OK, Now What Should We Do?

OK, NOW WHAT SHOULD WE DO? IS IT RICHARD FLORIDA'S "CREATIVE CLASSES" OR INSTEAD "BACK TO BASICS" THAT SHOULD GUIDE OUR REGIONAL ECONOMIC GROWTH?

Approximately 45 percent of the economic activity in Hampton Roads is dependent on defense spending. Beginning with the first State of the Region report in 2001, we have pointed out that our region is exceptionally vulnerable to any reductions in defense spending, or changes in the mix of that spending.

Among our defense spending vulnerabilities during this decade are:

- the loss of one or more carrier battle groups now homeported here;
- reduced ship construction and repair activity in Newport News, Norfolk and Portsmouth;
- the loss of air wing squadrons now sited at Oceana Naval Air Station; and
- a continued decline in the number of active-duty military personnel posted in Hampton Roads.

Any one of these developments would constitute bad news; the fear that one or more might transpire has infused new energy into regional economic development discussions. These discussions usually devolve to a simple question: How can we stimulate our regional economy so that it grows faster and creates more jobs?

This is an important question and often references other regions. Why have the economies of metropolitan areas such as Austin, Texas, and Raleigh-Durham, N.C., grown so much more rapidly than regions such as Rockford, Ill., and Flint, Mich.? The traditional answer to this question has been straightforward. Austin and Raleigh-Durham have grown more rapidly than Rockford and Flint because they have superior "human capital" (in education attainment and skills training), more abundant technology, enhanced infrastructures, more productive labor relations and more intelligent tax and regulatory policies.

It is easy to understand this view of economic development – regions that attract and retain more smart and talented people, foster technological change, invest in supportive infrastructure such as transportation, avoid excessive increases in labor costs and pursue intelligent tax and regulatory policies grow faster than those that don't.

The major problem with this traditional view of economic development is that it does not promise regions a quick fix. Decades of conscientious investments in education, technology and infrastructure are required to move a region to the economic forefront. It takes many years to improve an urban school system, increase the flow of patentable innovations, plan and build new bridges and tunnels, cultivate productive labor relations and optimize the nature of taxes and regulations. The economic dynamism of Austin and Raleigh-Durham did not appear overnight, and Rockford and Flint did not fall into their economic holes in a single year, or even a single decade.

There are, however, other views on how regions can spur their economic development; none has received more attention than the collection of ideas propagated by Richard Florida, who may be the uncrowned king of regional economic development gurus. Based on the huge number of books Florida has sold and his sought-after status as a speaker, he has had more influence on regional economic development strategies than anyone else since the turn of the century.

Over the past 15 years, Florida, who now is based at the University of Toronto and also is a senior editor at The Atlantic magazine, has put forward a set of highly seductive and provocative hypotheses about the sources of regional economic growth. The core of his ideas is set forth in "The Rise of the Creative Class" (2002), "Cities and the Creative Class" (2005), "The Flight of the Creative Class" (2005) and "Who's Your City?" (2008).

Florida argues that economic growth today is powered by human creativity. Hence, metropolitan areas that prosper are those able to attract and retain the highest proportions of the members of the "creative class" – scientists and engineers, to be sure, but also architects, artists, musicians, actors and perhaps even a few economists. What is the common thread among these people? They are knowledge workers who share a common spirit embodying individuality, merit, diversity, openness, tolerance and, of course, creativity.

Florida contends that:

- The creative class is moving away from traditional corporate communities to what he terms "Creative Class Centers."
- Creative Class Centers not only have high concentrations of creative people, but because of them, also host many innovative, technologically advanced industries that exhibit high rates of growth.
- Creative Class Centers prosper more because of the creative people who want to live there and less because of economic development incentives offered by cities, regions and states.
- Members of the creative class favor communities with abundant high-quality amenities and experiences, those that value diversity and those that allow creative class members to pursue their own individual identities. The major magnet for the members of the creative class, then, is not this week's listing of job vacancies, but instead environments that are eclectic and diverse, visibly tolerant and open to new ideas.

Florida puts it this way:

"Regional economic growth is powered by creative people, who prefer places that are diverse, tolerant and open to new ideas. Diversity increases the odds that a place will attract different types of creative people with different skill sets and ideas. Places with diverse mixes of creative people are more likely to generate new combinations. Furthermore, diversity and concentrations work together to speed the flow of knowledge. Greater and more diverse concentrations of creative capital [in turn] lead to higher rates of innovation, high-technology business formation, job generation and economic growth." ("The Rise of the Creative Class," p. 249)

These hypotheses are easily understood and without question have proven to be magnetic. Anyone who attends the meetings of regional leadership organizations in Hampton Roads has heard individuals advocate some or all of Richard Florida's ideas. Independent of the empirical validity of his hypotheses, it appears that many of those who lead organizations, select stories, write editorials, teach classes, give sermons and steer public opinion genuinely would like those hypotheses to be true. Florida's recipe for economic development represents the way many would prefer the world to operate. A little less Adam Smith and a little more Richard Florida.

A Bit More Detail About Richard Florida's Ideas

Florida and the traditional economic development proponents agree on several points. Both believe that human capital in the form of accumulated workforce education and training is important. Florida, however, innovates by subdividing human capital into three categories he asserts are especially critical for economic development: "Bohemians," gays, and immigrants/foreign born.

Florida's Bohemians are writers, designers, musicians, actors, directors, painters, sculptors, photographers and dancers. His "gay" designation includes lesbians, gays, bisexuals and transgender individuals. Immigrants/foreign born are those classified as such by the U.S. Census.

The notion of a "Bohemian" has a long history, but was revivified and refined by New York Times columnist David Brooks in his book "Bobos in Paradise" (2000). Brooks introduced the idea of "Bourgeois Bohemians," or "Bobos." These are well-educated people, middle and upper class, who dabble in art, theater, politics, food and living styles often associated with Bohemians. Even so, these individuals are unlikely to be mistaken for Jack Kerouac. They may, however, have supplied some of the inspiration for Florida's "creative classes."

