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**McDonnell Unveils Plan to Boost Virginia Economy  
Through Higher Education and Workforce Training:  
“Affordable Access: Educating Virginians for Top Jobs and  
Incomes in the Knowledge-Based Economy”**

**-Calls for 100,000 Additional Degrees over Next 15 Years-**

*McDonnell: “My focus is our higher education system, but the subject is really much broader. It’s about the future of Virginia as a thriving community, a growing economy, and a place where people from diverse regions and backgrounds, with varied interests and abilities, can live fulfilling, prosperous lives.”*

**Fairfax-** Bob McDonnell, Republican gubernatorial candidate and former Attorney General of Virginia, today announced his bold vision for Virginia’s colleges and universities in a speech to students, professors, administrators and local leaders at George Mason University. In his remarks McDonnell rolled out the five specific elements that combine to form his “Affordable Access-Top Jobs and Incomes” vision for Virginia’s colleges, community colleges and universities.

- Commit the Commonwealth to awarding 100,000 additional four-year and community college degrees over the next 15 years.
- Make higher education more affordable and accessible for all Virginians.
- Increase the number of students graduating with degrees in high demand, high income fields such as science, technology, engineering and math.
- Expand workforce training at Virginia’s Community Colleges based on current and anticipated employer needs
- Promote public-private partnerships for economic development, workforce training, and advanced research in every region of Virginia

In his remarks McDonnell noted, “The hard reality is this: The 21<sup>st</sup>-century economy requires increasingly high skill and knowledge levels. Too few Virginians are going to college and getting that preparation. And our present state policies are doing far too little about it. In fact, our present state policies are making the challenge worse. Higher education ought to be among our top priorities for investment. It is one of the areas of state government spending that produces the highest return on investment in terms of jobs and economic growth, and ultimately tax revenues.”

McDonnell added, “During a decade when the general fund budget in Virginia has risen about 50 percent and total state spending has increased roughly 70 percent in nominal dollars—yes, it has increased by 70 percent—we have had roughly a 40 percent cut in constant-dollar funding for higher education on a per-student basis. . . . . The effect of this short-sighted policy of disinvestment has been to jeopardize the essential quality and capacity of Virginia’s higher education system at the very time when we need it most—when we should be laying the foundation for sustained economic success in the new, knowledge-based economy of the future.

McDonnell continued, “At the very time when the tough economic situation made getting a college or community college degree or professional certificate even more crucial for getting a good job, misplaced priorities in state government made it tougher for ordinary Virginians to afford it.”

The full speech, outlining McDonnell’s positive vision of greater investments and innovation in higher education leading to more jobs and opportunities for all Virginians, can be found below the following selected speech highlights.

### **McDonnell on 100,000 Additional Degrees**

“Nothing happens without vision and commitment. This is a big goal, and it will take a sustained effort. As Governor, I will make sure this commitment is written into the policies of the Commonwealth, just as the Standards of Quality codifies our ongoing commitment to elementary and secondary education. What we are talking about here is a major effort to expand access to higher education—and the economic potential it unlocks—for thousands more Virginians. Achieving the goal of 100,000 cumulative additional degrees over the next 15 years will move Virginia to the national forefront of educational attainment, putting us on track to have 55 percent of Virginians between ages 25 and 64 with college degrees. That’s an important milestone. According to the respected National Center for Higher Education Management Systems, a degree increase of that magnitude would place Virginia in the top rank of states and countries in terms of educational level and personal income. That’s essential for our economic future.

“The key is to get serious about aligning our spending priorities with the realities of the new economy. Producing 100,000 additional degrees will raise incomes, attract new businesses, create good jobs, and generate a large economic return on investment for our state, with a corresponding rise in tax revenues.”

“We also know that college graduates pay substantially more in state and local taxes than high school graduates—on average nationally, about \$2,800 more each year, according to Philip A. Trostel, a professor of Economics & Public Policy at the University of Maine. In today’s dollars, 100,000 more degrees would translate into \$280 million in higher state and local tax revenues each year.

Likewise, there is a stark differential in what it costs taxpayers for welfare, Medicaid, corrections, and unemployment and workmen’s compensation services based on education level. College graduates consume on average about \$974 less each year for those services than do high school graduates, according to Trostel. For 100,000 degrees, that means annual savings of \$97 million in today’s dollars.

Taken together, these tax collections and costs savings mean that, by 2025, our investment in 100,000 additional degrees will directly benefit Virginia taxpayers each year to the tune of nearly \$400 million dollars, based just on the improved economic situation of those additional graduates.”

### **McDonnell on Restructuring for Affordability and Employability**

“Not everyone in our society wants or needs to go to college, but we must give everyone a realistic opportunity. We must commit our Commonwealth to offering every capable and committed student in Virginia an affordable pathway to a good job through a college education. And that means restructuring the system to focus on both affordability and employability.”

### **McDonnell on Increasing Degrees in Science, Technology, Engineering and Math**

“We know the winners in the economic competition of the future will be those who possess knowledge and skills in the STEM disciplines. Those are the people who will earn the high incomes. Those are the states and communities that will attract the major business investments and research grants. It is also a vital matter of national security to support the military, to sustain our leadership in the technological revolution, and to promote Virginia’s role as an energy leader, particularly with nuclear power. And we know those high-income, high-demand professions are where the opportunity lies for our children and grandchildren—it’s where the next generation of Virginians from all walks of life, especially underprivileged communities, will find upward mobility and the chance for a share of the American Dream.”

