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I. Introduction

Economists such as Lester Thurow have written extensively about the importance of regional cooperation in the new economy. He refers to this as the “economic unit” because when people look for a place to live, work, or start a business they do not restrict their vision to a city’s political boundaries but rather they look at the desirability of the entire region. “Until you start to think outside of the circle or whatever the configuration is, and start to think of a city and a county together as a metropolitan region, you are not thinking about a viable unit for strategic planning purposes.”1

A good metropolitan economic strategy, therefore, must first and foremost recognize the need to act regionally. Sometimes this may be difficult due to political and administrative barriers – metropolitan regions can cross state lines, like in the case of Kansas City, or even national lines, as is the case with the San Diego-Tijuana metropolitan area. The Hampton Roads metropolitan area did not face any barriers of this kind, but it did face obstacles from its local leaders and residents. A region that one would assume to have had a natural sense of unity – everyone speaks the same language, is from the state of Virginia, and enjoys the same maritime culture – was actually deeply divided along city lines.2

As the economy struggled due to its dependence on the United States Navy, leaders from diverse sectors in the region began to understand that having a unified port, a chamber of commerce, and claiming to be one metropolitan statistical area was not enough to protect against stagnation. Reports by the Hampton Roads Chamber of Commerce, state incentives like the Regional Competitiveness Act, and examples from other integrative organizations like the USO and the Cultural Alliance all pointed to broad-based regional planning as the way to improve the quality of life for residents of Hampton Roads.

With a population of 1.6 million, a low unemployment rate, a low cost of living, and a workforce of over 750,000 people, Hampton Roads is planning for a future of increased competitiveness with other metropolitan areas through organizations like the Hampton Roads Partnership. This, however, will require that the HRP continue to promote regional cooperation in the fields of research and development, transportation, workforce development, and protection of the environment. Strategic planning must recognize that “it’s the success of the regional system, on every measure from workforce preparedness to the quality of the infrastructure, that determines how competitive and successful the region will be for all its citizens in the long run.”3

II. Overview

The Hampton Roads region in southeastern Virginia includes the opening of the Chesapeake Bay, ten cities (Chesapeake, Franklin, Hampton, Newport News, Norfolk, Poquoson, Portsmouth, Suffolk, Virginia Beach, and Williamsburg), six counties (Gloucester, Isle of Wight, James City, Southampton, Surry, and York), and the town of Smithfield. Unlike typical metropolitan regions that have a dense core, Hampton Roads’ 1.6 million people are fairly evenly spread throughout its seventeen communities.4

The water has always played a leading role in the lives of its residents, which is what led to the name “Hampton Roads.” The term does not refer to street roads, but rather to the various rivers and waterways that were navigated by the first English colonists. Road is an abbreviated form of roadstead, which the American Heritage Dictionary defines as “a sheltered offshore anchorage area for ships.”5 The Port of Virginia also provides a strategic location for Hampton Roads – the port is the largest natural harbor in the world, and its ice-free and deep waters make navigation easy and convenient. The area is 18 miles from open ocean and two thirds of the national population is within a 750 mile radius.6 Some of the metropolitan areas included in this figure are New York, NY; Chicago, IL; Philadelphia, PA; Detroit, MI; Indianapolis, IN; and Jacksonville, FL.

Figure 1: The Communities of Hampton Roads

From the Hampton Roads Planning District Commission http://www.hrpdc.org/citycounty/index.shtml

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In Hampton Roads, history is doubly important for understanding the
development of the metropolitan economy – in addition to whatever direct effects it had
on the area’s economy, its richness makes the region a popular tourist destination. The
Hampton Roads region encompasses some of the oldest settlements in the United States –
cities that are older than America itself. In 1607 the first British colony, Jamestown, was
founded in what is now the western part of Hampton Roads. Colonial Williamsburg is
also within the Hampton Roads boundaries. As the settlers continued to explore the
region, they discovered the world’s largest natural harbor and in 1620 they took
advantage of this by establishing a shipyard in the Sewell’s Point Area of Norfolk. Thus
the coastal community of Hampton Roads can trace its shipbuilding industry back almost
400 years.7

The British quickly turned the port into a growing center of trade, military
activity, and transportation, creating a legacy of internationalism that is reflected in the
economy of Hampton Roads. Battles in the Revolutionary War were fought at Fort
Nelson (Norfolk 1779), Yorktown, and on the Chesapeake (Chariton Creek 1776 and
Lexington v. Edwards 1776).8 Less than one hundred years later, the Chesapeake
witnessed the legendary naval battle of the “ironclads,” the USS Monitor and the CSS
Virginia (originally the USS Merrimack). This 1862 battle, which ended in a stalemate,
proved the sturdiness of ironclad ships – they became the main type of warship produced
until the 1940s.9

The military ties to Hampton Roads made the region particularly sensitive to
United States foreign affairs. Whether the nation is waging war or downsizing in times of
peace has made a great difference to this regional economy because it means the
difference between creating and destroying thousands of jobs. For instance, the Korean
and Vietnam wars were both good for business in Hampton Roads – the worst economic
performance in the last 50 years was during the late 1970s when President Carter
redirected Navy ship-building contracts from Newport News to Philadelphia.10

In addition to the direct link that the military provides between Hampton Roads
and the central government, the region depends on nationally funded incentive schemes.
The Empowerment Zone Wage Credit, New Markets Tax Credit, and the Environment
Cleanup Cost Deduction are just three such incentives.11 While federal funds tend to be
gased towards the promotion of economic development, they say little about regional
cooperation. The Virginia General Assembly, the state legislative body, therefore picked
up where the central government left off by passing the 1996 Regional Competitiveness
Act, which will be discussed later.

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8 [http://www2.cr.nps.gov/abpp/revlist.htm#va](http://www2.cr.nps.gov/abpp/revlist.htm#va) Accessed on 7/12/04
III. Identity Regionalism

Identity regionalism requires that local political and civic leaders encourage everyone in the area to think of themselves as one economic metropolitan “team” that needs to pull together to compete with other metropolitan areas around the world. Economist and columnist Neal Peirce includes such participation in his criteria of “tests” that measure the efforts of regions, or “citistates,” as he calls them, in growing a strong and competitive economy. “Indeed, strong local foundations, especially community foundations, play vital convening and support roles for successful communities. But the broader point here is the civic support networks-- networks of citizen organizations, community leadership organizations, volunteer centers in cities, and mechanisms for neighborhoods and suburban groups to all be part of the regional dialogue.”12

Evidence seems to suggest that identity regionalism began rather reluctantly in Hampton Roads, and finally sprang out of the economic necessity identified by the business community, state leadership, and a few local political leaders.

A. Business Leadership – uniting the region into one metropolitan statistical area, and creating the Hampton Roads Chamber of Commerce.

The history of Hampton Roads has been tied to the military since the days of the American Revolution, and the second half of the twentieth century was no exception. In the 1970s, the defense industry made up 38% of the total Hampton Roads economy.13 Outside of the military, the two largest industries in 1970 were wholesale and retail trade and manufacturing – industries that rely on the military presence for customers.14 So, when the defense industry is downsized, the entire economy can suffer unless new jobs are found in the civilian industry. Fortunately, the civilian sector expanded during the first large cut in spending, which occurred between 1969 and 1976. About 47,000 defense jobs were lost during this period, but civilian sector growth caused a net increase of 33,000 jobs.15 While this was good for the economy, and the well-being of many Hampton Roads residents, it failed to produce a push towards regional cooperation. In the 1970s, there was no such thing as one unified metropolitan area called Hampton Roads.

After identifying an opportunity to attract more businesses in the early 1980s, business leaders began to push to unite the region of Hampton Roads into one Metropolitan Statistical Area (MSA). Founded in 1983, it was originally called the Norfolk-Virginia Beach-Newport News Metropolitan Statistical Area (MSA) as part of a

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marketing ploy.\textsuperscript{16} The trend at the time was for employers seeking to relocate their companies to limit their search to the U.S. listing of the top 50 MSA’s. Before unification, the region was missing out on potential new businesses because the single communities were all below the top 50 (Newport News ranked 101\textsuperscript{th}). After unification, however, the re-named Hampton Roads region became the 34\textsuperscript{th} largest market in US with a population of just over 1 million. Although becoming a MSA meant the region was recognized by the US Office of Management and Budget as a group of communities with economic and social integration, not much changed besides the title at first.\textsuperscript{17}

Regardless of whether local officials wanted to work with or against each other, government cuts in naval shipbuilding created a problem of how to reorganize an industry that had previously relied heavily on the military. Hill and Markusen compared Hampton Roads with Bath, Maine as well as similarly dependent cities in other countries, and concluded that the Hampton Roads attempt at combating economic decline due to defense downsizing in the early 1990s was a relative failure.\textsuperscript{18} They attribute their findings to the fact that the region was unprepared to handle the large cutback in jobs – from 30,000 at the end of the Regan-Cold War era military buildup to 18,000 in 1997 – as well as the lack of cooperation among local leaders. The study also explains that it was this lack of cooperation that was the impetus for the Hampton Roads Chamber of Commerce to take charge. Basically, there was a leadership vacuum in which no civic, labor, or peace activists were addressing the problem of economic conversion away from defense-related shipbuilding.\textsuperscript{19} The Hampton Roads Chamber of Commerce, according to Hill and Markusen, was created by private-sector leaders as a response to the inability of local leaders to cooperate.\textsuperscript{20}

The communities in the region still held on to their own names and local governments, and local chambers of commerce exist side by side with the Hampton Roads Chamber of Commerce, established in 1984. The regional committees of the Chamber of Commerce are mostly administrative (e.g., Ambassador Program, Marketing & Communications Committee, and Membership Committee), but the Workforce Development Task Force does help match employers and workers throughout the entire region. This task force educates employers on labor market challenges and advocates employer-led solutions.