According to Florida, the higher the percentages of Bohemians, gays, and immigrants/foreign born individuals in a region's population, the more conducive that region's climate is to generating economic growth. He argues that environments that are open, tolerant, diverse, eclectic and distinctive are hothouses for economic growth; his classifications of human capital provide indexes to represent those characteristics.

Because the Census did not have a Bohemians classification nor did it record individuals' sexual orientation in either 2000 or 2010, Florida created his own indexes for these variables. Table 1 reports the indexes that Florida developed for Hampton Roads and several other metropolitan regions for 2010. For example, among 361 metropolitan regions, Florida ranked Hampton Roads 100th in terms of its proportion of creative class employment, 107th in terms of its technology, 100th in terms of its talent, but only a dismal 244th in terms of tolerance. The tolerance ranking presumably reflects the percentages of Bohemians, gays and immigrants/foreign born in the population of Hampton Roads, although Florida does not disclose precisely how the index was constructed.

TABLE 1

RICHARD FLORIDA'S CREATIVE CLASS INDEXES: COMPARING HAMPTON ROADS TO OTHER METROPOLITAN REGIONS

Metro Area	Rank Among 361 Metro Areas	Percent Creative Class Employees	Creativity Index	Technology Index Rank	Tolerance Index Rank
Durham	1	48.4%	.953	8	45
Washington, D.C.	3	46.8%	.947	27	30
Charlottesville	13	39.7%	.826	58	19
Baltimore	21	37.7%	.837	55	103
Raleigh/Cary	24	37.6%	.887	6	95
Richmond	47	34.9%	.692	99	191
Charlotte	70	30.6%	.736	88	130
Hampton Roads	100	31.9%	.586	107	244
Charleston	137	30.4%	.533	194	178
Jacksonville	139	30.4%	.645	134	115

Source: Richard Florida, "The Rise of the Creative Class Revisited" (New York: Basic Books, 2011), Tables A.1 and A.2

How Well Do Florida's Hypotheses Explain And Predict Regional Economic Development Differentials?

Prima facie, Florida's hypotheses are a bit suspect from the outset because quite a few discordant counterexamples exist. Consider New Orleans, whose economic development deficiencies were exposed for all to see by Hurricane Katrina in 2005. By Florida's standards, New Orleans should have been a wellspring for economic development, as it is famously tolerant of a variety of living styles, is highly diverse and sports numerous eclectic artistic and musical venues. Unfortunately, other factors are more important and, in the case of New Orleans, among the most important of these are its citizens' educational attainment and labor force participation. In 2000 (prior to Katrina), only 74.7 percent of the residents of New Orleans had completed high school, compared to 80.4 percent nationally. The labor force participation rate for those ages 16 or older in New Orleans was only 57.8 percent, compared to 63.9 percent nationally. Not surprisingly, this combination was influential in producing a 2000 median household income in New Orleans of $27,133 – only 64.6 percent of the national average of $41,994 (all data from the 2000 U.S. Census). The bottom line is that New Orleans' diversity, tolerance and eclectic surroundings did not come close to overcoming the burdens imposed by its shortcomings in traditional economic areas. New Orleans may have "Power of Place," as Florida puts it, but that is overwhelmed by traditional economic verities.

Contrast New Orleans to Salt Lake City, whose majority Mormon population has long advocated and legislated strong views on acceptable social behavior. Further, Salt Lake City is not as demographically diverse as New Orleans. Nevertheless, according to the U.S. Census Bureau's America FactFinder, 83.4 percent of the citizens in Salt Lake City have completed high school, 68.4 percent of those 16 or older are in the labor force and median household income was $36,944 in 2000 (all data from the 2000 U.S. Census). Salt Lake City exhibits comparatively little of what Florida emphasizes, but its economy nonetheless has performed much better than New Orleans.

Nevertheless, Florida's ideas are de rigueur among many elected officials and economic development professionals. The entire state of Michigan, for example, proclaimed that it is going to become "cool" by following Florida's ideas.

Given the amount of attention Florida's hypotheses have received and their apparent popularity among opinion leaders, it is surprising that rigorous statistical tests of those hypotheses are few in number. Perhaps the most frequently cited is Harvard economist Edward Glaeser's review of "The Rise of the Creative Class"; one can find this review in Regional Science and Urban Economics (35[5], 2005). Glaeser examined 242 metropolitan statistical areas and found strikingly little statistical connection between several of Florida's human capital diversity variables and population growth between 1990 and 2000. Curious economists at Old Dominion University, anxious to put a finger on the real sources of regional economic growth, have replicated Glaeser's study, looking at per capita income and jobs.

Even though rigorous empirical evidence in favor of Florida's hypotheses is lacking, there's no disagreement that simple correlations exist between his three distinctive measures of human capital and measures of economic welfare such as growth rates in population, median household income and per capita income. Bohemianism and per capita income, for example, track each other in most metropolitan economies.

Alas, correlation does not imply causation. The critical question, therefore, is whether there is a causal relationship between Florida's three distinctive measures of human capital and indexes of economic development. Researchers such as Glaeser have demonstrated that the correlations decline dramatically or disappear when conventional measures of human capital, such as educational attainment, are also taken into account. That is, it is factors such as educational attainment that are most important to economic development, not Bohemianism as such. To the extent that Bohemians are better educated than the average person, measures of Bohemianism will be positively correlated with measures such as population and income growth. But, it is not the living styles of Bohemians that are critical to economic growth; it is their educational attainment.

Florida's ideas also have been attacked from a different angle. In his "The Flight of the Creative Class" (2005), Florida downplayed the economic challenges of countries such as India and China because the percentage of creative class citizens in these countries continues to be relatively small. However, it is obvious that these countries have dynamic, rapidly growing economies – for reasons other than those trumpeted by Florida. Thus, the world is more complicated than it is portrayed in Florida's fertile thinking, which is based primarily on bivariate correlations between variables.

