

BACON'S REBELLION

The Op/Ed Page for Virginia's New Economy

Building Human Capital

Human capital is the driving force of prosperity in a globally competitive economy. Soon, regions will vie for it like they compete for investment capital. Will Virginia be prepared?

By James A. Bacon

From the war in Iraq to genocide Darfur, from campaign finance scandals to the Medicare funding crisis, the world is so full of depressing news that I'm sometimes tempted just to pluck my eyes out. But there is one piece of good news that we never read or hear about: Americans are better educated than ever.

Between 1990 and 2000, according to [U.S. Census data](#), the percentage of American adults 25 and over with high school degrees increased from 75.2 percent to 80.4 percent. Likewise, the percentage with bachelor's degrees ascended from 20.3 percent to 24.4 percent. The numbers continue to improve as younger generations, for whom college is the norm, replace aged generations for whom graduating from high school was a big accomplishment.

Over that same decade, we Virginians increased our schooling even faster. The percentage of Virginians with a high school degree rose from 75.2, the national average, to 81.5, or a full percentage point ahead. Meanwhile, the number of adults with bachelor's degrees leaped from 24.5 percent to 29.5 percent -- inflating our lead over the national average by a full percentage point. [\(1\)](#)

It's debatable whether a rising education level has made Virginians any better informed as citizens and consumers, but there's no denying that it has created more productive, more innovative participants in the workforce. Because productivity and innovation are the well-springs of wealth creation, a more highly educated workforce generates higher incomes.

Given the powerful connection between education and economic prosperity, you'd think politicians and civic leaders would closely track the population's level of educational achievement. A handful of peo-

ple, from economic developers selling their regions to metrics wonk Gov. Timothy M. Kaine, do monitor educational achievement, but the numbers aren't widely circulated and they are rarely used to inform broader debate over public priorities.

No one has developed a comprehensive strategy for building human capital in Virginia or any of its regions. By "comprehensive," I mean a strategy that not only supports institutions of knowledge creation and aligns the disciplines taught with the demands of the workplace, but recruits the most productive, innovative workers to Virginia, and then ensures that, once here, they want to stay.

Human capital is Virginia's greatest asset in a globally competitive knowledge economy. With the possible exception of

Virginia Out-performs

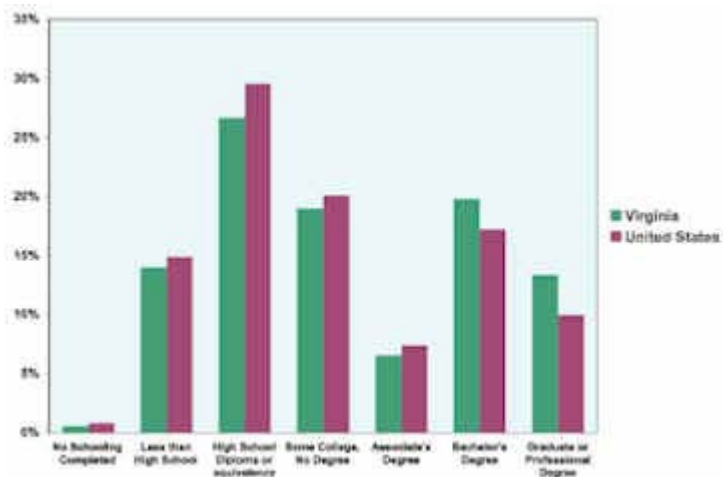


Figure 10. Educational Attainment for Virginia and the United States for Ages 25 and Over, 2005

Educational attainment for Virginia and the United States, 2005. (Click on image for larger, clearer graphic.) Source: [Virginia Per-forms](#), page 11.

fixing dysfunctional human settlement patterns, augmenting the stock of human capital is the most important task that any region in Virginia can undertake. Creating effective strategies to build human capital goes to the heart of the "Economy 4.0" economic development paradigm. Regions that fail to upgrade the productivity, creativity and problem-solving capacity of their workforces will wind up losers in the race for 21st century prosperity.