B. State Leadership – supplying funds and uniting the ports

The Virginia Municipal League (VML) has been providing leadership on behalf of Virginia’s cities in the state legislature since 1905. It is a nonprofit, nonpartisan

\begin{itemize}
  \item[17] ibid
  \item[19] ibid, see p 10
  \item[20] ibid, see p 8
\end{itemize}
association of city, town, and county governments that advocates on behalf of local
governments regarding finance transportation, environmental quality, and human
development issues. In the 1970s, the VML began to unsuccessfully pressure the state
government to repeal Dillon’s Rule, a policy that limits the control of local governments.
The rule is disliked by many government leaders, as well as the VML, because it states
that a city or county can only do what the state legislature has already specifically
approved. In other words, it presents a barrier to community leaders who wish to take
their own initiative.

Another initial barrier to the development and unification of the Hampton Roads
Metropolitan Area was the shortage of funds to municipal governments. The VML was
particularly active in the late 1970s in pressuring the state government to alleviate cities’
dependency on property taxes for revenue. The result of this pressure, which included
threats of annexation of the suburban counties that surround Virginia’s cities, was $150
million in new funds from 1980 to 1982.

Virginia’s state legislative body, the General Assembly encouraged functional
regionalism in regards to port activity. In 1981, the General Assembly passed legislation
to unify the once private ports of Hampton Roads, because the companies operating in
the region were not competitive. It was reported that the private port companies suffered
from sporadic growth and failed to work together towards a concerted market effort.
Once it was unified, the Port of Virginia (or the Port of Hampton Roads) fell under the
management of the newly established Virginia International Terminals, Inc. and became
the fastest growing port complex in the United States.

IV. How Hampton Roads overcame the obstacles

A. Initial Challenges

Historically, the cities of Hampton Roads have been more inclined to compete
than to cooperate with one another. In addition to each city’s local pride, the region was
essentially split into two camps – the Virginia Peninsula, which includes Hampton,
Newport News, Williamsburg, Poquoson, Gloucester, James City, and York, and the

21 From Virginia Municipal League website. “About the League.”
http://www.vml.org/about%20the%20league.html Accessed on 7/12/04
online from Lexis-Nexis. http://web.lexis-nexis.com/universe/document?_m=a97e8e96565d4fchb53a04e4f1b3e9129&_docnum=15&wchp=dGLbVz
+zSkVb&_md5=66b12392756c43eefdf01596a5c166fe2 on 7/15/04
+zSkVb&_md5=f1e33eb91beaf819f33d2b2f237ba1b8 on 7/15/04
Accessed on 7/12/04
on 7/12/04
Southside, covering Chesapeake, Norfolk, Portsmouth, Suffolk, Virginia Beach, Franklin, Isle of Wight, and Southampton. The process that brought all of these competitive communities together involved a gradual give-and-take that took over ten years to solidify into the Hampton Roads Partnership.

The initial hostility between the communities of Hampton Roads is reflected in the media networks. In the March 1991 issue of Inside Media, senior buyer and planner at Leo Burnett, June Schultz, said that the local TV news stations “fight tooth and nail against each other.” The newspaper market was also divided along Peninsula-Southside lines, with the former being the territory of the Newport News-based Daily Press/Times Herald. The Southside, on the other hand, relies on the Virginian Pilot/Ledger Star.

Three years later, the strength of regional cooperation was tested when the US Congress began to grant repair and maintenance contracts for the military’s ships. Essentially, the Congress had to choose between defense contractors and public military shipyards, both of which are part of the Hampton Roads economy. The metropolitan area’s delegation in Washington was split down the middle as far as whether to support the public or private industry when it argued before the House Armed Services subcommittee in April of 1994.

The largest obstacle to regional cooperation in the Hampton Roads delegation, and in general, was politics. For instance, one member on the delegation, Representative Owen B. Pickett (D), had a large constituency in Norfolk, where public contracts were particularly important because of the presence of the government-run Norfolk Naval Shipyard. Representative Herbert Bateman (R), on the other hand, had been a long-time advocate of Newport News Shipbuilding, which is the largest private shipyard in the country, and wanted to see the maintenance contracts go to the private sector. Studies such as the one on defense-dependent regions conducted by Hill and Markusen, as well as Imhoff’s report on the Commission on Population Growth and Development, found that local public officials were reluctant at best when it came to cooperating for the sake of the regional economy in the early 1990s.

One reason for the hostility between public officials is that traditional competition over natural resources was divided along city boundaries. Water, a resource that appears to be in abundance but is actually rather scare in the region, has been the source of heated debates between the Tidewater/Peninsula region and Norfolk since at least the 1940s. The bitterness over water stems from the fact that there is no regional cooperation – each city is in charge of its own water supply, but only Norfolk and Portsmouth have their own resources. The other cities of Southside Hampton Roads (Virginia Beach, Suffolk, and Chesapeake), must therefore purchase their water from their neighbors. Since 1976, however, water shortages have been a problem for the Tidewater communities because of

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27 ibid
28 ibid
dry periods in which the water supply was insufficient for their growing populations. In fact, Virginia Beach has had to enact water restrictions in every dry period since 1976, a problem that was predicted to worsen because of continued population growth in the city. The latest solution, therefore, has been to draw water from a lake that lies on the Virginia-North Carolina border. The Lake Gaston Water Supply Project, put into service in 1998, has shifted the traditional water debates between communities to the state level, as North Carolina adamantly opposed the siphoning off of water that would otherwise flow into its territory.

In November of 1999, less than two years after the Lake Gaston pipeline began supplementing Virginia Beach and Chesapeake, water debates divided the Tidewater communities and Norfolk. Another 13,000,000 gallons of water were found in Norfolk, and the city opted to use it to increase its own daily water flow by 13 million gallons per day rather than sell it to other communities. Virginia Beach opposed Norfolk’s actions, and debates between the mayors led to accusations that each city was not thinking regionally. In the Virginian – Pilot newspaper, for instance, Virginia Beach Mayor Meyera Oberndorf said, "Based on years of deprivation in Virginia Beach, it's very hard to understand why water has miraculously appeared in Norfolk. This is just one area that the cities have never agreed on." Norfolk City Manager Regina Williams was quoted in the same article as responding that, "It's almost like they're asking that our excess water be placed in reserve, just in case they need it. That's not a very regional view, if there are other localities that can use it now." The issue is sensitive partly because it involves the economic development of both cities – people only see that water can be used now to meet the demands of Norfolk and encourage further growth, or water can be saved so that the growth of Virginia Beach is safe from the damaging effects of the next dry season.

The beginnings of strategic planning that encouraged “identity regionalism” can be traced back to three reasons - out of sheer economic necessity, leadership pressure from the state level, and pre-existing federal and cultural organizations to serve as examples.

B. Economic Necessity

By the beginning of the 1990s, something needed to be done to stop what an Old Dominion University study called a “manic-depressive economy” – a second wave of military cuts proved more difficult to recover from because the civilian sector did not expand as it had in the 70s. Problems were foreshadowed in 1981 when President Ronald Reagan ended subsidies to commercial shipbuilding, which hurt companies like Newport News Shipbuilding and Dry Dock Co. and left them dependent on the navy. At first the industry was kept afloat by a 600-ship Navy expansion, but as the Cold War came to an

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32 ibid
33 ibid
35 ibid
end the Navy fleet was cut back down to 300 ships. At the national level, 76 shipyards were closed and 56,000 jobs eliminated between 1982 and 1986. The Newport News Shipbuilding and Dry Dock Co. had been Virginia’s largest employer throughout the decade, so the fact that the company cut about 15% of its workforce between 1985 and 1992 was alarming.

C. Encouragement Through Legislation

Although state legislation played an important role in the creation of a regional organization that could implement a complete metropolitan economic strategy, the actions of the General Assembly only came after pressure from the local level. In 1993, Norfolk mayor Paul Fraim met with the mayors of Richmond and Roanoke to discuss the problems they all faced as they tried to bring their cities out of a recession. The result of that meeting was the founding of the Urban Partnership – an organization formed by the Virginia Chamber of Commerce to help the state’s urban regions focus on cooperation between communities and the private sector so that they can compete better at the national and international level. In addition to the overall economic health of member metropolitan areas, the Urban Partnership discussed workforce development, poverty, and the impacts of urban sprawl.

The organization, and mayors from the communities involved, simultaneously pushed the state legislature and Hampton Roads residents to act and think regionally. As the mayor of Hampton, James Eason wrote at least one editorial for the local paper to persuade the suburbs to adopt regionalism; as Co-Chair of the Urban Partnership, he also played a role in generating support in the legislature. Eason also created the Neighborhood College in 1994 to encourage Hampton leaders to take a regional approach to solving community problems. As evidence that non-political leaders were also supportive of regionalism before official state action, Neal Peirce reports that a retired Naval commander from Virginia Beach organized a “grass-roots regionalism” conference for neighborhood organizations in the metropolitan area.