Once one has controlled for factors such as educational attainment, there isn't any reliable, rigorous empirical evidence that increasing the proportion of Bohemians, gays or immigrants in a region's population will attract more people, generate more jobs or result in higher incomes. Thus, if all of Hampton Roads were to mirror Norfolk's slightly Bohemian Ghent district, then this by itself would not produce more jobs and higher incomes unless the "Ghentization of Hampton Roads" also were accompanied by the other traditional essentials of economic development – attracting and retaining more smart and talented people, fostering technological change, investing in supportive infrastructure such as transportation, and pursuing intelligent labor, tax and regulatory policies. **In other words, well-educated, innovative Bohemians are valuable in the context of economic development; lowly educated Bohemians without technological savvy are not.**

If Not Richard Florida, Then What?

If Richard Florida's interesting hypotheses don't hold much empirical water, then how can Hampton Roads position itself better to stimulate its economic growth rate? The answers are straightforward, though perhaps disappointingly conventional to some.

INVEST IN K-12 EDUCATION

Mediocre, low-performing schools with high dropout rates are a recipe for economic stagnancy. As Table 2 reveals, Hampton Roads merits only a mixed grade in this regard. Only three of 13 regional public school districts reported four-year, on-time graduation rates that exceeded the Commonwealth average of 88 percent in 2012. Further, only five of our 13 public school districts boasted high school dropout rates below Virginia's average of 6.5 percent in 2012.

At the other end of the spectrum, when The Washington Post recently constructed a list of the 500 "most challenging" public high schools in the country, 34 of the schools on the list could be found in Virginia. However, 32 of the select 34 are located in Northern Virginia. Only Princess Anne High School in Virginia Beach (248th) and Bruton High School in Williamsburg (498th) made the list from Hampton Roads. (See http://www.washingtonpost.com/local/education/abcs-of-americas-most-challenging-high-schools/2013/04/11/ca4f27aa-a2fb-11e2-82bc-511538ae90a4_story.html.)

Add to this picture the indifferent overall performance by the region's students on objective examinations such as the Scholastic Aptitude Test and the presence of several schools in the region that the Commonwealth has designated as "failing."

It will suffice to observe that viewed collectively, the region's public K-12 schools are not the economic development spark plugs that they usually are in rapidly growing areas of the country. We enjoy genuine pockets of K-12 excellence, yet at the same time are hampered by many underperforming districts and schools. Improving our overall K-12 performance must be one of our highest regional economic development priorities. This will not be easy to accomplish and will require: (1) more generous funding; (2) increasing the proportion of educational budgets devoted to instruction rather than administration; (3) a willingness to reallocate educational resources when necessary, including closing under-enrolled schools; and (4) providing visible incentives to school districts, teachers and administrators to do things differently and improve their students' performances. We will touch on several aspects of these challenges below.

Hampton Roads typically has not performed as well as many other comparable metropolitan regions in terms of new companies started per capita, patents received and innovations commercialized. The Milken Institute and the Kauffman Foundation both publish indexes that reveal that our region lags in terms of new business formation and entrepreneurial activity. The Commonwealth of Virginia usually fares well in such comparisons, but this reflects activity in Northern Virginia, not Hampton Roads.

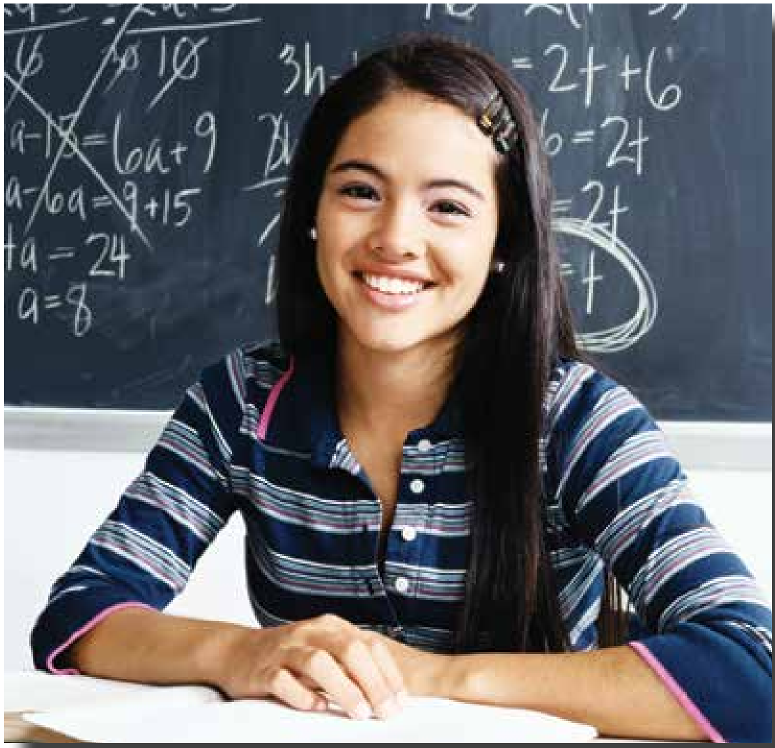


TABLE 2

ON-TIME PUBLIC HIGH SCHOOL COMPLETION AND DROPOUT RATES FOR VIRGINIA AND HAMPTON ROADS, 2012

On-time Public High School Completion Rates		Dropout Rates
Virginia	88.6%	6.5%
Male	85.5%	7.8%
Female	90.6%	5.1%
White	90.8%	4.4%
Black	82.7%	9.3%
Asian	94.8%	2.8%
Hispanic	80.9%	13.6%
Chesapeake	91.2%	4.4%
Franklin	78.8%	15.9%
Hampton	84.4%	5.2%
Isle of Wight	87.0%	6.6%
Newport News	82.8%	6.3%
Norfolk	77.0%	10.7%
Poquoson	94.1%	1.0%
Portsmouth	80.8%	11.7%
Suffolk	84.1%	9.9%
Surry	83.8%	10.3%
Virginia Beach	86.8%	5.9%
Williamsburg/James City	88.7%	4.9%
York	94.2%	3.2%

Source: State-Level and District-Level Reports, Four-Year Completion and Dropout Rates, 2012, www.doe.virginia.gov

Our lagging business startup and patent performance are functions of: (1) a long-term lack of funding for engineering, science and medical research; (2) our inability to commercialize research and development being generated at the region's federal laboratories; and (3) the relatively low proportions of high school and college graduates we generate regionally in STEM (science, technology, engineering and mathematics) disciplines.