The Looming Labor Shortage

In the United States, the issue of unemployment has dominated public policy debate since the Great Depression. Candidates for office at all levels of government have promised to "create jobs." Even with the national unemployment rate dipping below 5 percent, job security is still a huge issue. The outsourcing of manufacturing jobs, call center jobs, even IT jobs is a prospect feared by many. Despite this public perception, the greatest employment-related challenge facing the United States in the future is not creating more jobs but finding the people to fill them.

The United States stands on the brink of chronic labor shortages. Businesses recognize this, even if politicians do not. The "Graziado Business Report," a publication of Pepperdine University, summarizes the forces driving this change:

A systemic labor shortage is expected to transform the workplace over the next 25 to 30 years as the gap between baby boomers and entrants of college-educated workers widens due to the boomers' mass retirements. If the U.S. economy continues to grow at three per-

cent per year — the economy's consistent average since 1948 — the workforce will have to increase by 58 million employees over the next three decades if the same rate of productivity is maintained. Yet, if the current population trend continues, the number of workers will only increase by 23 million. This trend would create an overall U.S. labor shortage of 35 million workers.

For Virginia, where major metropolitan areas already suffer acute labor shortages, the situation will become even more acute. *As the labor shortage intensifies nationally, regions across the country will begin competing for employees with desirable skills just as they now compete for corporate investment.* Regions that start thinking seriously about building human capital and creating the institutions of labor recruitment will enjoy a significant competitive advantage over those that do not.

For purposes of dissecting the challenge, it is helpful to look at human capital from three perspectives:

- **Development.** Virginia must build the institutions, both public and private, formal and informal, which teach people the competencies they need to function as informed citizens in a democracy, producers in the workplace and consumers in the economy. This is the one aspect of the challenge to which Virginians have devoted considerable (though still insufficient) thought and resources.
- **Recruitment.** One reason Virginia is developing

human capital faster than other states is that highly educated people are moving here. We're benefiting from the educational investments made by others. What we haven't done is think much about what it takes to recruit these people, especially the members of what Richard Florida calls the "creative class" -- those occupations that disproportionately account for artistic, entrepreneurial and scientific innovation.

- **Retention.** Once we lavish our resources on educating our youth and recruiting the best and brightest from other states to Virginia, we would like them to stay. What we haven't done is think systematically about what attributes our communities must possess to keep people here.

We broached the topic of human capital development in our past column, "Education for the 21st Century." As I argued there, Virginia's educational system is hopelessly outmoded and resistant to change. I outlined key attributes of an educational system for the 21st century -- the end of age segregation in schools, the end of nine-month school years, the end of schools as distinct buildings or campuses where education takes place, the rise of free-lance teachers and professors, and just-in-time education -- but the will to change the system does not exist at present. I don't expect to see any substantive change in my lifetime.

Antiquated or not, continued investment in education is essential. The social Return on Investment for education is so high that investing in a creaky, inefficient, outmoded system is better than investing nothing at

all. As the bumper sticker on my father in law's car says, "Education expensive? Try ignorance."

Mobility and the Brain Gain

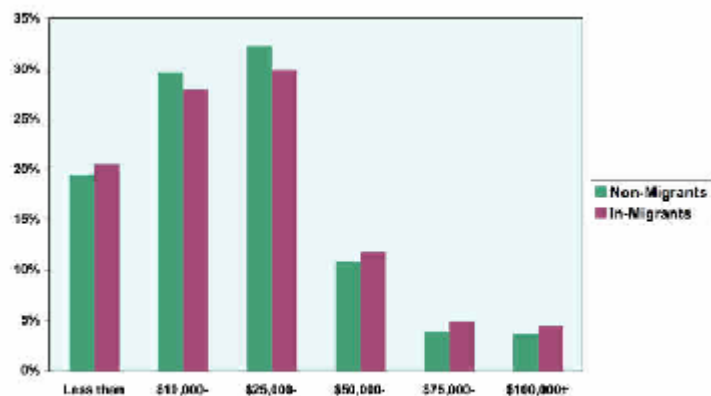
Fortunately, there are easier ways than reforming the educational system to raise the level of educational achievement. America is a mobile society, and the better educated among us are more mobile than the rest. If Virginia's regions can devise strategies for capturing and keeping this foot-loose population, we can build our human capital far more rapidly than if we relied upon schooling alone.