In 1996 the General Assembly passed the Regional Competitiveness Act, which provided state funds for inter-city collaborative efforts. The partnerships established between cities were required to develop strategic economic plans in order to be eligible for millions of dollars (the Hampton Roads Partnership received an average annual sum of $2.2 million from this program.) It is no coincidence that the communities of Hampton Roads waited until May of 1996 to endorse the Hampton Roads Partnership, which shows that state incentives can go a long way when creating a metropolitan economic strategy.

As the decade progressed, so did the willingness of public officials to take a regional approach to governance, the economy, and strategic planning for the future.

39 ibid
40 ibid
Although the Chamber of Commerce had recommended some form of strategic planning as early as 1992, it took four years for the HRP to materialize. The Hampton Roads Partnership, for instance, held its first official meeting in 1996, only one year after the Hampton Roads economy experienced a fall of 7 percentage points in its non-defense-related GDP growth (GDP growth fell from 8% in 1993 to 1% in 1995).41 So, state incentives and the economic reality of the times helped prompt the official start of Hampton Roads’ main regional planning organization.

At its inception, the HRP adopted the goals and priorities of any successful metropolitan economic strategy – it “focuses on the region's strategic issues for the purpose of enhancing our competitiveness in the global economy with resulting income and job growth for (our) citizens.”42 A combination of business, university, and civic leaders in addition to local governments make up HRP’s members, and its source of funding is equally broad-based.

Identity regionalism was further encouraged by the Legislative Steering Committee of the Hampton Roads Chamber of Commerce. This Committee addresses regional issues as well as legislates on local issues when they affect the entire region. The Chamber invites area residents to sign up for an e-mail list called the Legislative Contact Team so that they can be up to date on, and active in, issues related to governance and regional jurisdiction.

D. Positive examples set by federal and cultural organizations

Even if the initial consolidation of Hampton Roads into one metropolitan area was superficial in nature, other cultural organizations saw the importance of region-wide integrative planning as early as 1976. The Cultural Alliance of Greater Hampton Roads, for instance, sprung from the results of a study conducted in that year by the Metropolitan Arts Congress to determine the area’s cultural needs.43 Entitled “Blueprint for a Rainbow” and funded by the Norfolk Foundation, the study concluded that Southside cultural institutions would benefit from planning; by 1982, before the Hampton Roads MSA became official, the Peninsular cities joined in the cultural planning process. Led by Ralph Burgard, the planning committee consisted of people from the business, cultural, and educational communities in the region as well as members of the local governments. As recommended by the Cultural Action Plan, the Cultural Alliance works to coordinate dates, rather information, and raise awareness about the arts, music, and the region’s many museums.

On a larger scale, Nation-wide organizations like the USO, have also predated the region in terms of their focus on inter-community cooperation. The USO of Hampton Roads, like many defense-related organizations and companies in the region, suffered from military cuts in the 1970s. Their presence dwindled for over ten years, but the organization resurfaced with the help of private funding in 1984 after two off-duty

soldiers were shot to death in Newport News. The incident reflected the importance of finding a way to integrate military men with civilians, for the sake of safety as well as economic development – after all, 16,000 men exit the military and enter the Hampton Roads workforce every year. “The USO of Hampton Roads acts as the bridge between the military and civilian communities to help provide the military member a “home away from home.” With eight service centers and over 750 volunteers, the USO of Hampton Roads offers quality of life programs, family outreach and information and referral services.”

V. The Hampton Roads Metropolitan Economic Strategy

Hampton Roads is now the fourth largest metropolitan area in the southeastern United States, although it has traditionally performed at the national average in many respects, and below the Virginia average in terms of population and employment growth. Its Gross Regional Product (GRP) was $51.7 billion, falling behind Charlotte ($67.91 billion) but ahead of Raleigh-Durham ($47.83 billion), New Orleans ($46.26 billion), Jacksonville ($45.61 billion), and Richmond ($45.49 billion). As the table below shows, Hampton Roads has the lowest per capita income of these metropolitan areas, despite having one of the lowest unemployment rates and a relatively high GRP.

The first steps at developing a strategy for the region involved identifying and endorsing key elements such as the port, technology-related development, and later workforce training, transportation, tourism, regional identity, and healthy communities. As the strategy outlined by the HRP was implemented, a modest and gradual improvement was evident in the way the per capita income of Hampton Roads compares to that of the United States (see Figure 2). Unlike in the 1980s, when defense expenditures were at their highest for the region, recent growth in income has come despite falling defense expenditures in the region. Spending attributable to this sector made up 42% of the GRP in 1985, but fell to 29.1% in 2000 and was predicted to rise slightly to 31.1% in 2003.

45 ibid
Table 1: Hampton Roads 2003 Economic Indicators in a Comparative Context

<table>
<thead>
<tr>
<th>City</th>
<th>GRP (billions)</th>
<th>GRP growth (1996-2001)</th>
<th>Unemployment Rate</th>
<th>Per Capita Income</th>
<th>Local Expenditures as a % of GRP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hampton Roads</td>
<td>$51.7</td>
<td>28.4%</td>
<td>4.3%</td>
<td>$27,099</td>
<td>10.25%</td>
</tr>
<tr>
<td>Charlotte</td>
<td>$67.91</td>
<td>42.7%</td>
<td>6.1%</td>
<td>$32,218</td>
<td>10.01%</td>
</tr>
<tr>
<td>Raleigh-Durham</td>
<td>$47.83</td>
<td>47.4%</td>
<td>4.8%</td>
<td>$33,015</td>
<td>9.87%</td>
</tr>
<tr>
<td>New Orleans</td>
<td>$46.26</td>
<td>25.1%</td>
<td>5.2%</td>
<td>$28,104</td>
<td>9.09%</td>
</tr>
<tr>
<td>Jacksonville</td>
<td>$45.61</td>
<td>34.7%</td>
<td>5.0%</td>
<td>$32,448</td>
<td>10.24%</td>
</tr>
<tr>
<td>Richmond</td>
<td>$35.39</td>
<td>32.5%</td>
<td>4.1%</td>
<td>$31,636</td>
<td>8.92%</td>
</tr>
</tbody>
</table>

From Old Dominion University Economic Forecasting Project, 2003. **Bold**= best performance
http://www.odu.edu/bpa/forecasting/chapter2.pdf

Figure 2: Hampton Roads Per Capita Income as a Percent of US

From Old Dominion University Economic Forecasting Project, 2003. * denotes estimated value.
http://www.odu.edu/bpa/forecasting/chapter2.pdf

A. Identifying and Investing in Regional Assets

1. Large & skilled labor force

   Hampton Roads has a regional civilian labor pool of over 790,000 workers, with about 13,000 exiting military personnel each year. These men and women are skilled and ready to be employed in the region.\(^{49}\) According to the Hampton Roads Economic Development Alliance, a public-private partnership that markets the South Hampton

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Roads region to expanding companies but conducts research on all of Hampton Roads, 8,800 of the 12,600 people who left the military in 2003 were “separations.” These are both officers (331) and enlisted men (8,500) who did not leave for retirement – in other words, they are people still seeking employment.\textsuperscript{50} The military facilities in Hampton Roads are Langley Air Force Base, U.S. Coast Guard Hampton Roads, Cheatham Annex, Naval Weapons Station Yorktown, Norfolk Naval Station, Oceana Naval Air Station, Norfolk Naval Shipyard, Little Creek Amphibious Base, Fleet Command Training Center Dam Neck, Naval Security Group Activity Northwest, Fort Eustis, Fort Story, and Fort Monroe.

Eight universities and four community colleges educate 82,000 students, most of which are permanent residents and thus available for part-time employment. The universities and college of Hampton Roads are Old Dominion University, Regent University, Hampton University, Christopher Newport University, Norfolk State University, College of William and Mary, Virginia Wesleyan College, and Eastern Virginia Medical School. As Table 3 shows, however, Hampton Roads is still below both the state and national percentage of the adult population with a Bachelor’s Degree or greater. Considering the large number of institutions in the area, more investments need to be geared towards keeping the region’s college graduates in Hampton Roads.