The proposed regional Governor's School for Innovation and Entrepreneurship represents a way to begin to reverse the entrepreneurial aspects of this problem, though we must recognize it represents a long-term solution. College-level entrepreneurial instruction and support also offer some promise; however, it is difficult to teach someone to become an entrepreneur. We probably would obtain superior results from making it easier for those who are naturally inclined to become entrepreneurs to do so.

Some contend that our region's relatively modest performance in terms of objective measures of K-12 educational performance is the result of inadequate funding. However, the region's financial support of K-12 education actually increased significantly between 2001 and 2011. **On a per pupil basis, public school K-12 funding in Hampton Roads increased about 60 percent during this time period – and was still about 40 percent higher after taking price inflation into account.** If a funding problem exists in our region, then it primarily relates to capital expenditures. Virtually every city within the region continues to utilize school buildings and facilities that either urgently need refurbishing, or should be torn down and replaced with new construction.

The increased funding for K-12 education in Hampton Roads is commendable; however, Virginia has begun to shift more K-12 costs to localities. For example, this year the state appropriated funds for salary increases for K-12 teachers, but only if those funds were matched by localities – an impossibility for many districts, given existing commitments.

In an earlier chapter ("Where Our Cities and Counties Spend Their Money"), we report data showing that the typical school district in Hampton Roads reduced the proportion of its budget devoted to instruction by 2.15 percent over the past decade. In some cities (Hampton and Virginia Beach), the decreases were much larger than this. While it is true that effective administration and administrators are essential to educational performance, it's also true that more generous funding of K-12 public education may have a reduced impact on student performance if the increased expenditures are devoted to administration rather than instruction.

Further, lurking in the background of funding and resource allocation discussions of K-12 public education in Hampton Roads is the phenomenon of declining school enrollments. **Over the past decade, five of the region's seven largest cities experienced declining enrollments, according to the Commonwealth (see Table 3), and total enrollment in the seven cities declined 3.5 percent even while enrollment statewide was increasing 9.19 percent.**

In theory, declining enrollment should free up resources for reallocation, but this is not easy to do because many K-12 public education costs are fixed in the short run due to teacher tenure obligations and legal constraints. Thus, it does not follow that if enrollment at an elementary school declines by 5 percent, one can diminish expenses at that school by the same percentage. For example, it's virtually impossible to reduce the appointment of a required school counselor by 5 percent. Similarly, one either offers a German course, or one does not. It's not possible to offer only three-quarters of a German course because enrollment has fallen 25 percent.

Significant enrollment-related cost savings usually accrue when entire schools are closed or specialized curricula are abandoned. School closings are political dynamite, however (as Mayor Rahm Emanuel has found in Chicago), and superintendents shy away from confronting unhappy parents strongly opposed to the closure of their neighborhood school. Empirical evidence and logic often account for little in such situations.

Even so, intelligent use of scarce resources demands that our school districts reverse the regional trend toward increased expenditures on administration rather than instruction; this means that we must shutter some neighborhood schools. Easier said than done, of course. But we must support school officials when their closure decisions are evidence-based and transparent. School boards and city councils must be willing to take the heat that surely will follow.

Citizens of goodwill in our region must keep their eyes on the long-term prize – better-educated K-12 students, more vigorous economic development and a higher quality of life. It is not a path for the timid.

Hence, not only do we need to continue to provide increased funding for K-12 education in Hampton Roads, we also must be smarter in the use of those funds. One of our regional education goals ought to be to increase the proportion of funding spent on instruction and research and to diminish the proportion of funding spent on general and administrative support. Over the years, public school districts in Hampton Roads have tended to spend increasing proportions of their budgets on what in a business context is called A&O – administrative and overhead expenses. The same dollar cannot be spent two places, and so this has diminished the proportion of their budgets devoted to instruction. There are some legitimate reasons for climbing A&O expenditures, such as new and increased state and federal regulatory and legal requirements. Nevertheless, our school districts need to progress in this arena and to reward administrators who are able to retard the growth of A&O expenses. The road to K-12 educational heaven is not paved with administrative slots.

TABLE 3

APM ENROLLMENTS IN THE SEVEN LARGEST PUBLIC SCHOOL DISTRICTS IN HAMPTON ROADS, 2001-2002 AND 2011-2012

	Commonwealth Average Pupil Maintenance (APM)		
State/City	**2001-2002**	**2011-2012**	**Percent Change**
Virginia	1,147,239	1,252,039	9.19%
Chesapeake	38,271	39,525	3.28%
Hampton	22,396	21,406	-4.42%
Newport News	31,592	29,664	-6.10%
Norfolk	34,792	33,000	-4.96%
Portsmouth	17,036	15,192	-10.82%
Suffolk	12,031	14,397	19.67%
Virginia Beach	75,090	69,856	-6.97%

Note: Average Pupil Maintenance is the Commonwealth's equivalent of size of a school district in terms of students in attendance.
Source: Superintendent's Annual Reports for 2001-02 and 2011-12, http://www.doe.virginia.gov/statistics_reports/supts_annual_report/2011_12/index.shtml

INCREASE BOTH PUBLIC AND PRIVATE SUPPORT FOR THE REGION'S THREE COMMUNITY COLLEGES

High-quality occupational and technical training programs are among the golden building blocks of economic development. Tidewater Community College, Thomas Nelson Community College and Paul D. Camp Community College provide the most important means for us to achieve the goal of increased economic development, and the tuition cost per credit hour at these institutions is about one-third of the comparable cost to a student of a credit hour at a four-year public university. An important regional economic development objective ought to be to support short-course, certificate and associate degree programs that are closely attuned to job markets, as well as apprenticeships and internships that are jointly sponsored and funded by public and private sources.

