING
IN HAMPTON ROADS, 2000-2008

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

The port continues to be an important economic player in our regional economy and held up its end once again in 2008 (see Graph 8). The port’s general cargo tonnage expanded in 2008 (as it has every year since 2001) by 5.1 percent, or .9 million tons over 2007, despite disruptive international economic conditions.

The depreciation of the U.S. dollar has had predictable consequences to our port. Graph 9 reveals that cargo exported from Hampton Roads rose more than 19 percent in 2007, while imported cargo declined by almost 4 percent. Total cargo tonnage increased by 6.6 percent, reflecting the dominating influence of exports over imports.
GRAPH 8
ANNUAL GENERAL CARGO TONNAGE SHIPPED THROUGH HAMPTON ROADS (MILLIONS OF TONS), 2000-2008

Sources: Virginia Port Authority and the Old Dominion University Economic Forecasting Project
GRAPH 9
PERCENT CHANGE IN 2007 EXPORT/IMPORT TONNAGE THROUGH THE PORT OF HAMPTON ROADS

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

In 2008, hotel revenue in Hampton Roads declined by 1 percent (see Graph 10). Is the projected 2008 decline in regional hotel revenue an indicator of a chronic weakness in the area’s tourist industry? We do not think so, but in order to answer this question, we will examine historical data on the industry and then focus on economic events affecting the industry in 2008.

With the exception of the 2001 national recession, the Hampton Roads tourist industry experienced a steady increase in hotel revenue from 1997 to 2007. A major determinant of this growth was increased income in the northeastern United States, the major market area of the region’s tourism industry.

Graph 11 compares growth in total hotel revenue and revenue per room (REVPAR) in Hampton Roads with that of the United States and Virginia. The growth rate in the region’s hotel revenues was similar to that in the nation, but well below that of the Commonwealth of Virginia, primarily due to the rapid growth of the Northern Virginia economy.

Hotel revenue growth in Hampton Roads, which only reflects increased tourism and general economic growth, was not distributed equally among the region’s cities (see Graph 12). Chesapeake, which grew rapidly as a city, but has limited tourist attractions, led the region in both the growth rates of hotel revenue and REVPAR between 1997 and 2007. Williamsburg brought up the rear with relatively small growth rates in both measures.

Stagnant hotel revenues in Williamsburg over the past decade have been a major concern to the tourist-intensive historic triangle, which also includes Jamestown and Yorktown. The relatively slow growth and recent decline of Williamsburg’s hotel revenue from 1997 to 2007 (even taking into account the Jamestown tercentennial festivities in 2007) rearranged the relative shares of the industry held by the region’s cities. One can see in Graph 13 that Williamsburg’s share of regional hotel revenue fell by roughly 10 percent between 1997 and 2007, while the shares of Chesapeake and Virginia Beach rose by 5.2 and 2.4 percentage points, respectively.

Smith Travel data also suggest that tourism revenue growth within the entire region has slowed. Why? Given rising household income in the northeastern United States, the region’s major tourism market area, it seems likely that two factors – gasoline prices and housing market problems – are at work.

Gasoline prices are significantly higher in 2008 than in 2007. We estimate that the higher prices increased the motor fuel expenses of a typical household by $750 to $850 in 2008. This reduced discretionary income and almost inevitably reduced some travel and tourism expenditures.

House prices declined in 2008 in many of the metropolitan areas, such as Washington, D.C., and Baltimore, cities that generate numerous tourists for the region. What is the connection between housing markets and tourism? In recent months, relatively few households have extracted funds from their homes either by refinancing their mortgages and withdrawing equity, or by outright selling their homes. Graph 14 illustrates the dramatic decline in mortgage equity withdrawals in recent years. This has depressed travel and tourism.
GRAPH 10
HOTEL REVENUE IN HAMPTON ROADS
(MILLIONS OF DOLLARS, 1997-2008)