It is instructive to study migration patterns within the United States. A number of states -- primarily California, the Northeast, and the industrial Midwest -- are suffering a severe brain drain. Ranked by total numbers of net migrants between 2000 and 2004, New York led the way, followed by California, Illinois, Massachusetts, New Jersey, Ohio and Michigan. For those states, this out-migration represents a tremendous loss of human capital.

Just as China is evolving into the "world's workshop" as it becomes the globe's preferred manufacturing platform, Massachusetts has become the nation's school house. The Bay State is blessed with an unparalleled concentration of premier educational institutions -- Harvard, MIT, Boston College, University of Boston, University of Massachusetts, and a host of smaller, elite colleges such as Tufts, Amherst and Wellesley. Renowned for their excellence, these schools recruit students from all over the country. But, incredibly, Massachusetts has become one of the greatest exporters of human capital among the 50 states. Despite its thriv-

Gray Matter Migration				
	Average Annual Number +/-		Average Annual Rate (per 1,000 residents)	
	1990-2000	2000-2004	1990-2000	2000-2004
D.C.	-14,648	-10,176	-26.1	-18.1
New York	-196,449	-182,886	-10.8	-9.6
Massachusetts	-24,836	-42,402	-4.1	-6.6
North Dakota	-4,178	-3,999	-6.6	-6.3
Illinois	-61,786	-71,854	-5.2	-5.7
Kansas	-2,199	-11,469	-0.9	-4.2
Utah	6,754	-9,495	3.5	-4.1
Louisiana	-15,531	-16,945	-3.6	-3.8
New Jersey	-39,507	-32,147	-5	-3.8
Nebraska	-920	-5,445	-0.6	-3.1
Virginia	12,055	20,535	1.8	2.8
S. Carolina	15,423	18,756	4.2	4.6
N. Carolina	58,069	39,137	8.1	4.7
Georgia	72,334	41,298	10	4.8
Delaware	3,671	4,765	5.1	5.9
New Hamp.	3,867	7,771	3.3	6.1
Maine	-441	8,159	-0.4	6.3
Idaho	14,166	9,631	12.4	7.2
Connecticut	-22,798	-4,171	-6.9	11.2
Florida	112,454	190,894	7.9	11.4
Arizona	62,026	66,344	14.4	12.2
Nevada	46,233	50,803	29.8	23.3

Source: [U.S. Census](#)
Note: These numbers are native-born Americans only. They do not include foreign-born immigrants.
Explanation: To see the full list and read an explanation of what the numbers mean, [click here](#).



Distribution of Income for Virginia Non-Migrants and In-Migrants

Source: [Virginia Performs](#), page 15.)

ing high-tech industry sector, Massachusetts suffered an average net loss of 42,000 native-born citizens per year between 2000 and 2004.

Virginia is on the receiving end of the Northeast's brain drain. This Brain Gain has become a driver behind the increase in per capita income that consistently out-performs the national average. As the chart at the bottom of the previous page shows, a higher percentage of "in-migrants" to Virginia earned incomes of \$50,000 a year or more in 2000 than did native-born Virginians. In-migrants also were less likely to have lower incomes (less than \$50,000 a year).

While Virginia is a major importer of human capital, state-wide averages obscure the dynamics taking place on a regional scale. Between 2000 and 2006, the Washington metropolitan region was a bigger population importer than either Richmond or Hampton Roads. However, as the chart below indicates, the Washington region was a magnet mainly for *foreign* immigrants. The region actually experienced an exodus of native-born population. While foreign immigrants are a mixed bag -- some are very highly educated, others are dirt poor -- native-born migrants tend to be better educated and more affluent than stay-at-homes. Thus, migration flows proved to be a net loser for the region.