Investments in education for the purpose of enhancing the quality of the regional workforce in the future have been led by the Smart Region Hampton Roads organization. Part of the Smart Region mission is to take an integrative approach to education by emphasizing technology and collaboration between school districts, administrators, and disparate education initiatives.\textsuperscript{51} One such initiative is the Consortium for Interactive Instruction (CII), which was founded in 1984 to advocate for the useful implementation of technology in classrooms. Another regional organization that works with Smart Region is the Hampton Roads Public Education Services Agency (HRPESA), which focuses on devising cost-effective solutions to educational issues. For instance, HRPESA encourages its member school districts to pool their resources to save money on high volume purchase orders of supplies. The organization is also active in coordinating region-based employee training, and developing distance learning.\textsuperscript{52}

<table>
<thead>
<tr>
<th><strong>Level of Education</strong></th>
<th><strong>% of adult population</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Some High School</td>
<td>15.3</td>
</tr>
<tr>
<td>High School Diploma</td>
<td>27.7</td>
</tr>
<tr>
<td>Some College</td>
<td>26.3</td>
</tr>
<tr>
<td>Associate’s Degree</td>
<td>6.8</td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
<td>15.4</td>
</tr>
<tr>
<td>Graduate/ Professional Degree</td>
<td>8.4</td>
</tr>
</tbody>
</table>

Table 2: Hampton Roads Educational Attainment at a Glance

\textsuperscript{50} From HREDA website. \texttt{http://www.hreda.com/Research_Data/Web_Research/Labor\%20Stats\%202-04.pdf}
\textsuperscript{51} From Smart Region Hampton Roads website. “Smart Education.” \texttt{http://www.smartregion.org/education.htm} Accessed on 7/22/04
\textsuperscript{52} ibid
Table 3: Comparison with Virginia and the National Average

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>Hampton Roads</th>
<th>Virginia</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School or more</td>
<td>84.6%</td>
<td>87.8%</td>
<td>84.6%</td>
</tr>
<tr>
<td>Some College or more</td>
<td>56.9%</td>
<td>n/a</td>
<td>52.5%</td>
</tr>
<tr>
<td>Bachelor’s Degree or more</td>
<td>23.8%</td>
<td>34.2%</td>
<td>27.2%</td>
</tr>
</tbody>
</table>


Table 4: Population Growth in Hampton Roads

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hampton Roads</td>
<td>20%</td>
<td>9%</td>
<td>2%</td>
</tr>
<tr>
<td>Virginia</td>
<td>16%</td>
<td>14%</td>
<td>3%</td>
</tr>
<tr>
<td>US</td>
<td>10%</td>
<td>13%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Data from US Census Bureau, as reported by 2003 Statistical Digest. [http://www.virginiabusiness.com/market_research/digests/hampton/demographics.pdf](http://www.virginiabusiness.com/market_research/digests/hampton/demographics.pdf)

2. good quality of life

The low unemployment rate (4.1% in 2004) and low cost of living in the region make Hampton Roads a desirable place to live and work. Organizations like the Hampton Roads Partnership, the Hampton Roads Economic Development Alliance, and the Hampton Roads Planning District Commission have reported that having a good quality of life plays an important role in firms’ location decisions. Whereas most metropolitan areas are faced with a cost of living well above the national average, the Hampton Roads Cost of Living index is only 101.3. For comparison, Detroit rates 109.3 and San Diego is at 127.5.53 These values are determined by the American Chamber of Commerce Research Association (ACCRA) by comparing each metropolitan area’s prices of consumer goods for a professional household to the national average cost of the same consumer goods. In other words, a rating of 100 would mean the price of consumer goods in the metropolitan area is equivalent to the national average.54

Successful investments in the quality of life can often mean the difference between a business leader’s choice to operate in Hampton Roads over other metropolitan areas. In a recent HRP Quality of Life Survey, 34% of area residents responded that the water environment was what contributed most to their choice to live in the region. This was the category with the highest response, and when pooled with other categories, a total of 54% of respondents linked their quality of life with parks and the environment.55

53 From the City of Hampton website. [http://www.hamptonva.biz/welcome/about.html](http://www.hamptonva.biz/welcome/about.html) Accessed on 7/14/04
The HRPDC has been investing in the cultivation and protection of the environment through its Physical and Environmental Planning Department (PEP). The PEP emphasizes water resource management, but also develops plans related to stormwater management, coastal resources, Chesapeake Bay issues, environmental issues, and general planning support for local initiatives.56

3. Natural Port

The Port of Hampton Roads is the general name given to three ports situated in the communities of Newport News, Norfolk, and Portsmouth. Together, they ranked 8th in the country for container shipping in 1999 – the closest competitors geographically are Baltimore (ranked 15th), New York/ New Jersey (ranked 3rd), and Charleston (ranked 7th).57 The Newport News Marine Terminal, which has rail service from CSX to provide easy accessibility, is the smallest of the three with 140 acres. Portsmouth Marine Terminal include 219 acres and offers refrigerator hook-ups, fumigation facilities, and specialized warehouse space. At a total 811 acres of space, Norfolk International Terminals is the largest facility, and it boasts several “Suez-Class” container cranes, which are the largest container cranes in the world. Both Norfolk and Portsmouth are serviced by CSX and Norfolk Southern rail systems.58

Investments in the ports have come from the private businesses that call on them in addition to the public sector. Over the past 20 years, total cargo tonnage has increased almost fourfold, although employment in cargo movement only increased by 22% in that same period. The slow growth in this type of employment is part of what has become the ports’ competitive advantage, however. It reflects investments in technology and handling methods that led to much higher worker productivity – so, fewer workers need to be hired to manage the new cargo. Having a more productive port has led to the establishment of more shipping and other port-related firms in the region, which provide enough new jobs to compensate for the slow employment growth in cargo movement. Over the last 20 years, employment by such firms has gone from 3,307 to 18,677.59

A successful attempt to draw business from Baltimore began in 1991 with the expansion of the Norfolk International Terminal; the fact that the plan was implemented in carefully planned phases reflected a lesson learned from Baltimore’s own experience – that expansion should never outpace business growth.60 As of 1999, the Port of Hampton Roads was transporting 1307 containers annually, while Baltimore was handling just under 500 containers that same year.

56 From HRPDC Physical and Environmental Planning Department website. “Regional Initiatives.”  
http://www.hrpdc.org/newpep/RegionalInitiatives.shtml Accessed on 7/22/04
57 From The Port of Hampton Roads. Study conducted by Old Dominion University.  
59 From The Port of Hampton Roads. Study conducted by Old Dominion University.  
B. Industry Networks

For much of the twentieth century, Hampton Roads relied on its deep natural port as its greatest asset. This is evident by the economic dominance of the shipbuilding industry and other defense-related, Navy-oriented activities. The port is and will continue to be of vital importance to Hampton Roads, but the last decade has seen a change in the way of thinking about how this asset can be put to work in a more diverse way. The Navy and the shipbuilding network may still be present, but technology-oriented non-profits and employers are courting now roughly 9,000 skilled men and women who exit the military and seek civilian work. Powerful, international shipping companies like Zim-American have relocated their North American Headquarters to Hampton Roads from New York City because they prefer the region’s quality of life and talented workforce, and Zim relocation project manager Nadav Kaplan hailed Norfolk as a “cultural fit”.61 The automotive manufacturing network, and the tourism network, are two other sectors that have benefited from the abundance of labor and easily accessible location of the region. Despite this progress, however, Hampton Roads is still lacking in terms of research and development coalitions that can claim independence from the defense industry.

In a 2004 presentation to the Hampton Roads Planning District Commission, John W. Whaley found that the economy is evolving and improving, although it still has a mix of industries that “is less desirable than the US mix with respect to growth.”62 He also emphasized that the Peninsula sub-regional economy grows faster and with more stability than the South Hampton Roads economy because it has a better mix of high-paying, competitive industries.63 Relying on military defense makes for a less stable economy, and studies such as one conducted by Old Dominion University in Hampton Roads show that this factor explains why the region continued to perform at the “average” national level instead of above it throughout the 90s.64 That same study attributes recent outpacing of national growth rates to increased defense expenditures on personnel, the travel boom, and growth in shipping and port activity. The fact that the growth was not entirely due to defense shows progress in the efforts of the metropolitan economic strategy, although it remains to be seen if the region can continue such a growth rate once military spending slows down.

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63 ibid
Table 5: Total Full-Time and Part-Time Employment by Industry, 1975-2000

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total full-time and part-time employment</td>
<td>577,451</td>
<td>657,820</td>
<td>758,502</td>
<td>866,615</td>
<td>887,181</td>
<td>955,365</td>
</tr>
<tr>
<td><strong>By industry</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private employment</td>
<td>348,623</td>
<td>411,973</td>
<td>498,536</td>
<td>580,870</td>
<td>619,903</td>
<td>694,629</td>
</tr>
<tr>
<td>Agricultural services, forestry, fishing and other 3/</td>
<td>2,861</td>
<td>4,037</td>
<td>(D)</td>
<td>6,314</td>
<td>7,873</td>
<td>(D)</td>
</tr>
<tr>
<td>Mining</td>
<td>167</td>
<td>152</td>
<td>344</td>
<td>425</td>
<td>384</td>
<td>(D)</td>
</tr>
<tr>
<td>Construction</td>
<td>29,072</td>
<td>33,946</td>
<td>46,511</td>
<td>49,268</td>
<td>48,665 E</td>
<td>56,542</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>64,477</td>
<td>71,327</td>
<td>76,316</td>
<td>74,523</td>
<td>68,912</td>
<td>71,279</td>
</tr>
<tr>
<td>Transportation and public utilities</td>
<td>22,089</td>
<td>25,991</td>
<td>28,148</td>
<td>31,782</td>
<td>33,640 E</td>
<td>37,863</td>
</tr>
<tr>
<td>Wholesale trade</td>
<td>17,774</td>
<td>22,205</td>
<td>24,916</td>
<td>28,262</td>
<td>27,732</td>
<td>30,381 E</td>
</tr>
<tr>
<td>Retail trade</td>
<td>75,510</td>
<td>89,703</td>
<td>117,058</td>
<td>137,760</td>
<td>146,391</td>
<td>158,614</td>
</tr>
<tr>
<td>Finance, insurance, and real estate</td>
<td>38,132</td>
<td>39,853</td>
<td>43,527</td>
<td>50,145</td>
<td>52,100</td>
<td>61,059 E</td>
</tr>
<tr>
<td>Services</td>
<td>98,004</td>
<td>123,162</td>
<td>154,892</td>
<td>201,215</td>
<td>232,959</td>
<td>267,347 E</td>
</tr>
<tr>
<td>Government and government enterprises</td>
<td>223,190</td>
<td>241,522</td>
<td>256,255</td>
<td>283,087</td>
<td>264,610</td>
<td>258,441</td>
</tr>
<tr>
<td>Federal, civilian</td>
<td>52,601</td>
<td>54,321</td>
<td>56,971</td>
<td>59,693</td>
<td>49,351</td>
<td>46,924</td>
</tr>
<tr>
<td>Military</td>
<td>109,081</td>
<td>119,924</td>
<td>131,951</td>
<td>142,658</td>
<td>123,577</td>
<td>111,141</td>
</tr>
<tr>
<td>State and local</td>
<td>61,508</td>
<td>67,277</td>
<td>67,333</td>
<td>80,736</td>
<td>91,682</td>
<td>100,376</td>
</tr>
<tr>
<td>State government</td>
<td>(N)</td>
<td>16,161</td>
<td>15,346</td>
<td>18,803</td>
<td>21,743</td>
<td>(D)</td>
</tr>
<tr>
<td>Local government</td>
<td>(N)</td>
<td>51,116</td>
<td>51,987</td>
<td>61,933</td>
<td>69,939</td>
<td>71,381 E</td>
</tr>
</tbody>
</table>