By the middle of this decade, it should no longer be true that we hear employers lament that they are unable to hire the nurses, welders, die makers, computer-assisted manufacturing specialists, occupational therapists, and database and cloud administrators that they say they need, but cannot find. Our three community colleges possess the immediate ability to address labor market shortages, upgrade the talents of existing workers and provide many students with a superbly cost-effective way to begin their collegiate careers. We should develop and use them in much the same fashion that Germany utilizes its *Fachhochschulen* – technical colleges and institutes that are tightly connected to job markets and practical applications of science and technology.

The private sector must be a vital part of this refocusing of our efforts. In Europe, private-sector apprenticeships, often partially supported by government and often including post-high school-level academic training, produce a continuing stream of skilled workers who, after two to four years of on-the-job training at firms such as Mercedes-Benz, move into permanent, attractive jobs there. Once again, Germany provides an interesting model. There, about two-thirds of students who complete their formal high school-level academic training undertake an apprenticeship; Mercedes-Benz alone sponsors 2,000 apprentices a year.

Unfortunately, apprenticeships in the United States are tinged with bad memories of indentured servitude, even though modern European apprenticeships are in no way connected to that notion. Apprenticeships may not be flashy, but they work.

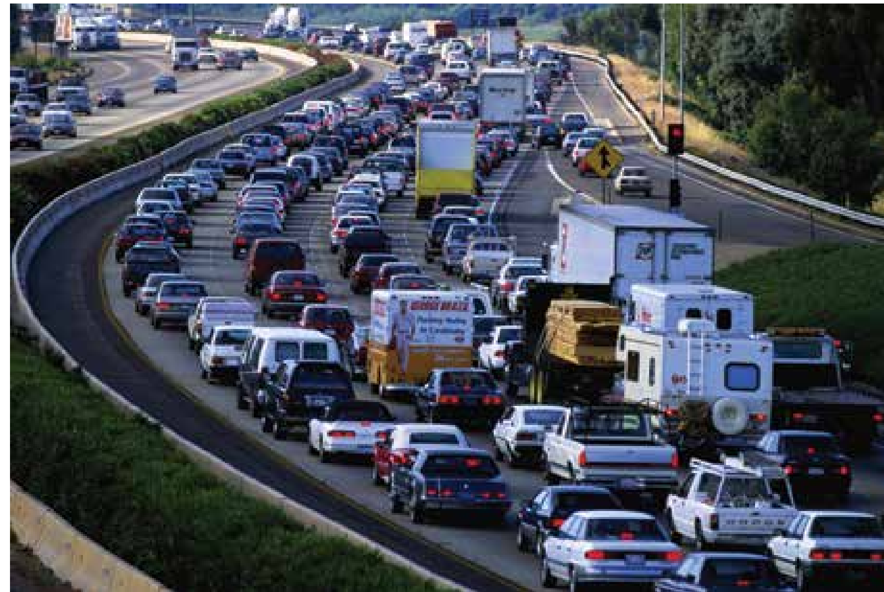
Here's where the rubber meets the road – choices must be made. In the view of most outsiders, it would be far more productive for Hampton Roads cities and counties collectively to provide tax incentives for firms to support apprenticeships than for the cities and counties to invest tens of millions of dollars in arenas, convention centers and performance venues whose net economic impact not only is highly questionable, but also probably self-canceling when multiple cities do the same thing.

IMPROVE AND RATIONALIZE THE REGION'S TRANSPORTATION INFRASTRUCTURE

We are, some say, located at the end of the longest cul de sac in the United States. This adage confers a certain distinction upon Hampton Roads, but not one that is advantageous. Yes, the new transportation funding program adopted jointly in spring 2013 by the Commonwealth and the region averted looming disaster, yet did not come close to accomplishing what is necessary to spur regional economic development because the benefits are accompanied by substantial costs.

The three most important legs underpinning our regional economic stool are defense spending, the port and tourism. The viability of each depends upon the existence of a high-quality, well-designed transportation system that is capable of moving both people and products efficiently and, in case of emergency, moving hundreds of thousands of citizens out of the region to safety.

The soon-to-be-implemented toll system (which The Virginian-Pilot once dubbed "a ring of fire") virtually encourages regional firms to relocate outside the ring of tolls – that is, closer to Richmond or points south. After all, why should one locate a business in, say, Hampton or Virginia Beach, if moving product from those cities not only will be handicapped by congestion, but also will require the paying of tolls for the privilege of facing that congestion?



Simply put, we haven't made sufficient progress in addressing our regional transportation needs. As a consequence, each of our economic "big three" will not contribute as much as they could to our future economic success; this also means that major "where to locate" decisions (including very important ones made by the Department of Defense) are less likely to be resolved in our favor in the future. We court disaster if we do not pay attention to the signals we are receiving from our major employers concerning our transportation system.

An intelligent approach to the regional transportation challenges facing us must include: (1) the use of technology to guide traffic and avoid congestion; (2) increased use of mass transportation; (3) a third crossing; (4) moderate tolls; and (5) a larger, dedicated, non-toll revenue stream to support these developments. "Mass transportation" here especially includes increased reliance on buses, which, despite popular notions to the contrary, ordinarily are more cost-effective than light rail and frequently just as environmentally kind per passenger mile.

The optimal solution also includes expansion of The Tide if (and this is an absolutely critical if) The Tide were to connect major traffic generators in the region, including Naval Base Norfolk, Old Dominion University and perhaps Norfolk International Airport. Let's be candid, however. Even if these first two high-traffic nodes were connected, this version of The Tide still would require massive subsidies per passenger, perhaps approaching 80 percent of operating costs. Nevertheless, this could be a reasonable undertaking in light of the large subsidies now provided by governments at all levels in support of automobile transportation. Reputable economists have computed that the price of gasoline would have to rise to $12 per gallon in order to reflect all of the costs imposed upon individuals, businesses and governments by automobiles.