Interestingly, the Richmond region also was a magnet for human capital. Although the total number of in-migrants between 2000 and 2006 was less than half than the figure for Washington, the Richmond metro region has only *one-fifth* the population. In proportion to its size, the in-migration was considerably larger. Also, while Washing-

Net Migration (Top Three Virginia Metros, 2000 - 2006)			
<u>MSA</u>	Total	International	Internal
Richmond	66,894	12,698	54,196
Hampton Roads	5,694	-1,768	7,462
Washington	159,015	239,246	-80,231
<i>Source: U.S. Census</i>			
<i>Note: Metropolitan data available only for top 50 metro regions.</i>			

ton exported native-born Americans, Richmond proved to be a major destination for the relatively affluent native-born.

Recruitment engines

If Virginia's regions are to devise effective strategies for recruiting the most talented people on the move, we need to better understand the mechanics of what drives migration. Why do people leave the communities they're in? Why do they move to where they do? And, what levers do regions have to influence the outcome?

I do not pretend to have the answers. I offer a number of observations with the aim of stimulating discussion. It is useful to start by looking at three major drivers of migration.

Traditional recruitment engines. Traditionally, people moved to new regions for two major reasons: to go to college, or to take a job. (I am excluding retirees who, by definition, no longer participate in the workforce and, thus, are not germane to this discussion.) Colleges recruit students on a massive scale. In this regard, Virginia enjoys an impressive advantage over other states. Our excellent institutions of higher education, both public and private, siphon thousands of out-of-state students into the state every year. What happens to

those students when they graduate is a good question. I don't know of anyone who compiles those numbers. It is a metric, I would humbly suggest, that Gov. Kaine's data gatherers would be well advised to monitor.

Business enterprises also recruit heavily -- not just young people coming out of school, but mid-career technicians, managers, professionals and executives. This activity, in which businesses spend millions of dollars persuading people to move to Virginia, is all but invisible to the public policy process. That needs to change: We can no longer afford to fumble in the dark.

Regions that collaborate with their educational institutions and businesses in the recruitment process, I contend, will be more successful in building human capital than those that don't. What forms such collaboration might take is a topic I hope to address in the future.

Industry clusters. Businesses enjoy an inherent advantage over competitors if they are part of an industry cluster. Lifetime employment doesn't exist anymore. People have the expectation of switching jobs, even careers, with some regularity. If they take a job in a particular region, they feel better about making the move if their specialized job skills are readily

transferable to other businesses in the region. (Northern Virginia's immense information technology sector is a great example.) That transferability allows employees to switch jobs, if necessary, without uprooting again. In a similar vein, regions with industry clusters offer greater opportunities for professional advancement, which aids retention.

There are many strategies that regions can do to build industry clusters, thus strengthening the hand of recruiters in the process. We'll discuss them in greater detail in a later column.

Quality of life. There once was a time when people moved to new locations mainly to advance their careers. Today, people are more inclined than in the past to consider lifestyle when choosing where to live. That is the key insight of Richard Florida, author of "The Rise of the Creative Class." Wrote Florida in 2002:

The people in my focus groups tell me that lifestyle frequently trumps employment when they're choosing where to live. Many said they had turned down jobs, or decided not to look for them, in places that did not afford the variety of "scenes" they desired -- music scene, art scene, technology scene, outdoor sports scene, and so on. ... I have come across many people who moved somewhere for the lifestyle and only then set out to look for employment there.

Writing of the creative class, Florida famously argues that creative people look for cultural/ethnic diversity, openness and tolerance. That is undoubtedly true for many -- especially of

young people with fewer family obligations and more time on their hands.