Sources: Smith Travel Research (various reports) and the Old Dominion University Economic Forecasting Project
GRAPH 11
GROWTH IN HOTEL REVENUE AND REVPAR IN SELECTED AREAS, 1997-2008

Sources: Smith Travel Research Trend Report, Dec. 27, 2007, and the Old Dominion University Economic Forecasting Project
GRAPH 12
GROWTH IN HOTEL REVENUE AND REVPAR WITHIN
HAMPTON ROADS, 1997-2008

Sources: Smith Travel Research Trend Report, Dec. 27, 2007, and the Old Dominion University Economic Forecasting Project
GRAPH 13
ESTIMATED MARKET SHARES, HAMPTON ROADS HOTEL INDUSTRY

Sources: Smith Travel Research and the Old Dominion University Economic Forecasting Project
GRAPH 14
U.S. MORTGAGE EQUITY WITHDRAWAL, 1992-2008

We estimate that despite federal tax rebates, retail sales growth in Hampton Roads was anemic in 2008 and approximated 1.5 percent. This is a significant reduction from the roughly 4 percent increase in retail sales for 2007. Graph 15 shows that the first quarter of 2008 was a particularly difficult time for regional retailers because retail sales, and in particular, new automobile sales, actually declined.

What are the reasons for the reduced growth rate in household spending within the region? On the premise that if households don’t have higher income or more jobs, they will not have money to spend, our first suspects are income and job growth. However, the region’s median household income grew by about 4 percent in 2008. Further, household income in Hampton Roads (Graph 16) now exceeds the nation’s median by roughly $5,000, the largest difference since 1999, when the two were about the same. And, we’ve already seen (Graph 2) that the number of jobs within the region grew somewhat in 2008. Thus, overall economic conditions by themselves do not appear to account for our very modest increase in retail sales.

Falling housing prices are another possible culprit, and region-wide, housing prices fell about 5 percent in 2008 after resisting declines through the first quarter. We estimate that this decline in housing prices led to a $200 million reduction in household spending in Hampton Roads because of the adverse “wealth effect.” Hence, let’s take a closer look at what has been happening in regional housing markets.
GRAPH 15
ESTIMATED PERCENTAGE CHANGE IN RETAIL SALES* (LESS NEW CAR SALES AND HEALTH CARE) AND NEW CAR SALES, 1Q2007 VS. 1Q2008

Sources: Virginia Department of Taxation, Virginia Automobile Dealers Association and the Old Dominion University Economic Forecasting Project

* Retail sales included gasoline purchases.
GRAPH 16
COMPARISON OF MEDIAN HOUSEHOLD INCOME,
HAMPTON ROADS AND U.S., 1998-2008

Sources: U.S. Census Bureau and the Old Dominion University Economic Forecasting Project
A More Detailed Look at Housing Markets

One measure of any misery in housing markets is the prevalence of mortgage foreclosures – situations where homeowners give up their homes because they are not able to pay their mortgages. The Mortgage Bankers Association (http://www.mortgagebankers.org/NewsandMedia/PressCenter/62936.htm) reports that foreclosures amounted to 2.47 percent of all outstanding mortgages in the United States in the first quarter of 2008, almost double the 1.28 percent rate of the first quarter of 2007. Graph 17 provides comparative foreclosure data for Hampton Roads and several other metropolitan areas. Note that the foreclosure rate in our region is only 0.4 percent (well below the national rate) and is less than one-twelfth the rate in Detroit.

Interestingly, the low mortgage foreclosure rate in Hampton Roads does not appear to be a function of our region having floated relatively fewer subprime mortgages (see Table 2), or from our borrowers receiving substantially lower mortgage rates. How can we explain our thankfully strong performance in this arena? First, the rate of unemployment in Hampton Roads is below the national average and per capita income is above the average. Second, we benefit from having a large, stable employer (the Department of Defense) whose expenditures have been rising. Third, we are fortunate to host an expanding port and we continue to be seen as an attractive tourist destination. Thus, despite the slowing of our regional economy, by and large, we’re in better shape than many other metropolitan regions and this has resulted in a lower mortgage foreclosure rate.