What about expansion of The Tide into Virginia Beach? **Extension of The Tide to the Virginia Beach Town Center, one of the city's strategic growth areas, is potentially plausible because it could generate the population density – in the form of residential and business development along that path and especially at Town Center – that would make that extension financially reasonable in the long run. We must recognize, however, that we are talking about 2030, not 2015. Further, we must recognize that while all citizens would pay for the extension, the benefits would accrue predominantly to property owners and businesses situated along the light rail corridor. It's not clear that the same rationale supports any other extensions of the Tide inside the city of Virginia Beach beyond Rosemont Road.**

What dedicated revenue stream should we seek to support our transportation needs? The future of revenue collection relating to automobiles should be connected to taxes based on actual miles driven rather than gallons of gasoline consumed. As our automobiles have become more fuel efficient, we use fewer gallons of gasoline even though those vehicles tear up our roads just as much. We need a mechanism to assess taxes based on miles driven. The technology exists now that would enable us to do so, but we are going to have to overcome our aversion to "being tracked" in order to move ahead. For better or worse, most of us already are being tracked now when we use the telephone and Internet, by cameras when we are in public places, by toll passes when we drive and perhaps even by drones. An annual mileage computation for tax purposes would be much less intrusive and would accurately impose the costs of driving where they properly reside – on drivers.

All citizens – drivers or not, young or old, employed or not – have a stake in a quality ground transportation system because all of us depend upon that system to deliver the necessities of life and to enable us to reach movie theaters, barber shops, churches, schools, etc. Hence, a significant state general fund contribution from income and sales taxes to transportation is merited, along with regional governmental tax support.

BE WARY OF FRITTERING AWAY PUBLIC FUNDS ON PROJECTS THAT SUBSIDIZE PRIVATE BUSINESSES, EVEN WHEN IT IS APPARENT THAT THE SAME BUSINESSES HAVE CALCULATED CAREFULLY THAT IT WOULD BE UNPROFITABLE FOR THEM TO MAKE SUCH INVESTMENTS ON THEIR OWN

All of the major cities in our region have invested significant public funds in capital projects that were much ballyhooed when they opened, but now contribute only marginally to the region's long-term economic growth. Norfolk's March 2013 decision to make a very large investment in a hotel/conference center in that city's downtown provides the most recent example.

Unfortunately, it is not clear that such projects represent the highest and best use of public funds. Here are some things to consider:

- *Don't ignore the signals private investors provide us, free of charge.* While private developers and investors are not omniscient, their assessments provide us with signals we should not ignore. When private investors decline to put their own money into a restaurant, sports complex, entertainment venue or hotel complex unless they are subsidized, it should give pause to any government that believes that the addition of public money somehow will make those projects compute financially.

- *Pay close attention to relevant local market conditions.* Consider once again Norfolk's decision to provide huge financial support for a hotel/conference center project in that city's downtown. Is this likely to be a productive investment of public funds? The hotel/motel revenue data reported in Table 4 are discouraging in this regard. **Over the past five years, REVPAR (revenue per available room, the coin of the realm in hotel economics) declined in every area of the region except Virginia Beach, and trailed both Virginia and the United States. Norfolk/Portsmouth experienced a 10.79 percent decline in REVPAR between 2007 and 2012.**

  The city of Norfolk believes that the new hotel/conference center will reverse this negative REVPAR trend and reports encouraging recent increases in hotel occupancy and REVPAR in Norfolk. The city concludes that this project will prosper because it will not involve typical convention space; rather, the new project will focus on upscale conferences designed to attract a more technology-savvy, luxury-oriented clientele and also will include additional downtown parking. While all of us wish Norfolk success, achieving profitability could be elusive if the new hotel sells rooms at $40 more per night than those already available at nearby hotels such as the Marriott and Sheraton.

TABLE 4

REVPAR IN HAMPTON ROADS CITIES, 2007-2012

Area	REVPAR, 2007	REVPAR, 2012	Percent Change
United States	$65.56	$65.17	-0.60%
Virginia	$61.96	$57.12	-7.80%
Hampton Roads	$52.90	$47.63	-9.86%
Chesapeake/Suffolk	$52.90	$42.96	-18.79%
Newport News/Hampton	$41.49	$35.85	-13.59%
Norfolk/Portsmouth	$54.05	$48.12	-10.79%
Virginia Beach	$64.73	$66.10	+2.12%
Williamsburg	$47.48	$36.95	-22.18%

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

- *What can the experience of other cities and regions tell us?* We need not attempt to reinvent the wheel. The experience of other cities and regions should discipline our thinking. For example, The Wall Street Journal reported (Oct. 13, 2012) that between 2000 and 2011, convention and exhibit-hall space in the United States increased 35.4 percent, while attendance at those meeting places fell 1.7 percent. Clearly, it will be important to differentiate the Norfolk development from the usual convention space that has proliferated along the East Coast.

- *Beware the fallacy of composition.* "Fallacy of composition" is the false assumption that something that is true for one individual or business is true for the economy as a whole. Local governments typically count upon their new developments to attract substantial new business to their areas. However, taking the hotel, convention and conference market as an example, all cities cannot increase their hotel, convention and conference business simultaneously at a time when the overall size of that business travel pie is constant or declining nationwide and stagnant in the Commonwealth of Virginia. The available evidence indicates that most cities and regions end up disappointed when they predict they will attract substantial new business.

The solution to that disappointment is not to construct differentiated versions of visions that have failed.

- *Don't ignore the displacement effect.* **Cities and regions that subsidize highly visible developments typically predict, and then later announce, increased sales and tax revenues from these projects. Initially, of course, this sounds very good. Unfortunately, such developments often do no more than rearrange existing expenditures and tax collections within that city or region.** People end up spending their dollars at one restaurant rather than another, or patronize one hotel rather than another. When this occurs, the projects do not actually result in net new economic development, even though they inevitably report sales, taxes collected, etc. This is economic displacement in action – new developments literally take sales and taxes out of one pocket and deposit them into another.

Virtually every major city in the region has invested substantial funds in subsidized hotels, convention centers, performance venues and athletic facilities. Yes, there have been some large public-sector investment successes, but it's also true that a healthy majority have not been financially successful (at least based on the financial standards of the private sector), despite representing embellishments that comport with elected officials' ideas of what vital, successful cities should include.