Data From the Bureau of Economic Analysis website, where E= estimate, D= data confidential, N= not available

1. **shipbuilding**

Newport News Shipbuilding and Dry Dock Company was founded in 1886 to repair ships involved in the local industry at the time – the transportation of coal. So, the shipbuilding industry in Hampton Roads started out with private customers, independent of the defense industry. This changed rather quickly, however, because by 1897 the company had built three US warships.\(^{65}\) Throughout the twentieth century, the

\(^{65}\) From the FreeDictionary.com website.
shipbuilding network relied on the US Navy and specialized in the construction of nuclear powered submarines, ballistic missile submarines, and *Nimitz*-class aircraft carriers – in fact, Newport News Shipbuilding is the only American shipyard that can produce these aircraft carriers, which are the largest ones in the world.

As the largest private shipyard in the country, Newport News Shipbuilding was so vital to the Hampton Roads economy that it made the region somewhat dependent on it and the defense industry. In 1985, at its peak, the company employed 31,000 workers and even as the Navy scaled back production during the rest of the decade, the defense industry contributed $6.6 billion to the regional economy. Traditionally the fact that Hampton Roads is also home to a government-run shipyard, Norfolk Navy Yard, has created stiff competition between private and public actors within the industry network.

By 1996 it was evident that the shipbuilding network needed to diversify, in relying on the military so much it had slowed the growth of the region. The company opted to turn into an independent corporation that year and began trading on the New York Stock Exchange. Then, in 2001, Newport News Shipbuilding merged with Northrop Grumman to create a $4 billion enterprise. Together, the merged companies aim to strengthen their core defense business, effectively manage technology insertion and systems integration, and become the life cycle manager for its products.

Currently, international firms such as Wartsila Lips, Inc. (from Stockholm and operating in Chesapeake) and Norship (from Cairns, Australia and operating in Norfolk) have also broken into the regional shipbuilding network. Ocean Marine, Inc. is a Portsmouth-based firm incorporated in 1989 that specializes in the repair of relatively smaller (under 80 feet long), private yachts. The company has expanded since then to service mega-yachts (some up to 200 feet long) in addition to the 1,500 boat repairs that it does annually. The continued growth of existing shipyards such as this one reflects a shift, however small, in the orientation of the industry network.

2. commercial shipping

Over 95% of all shipping companies come through the Port of Hampton Roads at some point, thus linking the port, and the region, to over 250 other ports worldwide. The fact that one of the world’s largest shipping companies prefers Hampton Roads to other metropolitan port cities shows how integrated planning and regional cooperation to improve the quality of life can win hundreds of new jobs for a metropolitan area. In 2001 the Zim-American Israeli Shipping Company relocated to Norfolk, Hampton Roads from New York City and brought 235 available jobs and a $6.2 million dollar investment to

the region.\textsuperscript{70} According to Governor Gilmore as quoted in a HREDA press release, Hampton Roads was chosen as the company’s new location in part because Zim recognized that this is a metropolitan region that appreciates cultural diversity, an issue of importance to this Israeli firm. Gilmore also granted $100,000 to the Development Authority of the City of Norfolk from the Governor’s Opportunity Fund so that the city (as well as the region through worker training programs) could assist Zim-American in its establishment.\textsuperscript{71} As of 2001, the shipping company was ranked as the 9\textsuperscript{th} largest worldwide.

An example of how metropolitan areas compete for business is evident in the growth of Hampton Roads’ shipping network. Asian firms generally operate in West-coast ports, but a dockworkers’ strike in September and October of 2002 forced many such companies to find an alternative route into the United States.\textsuperscript{72} Traveling down through the Panama Canal and calling on the Port Hampton Roads became a cost-effective solution for many firms, and they continued to use this route long after the West-coast strike had been resolved. In the first half of 2003, for instance, general cargo tonnage was still 15\% above the tonnage for the same period in 2002.\textsuperscript{73}

3. Automotive Manufacturing

The manufacturing network attracts more international firms than any other network in Hampton Roads (see Table 8). Companies such as the German-based Wilhelm Wagner GmbH have made Chesapeake the North American Headquarters, citing “the reception and support (they) have received from the local business community,” as a factor in their final location decision.\textsuperscript{74} Italian-based Lovato Electric, S.p.A. also chose Hampton Roads as the location for its North American Headquarters. The firm specializes in the manufacturing of electromechanical components for industrial machines and motors, and employs about sixteen people in its Chesapeake plant.\textsuperscript{75}

American firms have also taken notice of Hampton Roads – Ford Motor Company has been operating in Norfolk since 1925.\textsuperscript{76} With 2,400 workers, Ford’s Norfolk plant is the largest automotive manufacturing facility in the state. About a quarter of the world’s

\textsuperscript{71} ibid
\textsuperscript{72} The State of the Region, 2004. Old Dominion University. \url{http://www.odu.edu/bpa/forecasting/chapter1.pdf} Accessed on 7/20/04
\textsuperscript{73} ibid
Ford F-150 trucks are produced there (210,000 in 2002 alone) as well 14% of Ford’s national sales revenues, which makes the factory and the region that supplies its workers very important to Ford. Aside from the direct jobs created by the factory, other automotive supply companies like TDS US and Visteon have been drawn to Hampton Roads in order to serve Ford. The region has seen the rise of 117 new auto and parts manufacturers since 1993, and statewide investment was over $2.1 billion for the last decade. As for regional cooperation in keeping important auto makers such as Ford in Hampton Roads, Governor Gilmore granted $3 million and the Norfolk Industrial Development Authority granted another $8 million over 20 years to be used towards job creation. The result of these two incentives was a total increase of 200 jobs as the Ford factory expanded.77

In 2002 TDS US established a factory in Hampton Roads after the region successfully competed with Michigan and North Carolina for the plant and the 210 new jobs it created. State-level incentives such as the Enterprise Zone tax credits and rail access funding from the Virginia Department of Rail and Public Transportation encouraged the company to establish its first automotive support center outside of its home state of Michigan. In a HREA press release, President and CEO of TDS US said the area “offers us the opportunity to continue to build a qualified and motivated workforce while working cooperatively with state and local agencies.”78

4. tourism

The tourism network in Hampton Roads draws its strength from two natural regional assets – its rich history and its natural, deep port. These two things feed off each other to make the region an increasingly popular destination for cruise ships. According to the Hampton Roads Chamber of Commerce, a 2,000-passenger cruise ship and its crew generates on average $200,000 in on-shore spending per port.79

Projections for 2004 estimate that the region will host 114,000 cruise passengers, more than double the 50,000 passengers who passed through Hampton Roads in 2003. In 2002, $115 million was spent on direct purchases in Virginia by cruise travelers, and they generated 1,872 jobs and $80 million in wages that year.80 When looking at state-wide tourism, 18% of all revenue brought in by visitors to Virginia comes from Hampton Roads – this totals $2.4 billion.81

The rapid growth and development of the cruise ship industry is what sparked the development of a new cruise-ship terminal in Norfolk in 2003.82 This $30 million

77 ibid
80 ibid
investment was designed to manage the increased flow of cruise ships to the region, as well as attract new ships. The growth of the tourism industry involved more than just spending millions of dollars in new investments, however. Spreading the word about what the region as a whole has to offer has recently become an issue; places like Virginia Beach, Colonial Williamsburg, and Jamestown, are better known to travelers than Portsmouth is, for example. Public-private marketing initiatives have led the way in selling the region of Hampton Roads as a tourist destination. CI Travel, a travel and cruise agency in the region since 1974, united four cruise lines (Carnival, Celebrity, Holland America, and Radisson), four cities (Norfolk, Virginia Beach, Portsmouth, and Hampton), the Colonial Williamsburg Foundation, Nauticus, and Norfolk International Airport to create the Norfolk Cruise Guide.83 The guide provides information on cruise itineraries and local attractions, and it was distributed to 1.4 million homes from Washington, D.C. to North Carolina.