Priorities appear to change, however, as people age, get married and have children. A close inspection of migration data shows that native-born migrants are moving in droves out of urban centers in favor of the un-hip, homogenous culture of "suburbia." As people get older, it seems, they crave bigger houses, better schools and crime-free neighborhoods more than a cool music scene.

Take the Washington region, for example. The region pulled in 240,000 foreign-born immigrants between 2000 and 2006 and lost 80,000 native-born migrants. Moreover, there was a massive reshuffling of population *within* the region. Municipalities close to the urban core -- Arlington, Alexandria and Fairfax County -- collectively lost *152,000 native-born migrants*. They experienced a population increase only because of the influx of foreign immigrants and the surplus of births over deaths.

And where did the native-born migrants go? Many of them hopped over the county line. Loudoun, Prince William, Stafford and Spotsylvania counties collectively experienced a net gain of 155,000 native-born migrants over the same period. By contrast, those same counties saw a net gain of only 15,000 or so foreign migrants. The household income of those municipalities, incidentally, is soaring.

The role of the region

What can regions do, beyond distributing the traditional Chamber of Commerce "welcome kits" to newcomers, to help universities, businesses and other entities recruit the creative

class? Here's a quick cut:

Conduct market research.

Chambers of Commerce, economic development organizations or other regional groups can sponsor market research that identifies the likes and dislikes of different generational and demographic groups. To what extent are households within these groups looking for reasonable housing costs, good schools and congestion-free roads? To what extent do they value a hopping arts-and-music scene? Recreational amenities? Cultural and ethnic diversity? Tolerance and openness?

Another set of questions would revolve around the proclivity of different age groups to relocate to a new community. Is there a certain age at which a breadwinner has sunk roots in a community and is less likely to contemplate a major change?

Inventory community resources.

What assets does the community have to offer, and which demographic groups do those assets most appeal to? Does the region have a hot nightclub scene, which appeals to twenty-somethings? Or does it have superior schools, a priority to older households with school-age children? Only by taking honest stock of its assets can a region determine which demographic groups it has the best shot at enticing.

Execute marketing programs.

Regional groups can create websites and brochures describing the region and its attributes, which all business recruiters can share. Richmond does this in a sophisticated way by underwriting the publication of WORK Magazine (which I used to write for), targeting young professionals. The key is to put these print and Web resources into the hands of H.R.

departments who can use them when hiring and recruitment employees from outside the region. More ambitious regions might consider spending more money to build brand awareness in targeted demographic segments.

Make the region more livable. All the marketing flash and dazzle will avail the region little if there's no substance behind it. Regions must focus on building more livable, desirable places. Traditionally, regional elites have channeled finite community resources into high-profile projects like sports stadiums, museums, performing arts centers and convention centers. But are those what citizens — especially the most economically productive citizens — really want? How about affordable and accessible housing? Short commutes? Lower taxes? Good schools? Safe streets? Clean rivers and streams open for recreational use? A vibrant "street" scene. Livable neighborhoods with a strong sense of place? My hunch is that these are the things that really matter, but that hypothesis should be backed up with market research.

As Virginia's regions strive to build human capital by competing for skilled and educated workers, the creation of more livable places will evolve from a nicety to a necessity. As it does, economic development will morph into community development.

Inevitably, political, business and civic leaders will be forced to grapple with that old *Bacon's Rebellion* bugaboo, the dysfunctional human settlement patterns that detract so much from the quality of life. In upcoming editions of "Economy 4.0," we will explore the intersection of human capital and human settlement patterns.

-- January 14, 2008

End Notes

(1). Cynics may argue that a diploma ain't worth what it used to be. We may have more high school graduates, but they can't read Latin, solve quadratic equations and rattle off the names of the member states of the United Nations like the high school grads of yore could. There may be some truth to that, but it's also true that youngsters today compensate for their ignorance in classical disciplines with a facility in technology.

(2). At Gov. Kaine's instigation, the state maintains the "[Virginia Performs](#)" website, which tracks a variety of social, economic and demographic data. The data is not as comprehensive as it might be, but it is definitely a big step in the right direction.

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