Weighed against the long-term economic development that would be generated by a successful K-12 public education system, or measured side to side against the benefits that additional university/medical community research and development expenditures would produce, most of these highly visible investments simply do not cut the financial mustard. **Once again, we should pay attention when private investors tell us that they will not undertake an investment unless they receive tens of millions of dollars in subsidies. They are providing us with free consulting advice that we ignore at our peril.**

BE MODEST WHEN IMPOSING TRAVEL TAXES (TOLLS) ON THE REGION'S BRIDGES AND TUNNELS

Avoid any toll structure that in effect would sever the Peninsula from the Southside (remember that 17.4 percent of those working in Newport News cross the James River estuary every workday) and Eastern Hampton Roads from Western Hampton Roads (24.2 percent of the jobs in Portsmouth and an additional 12 percent of the jobs in Suffolk are filled by people who commute across the Elizabeth River from Norfolk and Virginia Beach). Another 8.2 percent of jobs in Suffolk are held by people who cross the James River. Table 5 provides those data, which should sober those who argue that tolls won't make a difference in our economic behavior.

Note well that it is appropriate to insist upon tolls designed to ensure that those who derive the most benefit from these bridges and tunnels also pay most of the cost. However, the tolls in question risk partitioning our region and increasing the costs to workers, consumers and business owners. Remember that the benefits of a quality transportation system are widely diffused among the region's citizens, whether or not they ever drive across a bridge or through a tunnel. Hence, all citizens, not only drivers, should help pay for these projects.

TABLE 5

SELECTED HAMPTON ROADS WORKERS WHO COMMUTE ACROSS THE ELIZABETH RIVER OR THE JAMES RIVER, 2010

City in Which the Job Is Located	Percentage of Job Holders in That City Who Commute from These Cities by Crossing the Elizabeth River or Driving Through a Tunnel			
	Norfolk	Virginia Beach	Other Southside	Peninsula
Hampton	5.0%	6.5%	11.6%	NA
Newport News	2.9%	4.5%	12.5%	NA
Portsmouth	10.6%	13.8%	NA	7.3%
Suffolk	4.3%	7.7%	NA	8.2%

PROVIDE GENEROUS SUPPORT FOR RESEARCH AND DEVELOPMENT ACTIVITIES AT THE REGION'S RESEARCH UNIVERSITIES AND AT EASTERN VIRGINIA MEDICAL SCHOOL BECAUSE SUCH FUNDS GENERATE A WIDE RANGE OF JOBS THAT TYPICALLY PAY MORE THAN THE REGIONAL AVERAGE AND SPAWN NEW BUSINESS DEVELOPMENT

Old Dominion University is the region's largest academic/medical research and development participant. A year ago, the federal government reported $95 million in funded research and development (R&D) activity for ODU. However, by comparison, Johns Hopkins University recorded approximately $1.4 billion and is readily acknowledged to be Baltimore's most powerful economic engine. When one adds all of the other institutions in the region to Old Dominion, the R&D total rises just above $200 million annually.

Our region simply has not developed the highly productive "ed-med" complex one observes in metropolitan areas such as Richmond and Baltimore. Why does this matter so much? R&D funds nearly always come from "the outside" and thus represent real injections of economic stimulus into the region rather than simply redirecting existing expenditures. (They are not "displaced" expenditures.) This is real economic development involving clean, well-paying jobs, not redistribution of existing economic activity.

What would constitute the outlines of a good action plan in the "ed-med" arena?

- **Press our legislators to provide generous funding for R&D at the region's doctoral research institutions (Old Dominion University, the College of William & Mary and Eastern Virginia Medical School).** Repeated empirical studies reveal that the long-term payoff to public investments in science and engineering R&D exceed 10 percent; very few competing public investments offer the same promise. Unfortunately, the Commonwealth of Virginia has been falling short in terms of funding higher education and medical education. Table 6 reveals that ODU in particular has received the short end of the Commonwealth funding stick, though in truth, state general fund support for all of higher education has fallen significantly in recent years.

- **Find ways to support Hampton University's Proton Therapy Institute, a state-of-the-art cancer treatment and research facility.** In the most recent session, the General Assembly shied away from providing funding for this private-sector initiative; we must find innovative ways for the Commonwealth to provide financial support because the institute already has proven to be a job generator.

- While not everyone has the same vision for the future of EVMS, a merger between it and William & Mary no doubt would confer prestige on the medical school. **Yet, because of the relatively small size of W&M, the absence of engineering there and its distance from EVMS, such a merger would do little to spur the long-term development of the university/medical/health research dynamo that we have been missing. This will occur only when EVMS and ODU merge or affiliate. Our region ought to be thinking about where it wishes to be in 2030, when Old Dominion likely will enroll 40,000 students and be generating $400 million annually in externally funded research. At that point, a decision to meld together EVMS and ODU will appear to have been obvious.**