5. Wholesale Packaging & Distribution

17% of the nearly 150 international firms in Hampton Roads specialize in distributions (see Table 8). Domestic companies, such as Hudd Distribution Services (a subsidiary of Maersk Logistics), have also established their presence in the region through multi-million dollar investments. Hudd Distribution expanded its 225,000 square foot facility in Chesapeake by an additional 80,000 square feet in 2003 in order to accommodate new clients such as Target. The company was established in Hampton Roads in 2001, and already serves big-name retailers such as Wal-Mart Stores and Heineken.84

Combined, 9% of the region’s major employers are in either wholesale packaging or distribution networks.85 QVC, Inc. and Jensen Activewear, Inc. both expanded their Hampton Roads distribution centers in 2003, while Fleet Imports, 84 Lumber Company, and FLEXA Furniture, Inc. established new distribution centers that same year.86 Dollar Tree and Cost Plus are also based in Hampton Roads.

6. High Technology / Software Development / Telecommunications

Hampton Roads is the second largest technology center in Virginia in terms of its share of both employment and firms in the state. Northern Virginia dominates the industry, with 60.4% of all technology jobs and 57.4% of all firms, but Hampton Roads still claims much of what is left – 13.2% of state jobs and 15.1% of state firms as of

86 ibid
At the regional level, technology firms only make up 1% of all companies in Hampton Roads, but this relatively small network generates 7.5% of all private-sector employment and 11% of private sector income. Two major companies in the network are Symantec (the company that created Norton Anti-Virus software), which has 300 employees working on product development for Norton Internet Security and pcAnywhere, and Remtech Services Inc. (600 employees nationwide, with Newport News as the corporate headquarters).

Nonprofit organizations such as the Hampton Roads Technology Council (HRTC) have helped the network grow by marketing the region as a desirable location for companies to move to, creating an infrastructure that enhances the competitiveness of existing firms, and devising methods to attract and retain skilled technology workers in the region. The HRTC is also active in the development of a regionally-based and technology-oriented legislative agenda. At the state level, the organization coordinates with other regional technology groups and the Virginia Technology Association (VTA) to create a unified, state-wide agenda.

The funding that technology-oriented organizations receive reflects their level of integration with the region. The Hampton Roads Technology Incubator (HRTI), for instance, is supported by the cities of Norfolk, Hampton, and Virginia Beach as well as NASA and the Virginia Center for Innovative Technology. The HRTI was established in 1998 as part of an initiative led by NASA’s Langley Research Center to promote the growth of small technology businesses and encourage their cooperation with local universities.

Since 1995, business formation in the technology network has been four times greater than new business formation in other sectors, Virginia Business Online reported from the Virginia Employment Commission. More recent employment growth in the network benefited from the Langley Research Center’s launching of a National Institute of Aerospace in 2003. Over the Summer of 2004, Hampton Roads expects to connect to a national fiber-optic grid called the National LambdaRail that will allow users to transmit data at a rate 100 times faster than is currently possible. The LambdaRail would replace costly supercomputers by allowing information to be stored and shared across multiple computers when working on large experiments. Old Dominion University, its related Virginia Modeling Analysis and Simulation Center (VMASC), and the US Joint Forces Command are the first institutions scheduled to connect to a smaller, preliminary grid. According to Mark Phillips, senior research scientist as VMASC, “the local grid alone would be attractive to defense contractors and high-tech companies, even before it’s tied into the national grid.” Unnamed telecommunications companies are also negotiating with Hampton Roads officials to help connect the region to the national grid.

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88 ibid
89 ibid
90 From HRTI website. “History.” [http://www.hr-incubator.org/history.html](http://www.hr-incubator.org/history.html) Accessed on 7/19/04
Table 6: Breakdown of the Hampton Roads Employment by Sector, February 2004

<table>
<thead>
<tr>
<th>Sector</th>
<th>Employment in Thousands</th>
<th>% of Labor Force</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation and Public Utilities</td>
<td>25.1</td>
<td>3.5</td>
</tr>
<tr>
<td>Finance Insurance and Real Estate</td>
<td>37.9</td>
<td>5.2</td>
</tr>
<tr>
<td>Construction and Mining</td>
<td>45.2</td>
<td>6.2</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>59.7</td>
<td>8.2</td>
</tr>
<tr>
<td>Government (Federal, State and Local)</td>
<td>150.7</td>
<td>20.7</td>
</tr>
<tr>
<td>Trade (Wholesale and Retail)</td>
<td>108.2</td>
<td>14.9</td>
</tr>
<tr>
<td>Leisure and Hospitality</td>
<td>71.9</td>
<td>9.9</td>
</tr>
<tr>
<td>Information</td>
<td>16.2</td>
<td>2.2</td>
</tr>
<tr>
<td>Services</td>
<td>211.9</td>
<td>29.2</td>
</tr>
</tbody>
</table>


Table 7: Breakdown of the Hampton Roads Employment by Community, 2003 (Excluding Surry County)

<table>
<thead>
<tr>
<th>Community</th>
<th># of Employers</th>
<th># of Jobs</th>
<th>Community</th>
<th># of Employers</th>
<th># of Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chesapeake</td>
<td>4,451</td>
<td>85,314</td>
<td>Norfolk</td>
<td>5,413</td>
<td>147,900</td>
</tr>
<tr>
<td>Gloucester County</td>
<td>875</td>
<td>9,294</td>
<td>Poquoson</td>
<td>186</td>
<td>1,798</td>
</tr>
<tr>
<td>Hampton</td>
<td>2,433</td>
<td>60,291</td>
<td>Portsmouth</td>
<td>1,667</td>
<td>41,139</td>
</tr>
<tr>
<td>Isle of Wight City</td>
<td>584</td>
<td>12,035</td>
<td>Suffolk</td>
<td>1,217</td>
<td>22,009</td>
</tr>
<tr>
<td>James City</td>
<td>1,159</td>
<td>20,784</td>
<td>Virginia Beach</td>
<td>10,103</td>
<td>169,329</td>
</tr>
<tr>
<td>Mathews County</td>
<td>205</td>
<td>1,547</td>
<td>Williamsburg</td>
<td>739</td>
<td>19,122</td>
</tr>
<tr>
<td>Newport News</td>
<td>3,567</td>
<td>94,993</td>
<td>York County</td>
<td>1,193</td>
<td>16,642</td>
</tr>
</tbody>
</table>


Table 8: International Firms in Hampton Roads by Sector

<table>
<thead>
<tr>
<th>Sector</th>
<th>% of all international firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>52%</td>
</tr>
<tr>
<td>Services and Sales</td>
<td>31%</td>
</tr>
<tr>
<td>Distribution</td>
<td>17%</td>
</tr>
</tbody>
</table>


VI. The Future Goals and Challenges of Hampton Roads

1. Research and Development

As a southeastern metropolitan area, Hampton Roads has to compete with powerful research hubs like North Carolina’s Research Triangle in the Raleigh-Durham-
Chapel Hill region. Currently, the bulk of research and development is organized by companies related to the defense industry and the federal government. For instance, large centers of R&D in the region include NASA’s Langley Research Center, with 800 acres dedicated to aviation and space research, and the Thomas Jefferson National Accelerator Facility, which is run by the US Dept of Energy to conduct basic and applied atomic research.

The 2000 State of the Region study conducted by Old Dominion University highlighted the importance of the “spillover” effect in fostering a dynamic technology industry, and cited economists Paul Krugman and David Birch as specialists who have come to the similar conclusion that universities play a crucial role in creating knowledge “spillovers.” There is still much work to be done in improving the quality and competitiveness of the Research Universities in Hampton Roads, however. According to Robert Sharak, Director of Special Projects for the Hampton Roads Partnership, none of the region’s eight colleges and universities breaks the top 100 when ranked by research expenditures. Hampton Roads’ technology network would benefit from improvements in private-sector research and development, especially since Chmura Economics found that 87% of all high-technology jobs are located around metropolitan areas with research institutions. The current problem facing the region is that although innovative research is taking place, it is defense-related and thus not shared with or not applicable to the regional economy – there is no “spillover effect.”

The Hampton Roads Partnership 2004 Action Plan took note of this challenge to regional economic development created by the lack of research and development. In its report, the HRP proposes to assist members of the Hampton Roads Research Partnership (HRRP) through funding and strategic planning efforts. The HRRP has been in operation with the help of the HRP since 2000 and is made up of the region’s universities and two federal labs. Its goals are to increase research capabilities through increased funding and the active recruitment of scholars, and to become more engaged with the regional economy through the identification of industry networks.

As part of making research a priority of the Hampton Roads metropolitan economic strategy, Old Dominion University has undertaken a $44 million plan for the renovation and construction of new research and teaching facilities. The funding came after a referendum on the issuance of state bonds to support Virginia’s public colleges and universities. The total amount of funding designated for Hampton Roads institutions was projected to surpass $200 million, according to Old Dominion University. Ironically, the boost to research and development through investments in higher education came on the same day (November 5, 2002) that residents of Hampton Roads voted down the

95 ibid
regional transportation referendum – the two issues were on the same ballot.\textsuperscript{98} The statewide education referendum passed by 2-1, which is how much the transportation referendum lost by, because such investments in education are rarely defeated in Virginia, the proposal would not raise taxes, and its projects were all slated to begin within five years. The transportation referendum lacked all of these advantages, in addition to being confronted with a unified opposition group.