Ultimately, housing prices reflect supply-and-demand influences. On the supply side, Hampton Roads builders and developers have adjusted their construction activities to deal with the realities of the 2008 residential property market. New housing permits, displayed in Graph 18 along with annual changes in regional employment, declined approximately 25 percent in 2008 to their lowest level over the past 28 years. We estimate that home construction fell from 6,200 new units in 2007 to 4,300 units in 2008. This reduction by itself chopped $650 million from our gross regional product (about .85 percent) and underlines the importance of housing markets to our regional prosperity.

Graph 18 also tells us that one of the major drivers of new home construction is employment. This conclusion hardly qualifies as rocket science; however, this graph underlines how dependent housing construction is upon the general state of the Hampton Roads economy. The total number of jobs in a regional economy is a useful barometer of that economy. Falling employment nearly always results in a subsequent reduction in new housing permits and soon after in a decline in the production of new housing units.

It’s also worth noting that population growth tends to follow economic growth (rather than the reverse). What has been happening to population growth in Hampton Roads? Graph 19 tells us that this growth has slowed to virtually zero. Our region is not generating many new jobs and therefore, it no longer acts as a magnet to people who might migrate here from other areas. Indeed, according to the Weldon Cooper Center at the University of Virginia, net migration to Hampton Roads has been negative (-11,000) since 2000. Our major employer, the Department of Defense, is spending more money, but actually has reduced its employment over the past few years.

If our regional housing markets mimic history, then we will likely see the bottom in the middle of 2009. ”Bottom” here means both an end to declining home prices in most major market segments and a sustained increase in new housing permits. Much, however, depends upon factors we cannot control or predict, such as the state of the national economy, Federal Reserve policy, the political and economic situation in the Middle East, and the like.

### Table 2

<table>
<thead>
<tr>
<th>Selected Characteristics of Subprime Mortgage Loans in Hampton Roads and the U.S.</th>
<th>Hampton Roads</th>
<th>U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subprime as a percent of housing units</td>
<td>3.0%</td>
<td>2.9%</td>
</tr>
<tr>
<td>Past due 30 or more days</td>
<td>20.9%</td>
<td>22.3%</td>
</tr>
<tr>
<td>Loans in foreclosure</td>
<td>2.8%</td>
<td>7.7%</td>
</tr>
<tr>
<td>Average loan rate</td>
<td>8.5%</td>
<td>8.7%</td>
</tr>
</tbody>
</table>

Sources: Federal Reserve Bank and the Old Dominion University Economic Forecasting Project
In 2007, one in every 277 Hampton Roads households was in foreclosure.

Source: Realty Trac
Graph 18
Annual Change in Total Employment and New Housing Permits in Hampton Roads, 1980-2008

Sources: U.S. Census Bureau and the Old Dominion University Economic Forecasting Project
*Actual 1991 total employment change is a negative 10,658 jobs.
GRAPH 19
AVERAGE PERCENT ANNUAL POPULATION CHANGES,
U.S. AND HAMPTON ROADS, 1980-2008

Sources: U.S. Census Bureau, the Weldon Cooper Center and the Old Dominion University Economic Forecasting Project
Final Thoughts

Despite almost 5 percent growth in Department of Defense spending and increased port cargo movement, 2008 has been a year of relatively weak economic growth for Hampton Roads. A decelerating national economy, unimpressive tourist spending and housing market problems have combined to reduce economic growth well below levels earlier in this decade. These basic influences bode not to change substantially in the first half of 2009. Thus, it is quite possible that 2009 will turn out to be a year in which the region runs in place, economically speaking.

Nevertheless, with a bit of schadenfreude, we can point out that we’re doing better economically than many comparable metropolitan areas. In particular, we have skirted the disastrous housing market problems that have afflicted many other regions. In addition, there is no sign that our major economic driver, the military, will reduce its expenditures, though national elections and international events could change this. All things considered, things definitely could be worse.