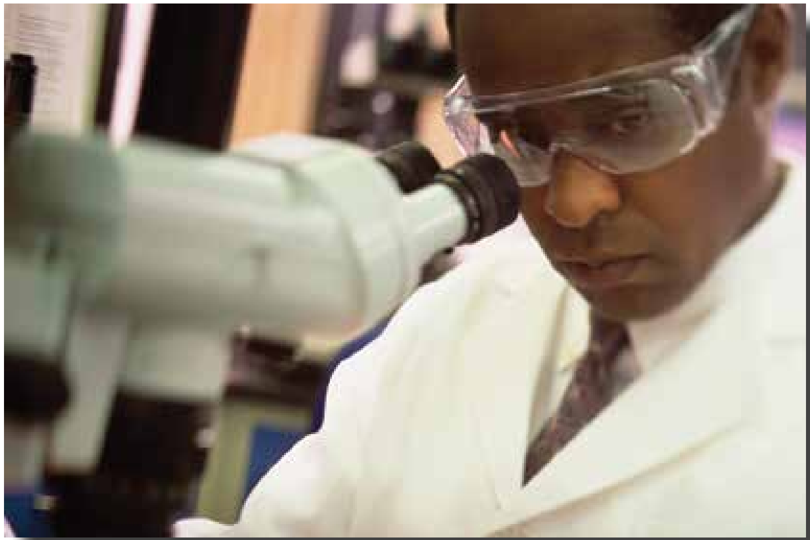


TABLE 6 COMMONWEALTH GENERAL FUND SUPPORT FOR SELECTED VIRGINIA UNIVERSITIES, FY 2009 AND FY 2013			
Institution	**FY 2009 Tax Support Per Student**	**FY 2013 Tax Support Per Student**	**Percent Change**
Doctoral Institutions in Virginia			
William & Mary	$9,024	$8,057	-10.7%
George Mason University	$7,079	$5,291	-25.3%
Old Dominion University	$7,100	$5,393	-24.0%
University of Virginia	$10,555	$8,334	-21.0%
Virginia Commonwealth University	$8,855	$6,272	-29.25%
Virginia Tech	$8,727	$6,289	-27.9%
Comprehensive Institutions in Hampton Roads			
Christopher Newport University	$6,108	$5,135	-15.9%
Norfolk State University	$11,068	$7,384	-33.3%

CAPITALIZE ON OUR EXISTING DISTINCTIVE STRENGTHS – NASA LANGLEY, THE JEFFERSON LAB, THE PORT, TOURISM AND CERTAIN SPECIALTIES AT OUR RESEARCH UNIVERSITIES

NASA Langley Research Center, the Thomas Jefferson National Accelerator Facility and the most superb deep-draft port on the East Coast are located in Hampton Roads, not in Baltimore, Raleigh-Durham or Jacksonville. We still have achieved only limited success in commercializing the research generated by NASA Langley and the Jefferson Lab. Nor have we yet taken the steps necessary to capitalize on the water that flows through so much of our region. Hampton Roads ought to be the nation's leader in rising sea level research and applications. Further, since even the most modest projections suggest that container traffic at our port can grow twice as fast as the United States' gross domestic product, we are negligent if we don't do the things necessary to enable us to achieve this goal and then sprint well beyond it.

It would be wonderful if Google or some other technology giant were to establish a huge presence in Hampton Roads, but we shouldn't count on such occurrences. Instead, let's capitalize on the impressive physical and intellectual assets already located here. A May 31, 2013, Washington Post article ("What Sequester?" by Elizabeth Williamson) provided data revealing that since 2000, federal spending in the Washington, D.C., metropolitan region has held relatively constant; however, the regional economy there has grown approximately 50 percent because the area's economic base has diversified. As Steve Fuller, a George Mason University economist, noted, "The stuff we learned how to do for the federal government can be sold to other people." This is advice we should take to heart.

MAINTAIN A BUSINESS-FRIENDLY CLIMATE THAT ESCHEWS TAX RATES AND REGULATORY POLICIES THAT WOULD POSITION OUR REGION AS AN EXPENSIVE OUTLIER

Lest anyone misunderstand: taxes and regulations are necessary to operate a civil, productive, growing society. Nevertheless, we would be wise to recognize that individual citizens, businesses and capital in general are mobile. We must avoid tax and regulatory policies that position us badly with respect to our peers; and, we should focus our large public investments on things that ultimately will improve both the business and the social climates of our region.

Each of our regional cities claims to be business friendly and, indeed, some national surveys suggest Hampton Roads is amenable to economic development. Even though Entrepreneur magazine recently recognized Norfolk as a great site for entrepreneurs, our regional rate of new business formation is not very impressive and we suffer from a net out-migration of adults. (This may be the most critical economic thermometer of them all.) These facts speak louder than our words. Hence, whether via city governments, universities or businesses and regional organizations (or any combination thereof), we would do well to re-examine our thinking about what we can do to stimulate new business formation and support those businesses already here.

ENGAGE IN "ECONOMIC GARDENING" DESIGNED TO GROW EXISTING FIRMS

Our best prospects for stimulating economic growth often may arise via the process of "gardening" the businesses already operating in our region. The essence of gardening is to find out what existing firms need in order to expand and prosper. Emphasis should be upon making connections and smoothing the way for expansion rather than providing large financial injections to the firms involved. Our gardening focus should be upon firms that already have invested their own risk capital and have demonstrated they have what it takes to succeed.

For example, if a promising firm is small and needs additional capital, then we should connect it with possible funding sources. If it requires the assistance of engineers or operations research experts to improve its production processes, or could benefit from guidance on how to obtain an export permit, then we should put the firm in touch with individuals with the appropriate expertise. If it needs better transportation access to expand, or additional attention from law enforcement officials, then government should do its best to see if it can help.

We must find out what would be necessary to convince a large firm such as Siemens in Newport News or a smaller firm such as O'Connor Brewing in Norfolk to expand their operations. Can we eliminate impediments and help such firms do the things that would allow them to expand, hire more people and prosper – here in Hampton Roads?

In the gardening model, economic development personnel spend more time focusing on the needs of existing firms than they do attempting to attract new firms. Ideally, gardening emphasizes finding ways to make life easier for existing firms so they will increase the size of their regional economic imprint rather than viewing them as tax cows ready to be milked. Should financial assistance to existing firms be considered? Yes, on limited occasions, but not if that assistance would directly advantage one existing regional competitor over another, or if the private sector already has signaled that it considers the activity in question to be a dubious investment. Gardening is not about subsidizing losers.

Final Observations

Absent the discovery of oil (North Dakota), a propitious location (the Washington, D.C., metropolitan area) or historically significant inventions and innovations (Silicon Valley and Seattle), the road to regional economic development usually is a long, hard slog. However, there are predictable, profitable payoffs to steady, long-term regional investments in education, infrastructure, technology, research and development, and intelligently crafted public policies. This approach, however, requires patience (a virtue that unfortunately has been in short supply) and an unwavering focus on the distant horizon. We must change our short-sighted approach to economic development if we hope to prosper during this century.