2. Transportation

Hampton Roads Transit (HRT), founded in 1999 from the merger of two smaller transportation organizations, is responsible for public transportation in the region. As of 2003, HRT manages the operations of 550 buses, paratransit vehicles, ferryboats, and related support equipment.\textsuperscript{99} In the future, HRT will have to address congestion problems if the region wishes to maintain a good quality of life. As the Hampton Roads Partnership Action Plan of June 2004 explained, the region “is economically connected. It is imperative that (we) provide the infrastructure that better connects the physical landscapes of our region…. We are one region and we must perform as one in order to maintain good jobs and a superior quality of life.”\textsuperscript{100}

Transportation has been the biggest complaint of area residents over the last five years, according to regional surveys cited by the HRP Action Plan. The response to improvement demands has come in the form of the 2026 Regional Transportation Plan - an $8 billion plan that involves construction & maintenance of highways, light rail, buses, and bike lanes.\textsuperscript{101} To encourage citizen participation, the HRT website collects commentary on current planning issues such as the Peninsula Rail Transit Project that is one part of the 2026 Plan.

Another aspect of the transportation plan is the Intelligent Transportation System (ITS) Strategic Plan 2004, which takes a regional approach to emergency management, systems integration, transportation management, systems management, and ITS program development and management.\textsuperscript{102} As of July, 2004, the ITS Strategic Plan had not yet been formally adopted, although $116million have been allocated into the budget of the approved 2026 Plan for ITS funds. This is less than 2% the total 2026 Plan Budget, with the majority of the funds divided into highway improvements (81% or $7.2 billion) and


\textsuperscript{101} From HRPDC website. 2026 Regional Transport Plan PowerPoint presentation. http://www.hrpdc.org Accessed on 7/20/04

\textsuperscript{102} From HRPDC website. http://www.hrpdc.org/transport/presentations/hr%20its%20Strategic%20Plan%202004-%20MPO.pdf Accessed on 7/21/04
transit (17% or $1.5 billion) using money that comes mostly from the Virginia Department of Transportations (VDOT), additional state and federal funds, and tolls.\textsuperscript{103}

Absent from the approved 2026 Plan are projects such as the “third crossing,” a $4 billion highway project to connect Hampton to Norfolk and Virginia Beach, and the midtown tunnel, which would connect Norfolk and Portsmouth. These projects, as well as several other highway expansions, were excluded from the plan after a referendum held in November of 2002 failed to approve the necessary funding.\textsuperscript{104}

The outcome of the transportation referendum was a blow to both specific transportation initiatives and the goals of the region’s metropolitan economic strategy. As early as November, 1999, a state task force under Governor Gilmore recommended that regional authorities be given the right to tax their citizens for the purpose of regional transportation improvements so long as such an action is voted on by the community. The current governor of Virginia, Mark Warner, even campaigned in favor of such regional taxation power in 2001. Then, in February of 2002 the state Senate approved a bill by 32-8 to allow both Northern Virginia and Hampton Roads residents to vote on a sales tax increase for the improvement of roads and public transport. In Hampton Roads, the agreed-upon increase was one cent for each dollar, so area residents would now pay a 5.5% sales tax. If the referendum had passed, it would have raised an estimated $7 billion over 20 years, according to the Washington Post.

To respond to opponents that feared the new funds would be misused, Governor Warner, who publicly supported the referendum, established two citizen audit committees to guarantee that money raised from the increased sales tax would be used only in the previously specified transportation projects. Unfortunately the combination of the fact that the projects were explained well before the referendum and the relatively diverse nature of Hampton Roads residents led people to vote the referendum down. For instance, while some highways suffer from bottlenecks and connections between the Peninsula and Southside come to a standstill, traffic in the rest of suburban Hampton Roads is seen as a hassle that is not bad enough to warrant higher taxes.\textsuperscript{105} Politically, the referendum’s opponents came from both the right and the left – environmental groups claimed the new roads would only worsen urban sprawl while anti-tax conservatives cited mistrust of the state and advocated that a solution be found using money that the region, and the state, already has.

According to the Winter 2004 HRPDC newsletter, the 2026 Plan was approved by the Hampton Roads Metropolitan Planning Organization (MPO), a federally mandated planning organization which must approve a new 20-year transportation plan every three years. The most expensive highway and tunnel plans were removed after the referendum failed, and now 17% of the necessary funding is expected to come from tolls placed on three new road projects. The same newsletter estimated that the Virginia Department of Transportation’s (VDOT) funding for Hampton Roads will increase by 4% annually over

\textsuperscript{103} From HRPDC website. 2026 Regional Transport Plan PowerPoint presentation. \url{http://www.hrpdc.org} Accessed on 7/20/04
\textsuperscript{104} ibid
the planned twenty-three year period – due to maintenance costs and inflation that means the purchasing power of the funds available for new construction will decrease.

The planning is already in place, but for transportation to improve there needs to be enough funding to implement the recommendations of the HRPDC. A second attempt was made at securing money for transportation at the state level in early 2003; state senators pushed for $800 million per year to be added for transportation projects in the new budget. A lack of cooperation between Congress and the Senate forced legislators to drop the transportation funds in March, however, in order to reach an agreement on the budget.\textsuperscript{106}

3. Fostering Regional Citizenship

The HRP Action Plan from June 2004 uses William R. Dodge’s definition of regional citizenship as the mutual understanding among residents that “they need to develop their own skills, as well as their capacity to work with other citizens to shape balanced growth, overcome intercommunity disparities, or build regional community.” The recent HRP Quality of Life survey showed that “identity regionalism” is present among Hampton Roads residents, but there is still room for improvement. For instance, 80\% of respondents identify their economic situation with the region versus with their community alone, and 19\% of respondents cited regional cooperation as the way to improve the Hampton Roads economy. At the same time, when asked about which shortcomings should be addressed by the Hampton Roads leaders and elected officials, 15\% of respondents named the lack of regional cooperation. This was the second largest response, behind transportation issues (combining road congestion, transportation generally, and lack of transit this category received 60\% of all responses).

Future methods to foster regional citizenship are devised by the Hampton Roads Partnership and the Hampton Roads Planning and Development Committee. In the Action Plan, for example, steps are laid out for how to generate enthusiasm for the regional economy in the same way that many people support their home team in the world of professional sports. The various steps are to produce a useful list of current joint activities or services between Hampton Roads communities, encourage local government strategic plans to include regional goals, promote local governments to include regionally oriented questions in its citizen polls, disseminate information about the region to local government employees and civic groups, and finally include regionalism as a topic in community leadership development programs.\textsuperscript{107}

Many people in the region believe that citizens would be more likely to support their regional economy if there were a nationally recognized sports team in the area. Not only would professional sports bring a new source of wealth to the region through new direct jobs, but it would also put Hampton Roads on the map as a metropolitan area ready to compete with similar regions across the nation. Beginning in January of 2004, two private investors have begun bidding for the Montreal Expos to relocate its financially


\textsuperscript{107} From the Hampton Roads Partnership Action Plan, June 2004.
troubled team to Norfolk. Jason Osbourne and William Somerindyke, Jr. founded the Norfolk Baseball Co and secured private investments and state funds to potentially build a baseball stadium. Beginning in May, 2004, the company began selling advance ticket deposits to show that the region has a high enough demand for a major league team.\(^{108}\)

In an article from the Virginian – Pilot Newspaper, Norfolk mayor Paul Fraim stressed what a major league baseball team would do for regional citizenship. “If the Expos do come to Hampton Roads, it will change the community's psyche. An area with a "we're not worthy" attitude, one whose citizens view Hampton Roads as a group of disparate cities, would find itself with a team to rally around...Major league sports is one of the few things that can inspire a region, can actually draw people together." Indeed, the Hampton Roads Chamber of Commerce, the HRP, the Virginia Peninsula Chamber of Commerce, and the Downtown Norfolk Council are all partners in the campaign for the Expos.\(^ {109}\) As of July 2004, a decision had not yet been made regarding the future of the Expos; Hampton Roads is competing with Washington, D.C., Portland (OR), Northern Virginia, Las Vegas, and Monterrey, Mexico for the team.

Even if the Expos do not move to Hampton Roads, the region has a minor league baseball team that could serve the same purpose of building identity. Norfolk has been home to a minor league team whose name, league, and ownership have varied over the years since its founding in 1961.\(^ {110}\) Previously called the Tidewater Tides, the Norfolk Tides experienced three consecutive years of franchise record-breaking ticket sales from 1993 to 1995. 1997 marked the team’s fifth consecutive season with an attendance of over 500,000 fans, and in 2003 the team had an average attendance of 7,399 fans per home game. This number placed the Tides 11\(^{th}\) out of 46 teams playing in the various AAA leagues (Norfolk is in the International League), but trails well behind the comparable Louisville Bats’ average attendance of 9,307 people per game.\(^{111}\)

The Tides are a part of the New York Mets franchise, and in 2003 they averaged an attendance of about 62% capacity at their Harbor Park stadium, which seats 12,000. This number was calculated based on the average attendance for a home game divided by the stadium’s seating capacity—the Bats sold 73% of available seats on average that same year in a stadium that fits 13,000 people. Although attendance shows that Hampton Roads residents are supportive of their team, proponents of the Expos argue that a Major League team would bring more national recognition.

The Tides are not broadcasted on local television, and league television coverage is generally scarce. As Paul Fraim said in an interview with the Virginian – Pilot newspaper, “it’s one thing to play the Pawtucket Red Sox and it’s another thing to bring the New York Mets or the Atlanta Braves or the Cardinals, Cubs or Baltimore Orioles to town, as would happen in inter-league play. You’re talking about a completely different experience in a completely different type of facility...Once they’re here, they will


\(^{109}\) ibid

\(^{110}\) From Norfolk Tides website. “About.” \ http://norfolktides.com/team/about/ \ Accessed on 7/28/04

\(^{111}\) From Official Minor League Baseball website. \ http://www.minorleaguebaseball.com/pagebank/?id=521 \ Accessed on 7/28/04
become the state’s team. We think it makes sense that people will come from Charlottesville, that people will come from Richmond and North Carolina.”

4. Funding

The effect that the Regional Competitiveness Act had on the development of a metropolitan economic strategy in which residents began to see themselves within a greater metropolitan framework reflects the importance of state funding. Virginia, however, faced a $2.1 billion budget deficit when Governor Warner came to office in 2002 due to the fact that the fiscal year marked the largest decrease in Virginia’s tax revenues in its records. As of January, 2003, Warner and the General Assembly had cut $858 million. The remainder of the deficit was closed through fee increases, the use of Virginia’s “rainy day fund,” and program cuts such as the HRP, the HRRP, the HRTI, the HRTC, and the CIT (Center for Innovative Technology). The CIT is a statewide organization that provided funds to regional technology groups, but its $7.65 million budget was cut by 25% in July 2004.

Some of the first cuts were made in regional programs; in 2002, the Advisory Board of the Regional Competitiveness Act lost four-fifths of its funding. By February of 2003, the program had been eliminated altogether. As Governor Warner said about the budget cuts to PBS newscaster Ray Suarez, “we were operating on a fairytale existence for a while. We were basically cutting our taxes dramatically, increasing our spending dramatically at the same time, and assuming the go-go days of the ’90s was going to last forever. Well, that fiscal house of cards collapsed.” Warner also recognizes the importance of “streamlining state government,” which means either the consolidation or elimination of many agencies. For instance, Warner cited the state’s various technology agencies as a sector of government which could be run more efficiently – unfortunately for Hampton Roads this has meant the gradual phasing out of state support. The Hampton Roads Partnership, which both the Research Partnership and the Technology Incubator rely on for funds to supplement what comes from the state, was also eliminated from the proposed 2004 budget. The majority of HRP’s funding came through the Hampton Roads allotment in the Regional Competitiveness Act – a value determined by population.

State support via the Competitiveness Act had decreased from 2001, when the HRP received $2.3 million, to $1.9 million in 2002, to zero once the program was eliminated.

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113 From PBS. http://www.pbs.org/newshour/bb/budget/jan-june03/govs_01-03.html Accessed on 7/27/04
116 From News Hour Online. http://www.pbs.org/newshour/bb/budget/jan-june03/govs_01-03.html accessed on 7/27/04
The HRP is not at risk because of aid from municipalities, the business community, and member operations, but the initiatives that it sponsors are.\textsuperscript{118}

Metropolitan economic strategies demand creative approaches to the region’s needs, and for organizations like the Hampton Roads Technology Council that lost all public funding in July of 2004 creativity may be the key to survival. The HRTC, for instance, will hold conferences on sensors in July and September of 2004 to help promote its business members and their products to military and government buyers. The conference is a part of a HRTC initiative known as the Sensor Science and Technology Forum, and is run in partnership with Advanstar Communications, Inc.\textsuperscript{119} The partnership ensures that the HRTC does not have to pay out of pocket for the conference, and instead the organization is responsible for staffing and organizing the event. Through the conference, the HRTC is showing how an initiative can continue to pursue its goals despite severe budgetary limitations.

VII. Conclusion

The Hampton Roads metropolitan area, in the course of the last 25 years, has gone from being a region of communities that compete with each other to a region where communities work together towards a broad range of common goals. The first steps, such as the unification of the various privately owned ports into the Port of Hampton Roads in 1981, were narrowly focused on one specific aspect of life in the region. The region faced obstacles such as community rivalries over the water supply, political rivalries over whether to support public or private shipbuilding, and media rivalries that highlighted the Peninsula/Southside divide. Initially, the region was united into one statistical area in order to attract more businesses. One of the first steps taken toward cooperation among elected officials for the sake of generating economic growth was the founding of the Hampton Roads Chamber of Commerce.

The state of the “manic-depressive economy,”\textsuperscript{120} encouragement from the state level, and positive examples from earlier regional groups like the USO and the Cultural Alliance helped turn Hampton Roads’ limited regionalism into a metropolitan economic strategy that involved cooperation between local business, community, political, and university leaders. Working together, members from all of these aspects of society formed the Hampton Roads Partnership in 1996 to provide leadership on strategic issues and generally improve the region’s competitive position in the global economy.\textsuperscript{121} Since then, the HRP has identified and invested in the region’s assets with the help of other planning organizations like the HRPDC and Smart Region Hampton Roads.

To succeed in the future, organizations will have to continue to cooperate with one another to devise new ways to improve the region’s weaknesses and make the most out of very limited funding. The HRP recognizes this and states that it believes in the

\textsuperscript{118} ibid
need to “engage in activities that foster economic opportunities leading to a higher standard of living for all residents of Hampton Roads and stronger, more agile communities that can quickly respond to changes in a dynamic economic environment.”122

122 ibid
### VIII. Appendix: Sample Companies in Hampton Roads

<table>
<thead>
<tr>
<th>Target Cluster</th>
<th>Sample Companies</th>
<th>Locality</th>
</tr>
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<tbody>
<tr>
<td>Shipbuilding and Repair</td>
<td>Wartsila Lips Inc.</td>
<td>Chesapeake</td>
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<td></td>
<td>NORSHIPCO</td>
<td>Norfolk</td>
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<td></td>
<td>Ocean Marine Inc</td>
<td>Portsmouth</td>
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<tr>
<td>High Technology / Software Development / Telecommunications</td>
<td>Init Gmbh</td>
<td>Chesapeake</td>
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<td></td>
<td>Mymic LLC</td>
<td>Portsmouth</td>
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<td></td>
<td>Keane Inc</td>
<td>Virginia Beach</td>
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<tr>
<td>Production / Assembly &amp; Testing</td>
<td>Amadas Group</td>
<td>Suffolk</td>
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<td></td>
<td>Plasser American</td>
<td>Chesapeake</td>
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<td></td>
<td>STIHL Inc</td>
<td>Virginia Beach</td>
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<tr>
<td>Business Services (Engineering, Research, Professional)</td>
<td>TAF Group</td>
<td>Virginia Beach</td>
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<td></td>
<td>Shriver &amp; Holland Assoc.</td>
<td>Norfolk</td>
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<td></td>
<td>HBA Architecture and Engineering</td>
<td>Virginia Beach</td>
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<tr>
<td>Maritime Related Operations</td>
<td>Zim-American Israeli Shipping</td>
<td>Norfolk</td>
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<td></td>
<td>CMA /CGM</td>
<td>Virginia Beach</td>
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<td></td>
<td>Maersk Lines Ltd</td>
<td>Norfolk</td>
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<tr>
<td>Wholesale Packaging / Distribution</td>
<td>Dollar Tree</td>
<td>Chesapeake</td>
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<tr>
<td></td>
<td>Target</td>
<td>Suffolk</td>
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<tr>
<td></td>
<td>Cost Plus</td>
<td>Isle of Wight</td>
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<tr>
<td>Automotive and Related</td>
<td>Ford Motor Co.</td>
<td>Norfolk</td>
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<td></td>
<td>TDS Inc.</td>
<td>Chesapeake</td>
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<td></td>
<td>Walker Mfg. Co. (Tenneco)</td>
<td>Virginia Beach</td>
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<tr>
<td>Technical Support Centers (Insurance, Financial, Management, Manufacturing, Hospitality)</td>
<td>USAA</td>
<td>Norfolk</td>
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<td></td>
<td>GEICO</td>
<td>Virginia Beach</td>
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<td></td>
<td>Towers Perrin</td>
<td>Chesapeake</td>
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<tr>
<td>Food Processing</td>
<td>Sara Lee Coffee &amp; Tea</td>
<td>Suffolk</td>
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<tr>
<td></td>
<td>Smithfield Foods</td>
<td>Isle of Wight</td>
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<td></td>
<td>Birdsong Peanuts</td>
<td>Suffolk</td>
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<tr>
<td>Defense Contractors / Homeland Security</td>
<td>Lockheed Martin</td>
<td>Virginia Beach</td>
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<tr>
<td>(The above also belong to other industrial classifications)</td>
<td>Raytheon</td>
<td>Norfolk</td>
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<tr>
<td></td>
<td>General Dynamics</td>
<td>Suffolk</td>
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<tr>
<td>Education &amp; Knowledge Creation</td>
<td>As a catalyst for patent generation and future technologies, the pursuit of sophisticated research facilities places metro areas at a distinct advantage for the attraction of commercial ventures (i.e., Biotechnology, Aerospace, Marine Science)</td>
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