“And if all that were not motivation enough, we know that for our nation’s security and survival, it is a contest we simply cannot afford to lose. Where, then, is our strategic plan here in Virginia? Where is the leadership to forge a bipartisan consensus and sustained commitment? Where is the systematic collaboration between business and government and higher education necessary to make this happen for our future? Where’s the sense of urgency, or sense of mission? We don’t have it. And, as Governor, I will be committed to changing that.”

### **McDonnell on Accessing Ready Employment Opportunities through Better Targeted Workforce Training and Re-Training at our Community Colleges**

“Some of the work at our community colleges results in associates degrees or transfer to four-year institutions. Some leads to professional certification. And in other cases the training is tailored to the specific needs of local businesses, some of whom partner with the community colleges for specialized programs. But the common denominator is that all of these programs provide access to better job opportunities for a wide range of Virginians—young people and adults, from varied backgrounds, all across our state. Expanding these opportunities will be a key element of our blueprint for sustained success in the knowledge-based economy. Instead of 23 different workforce training programs, spread across 9 different agencies, I will make our community colleges the focus of a comprehensive workforce training system—one that is aligned with emerging economic trends and geared to identified employment opportunities in our fast-changing private sector.”

### **McDonnell on Establishing more Public-Private Partnerships for Economic Development, Workforce Training, and Advanced Research**

“To realize our full potential for economic recovery and sustained expansion in Virginia, we must do a much better job of strategic planning on a regional basis. That will allow us to better tailor workforce training programs to the needs of existing enterprises and to the needs of the new businesses we are recruiting to each region. It will allow us to craft financial, workforce and other job-creation incentives that match the profile of businesses and business clusters in each region. And it will allow us to better align university-based research and development activities with the regional potential for private sector investment and commercialization. “

“It is time for us to take a quantum leap forward in Virginia in the quality of our strategic planning and implementation at the regional level. And to provide a catalyst for it, I will work with the General Assembly to review existing funding streams and weave financial incentives for regional collaboration and public-private partnerships into the state budget. At the same time we will establish and implement metrics to measure performance of these programs. Only things that actually work will be funded.”

# *Full Text: Bob McDonnell's "Affordable Access" Vision for Virginia's Colleges and Universities*

## **Address at George Mason University**

*May 12, 2009*

Let me thank Alan Merten and the great team here at George Mason University for having us here today. It is good to see so many good friends and supporters of the University and higher education here today as well.

You cannot come here without being impressed by the great vision, commitment, and dedication it took from all of you and so many others to build this great university right in the heart of Northern Virginia.

And it is not just one national accolade or ranking that attests to this institution's achievements. It is everything from being rated one of America's "Best Values" by Princeton Review and Kiplinger's, ... to being ranked one of the best colleges in the country "to work for" by the Chronicle of Higher Education, ... to scoring in the top 100 North American universities for academic excellence according to the Academic Ranking of World Universities, ... to being voted the Nation's "number-one university to watch" on the US News and World Report list of up-and-coming universities.

And as a relatively short and quick guy, I especially enjoyed your trip to the Final Four a few years back, a game I attended. As you probably have noticed, I've made it to the Final Four myself in terms of the contest for Governor. And I plan to pick up where you left off and win the championship this November.

I see a number of other higher education leaders in the audience, and I also want to thank you for coming and for all you do to advance the cause of learning and opportunity in this Commonwealth.

I am here this afternoon to do something unusual for political campaigns these days—though we are doing it often in our campaign—and that is move beyond sound bites to real solutions, and talk seriously about how we can accomplish transformative change. My focus is our higher education system, but the subject is really much broader. It's about the future of Virginia as a thriving community, a growing economy, and a place where people from diverse regions and backgrounds, with varied interests and abilities, can live fulfilling, prosperous lives. And it's about how we can secure that future in a world that is changing faster and challenging us more fundamentally than any generation has ever experienced.

Let me begin by emphasizing this: I am running for Governor because I want to help bring strong and sustainable economic opportunity and expansion to every part of our state—with good jobs, and rewarding careers, and good and growing incomes for all Virginians.

And like all of you, I know we cannot achieve that in today's high-tech economy unless we raise the level of educational attainment in the Commonwealth.

I know in my own life, had I not graduated from college and then gone on to earn two Masters degrees in public policy and business, as well as a law degree, I would not have the great opportunities I have had in my life.

For our children and grandchildren to enjoy the kind of opportunities that our generation enjoyed—for them to be good citizens who help secure the blessings of liberty, prosperity, and security for themselves and future generations—we must put policies in place now that will provide the foundation for sustained success in the knowledge-based economy.

Today, I want to outline how we can lay that foundation by making major changes in our commitment and approach to higher education in Virginia. I will outline five major initiatives that will guide my strategy for investment and innovation in higher education and workforce development as Governor.

Before I describe those five elements, though, let me supply some context for the conversation.

Virginians, today, are hurting and concerned about the economy and jobs, and they want action. They also have a sense of history, and they know that Virginia did not prosper over these 402 years by shortcuts and quick fixes. So they want what we do to make good sense, not just next month or next year, but for the next generation. They want to lay a solid foundation for a prosperous future.

That is one reason why there is mounting skepticism about what is going on today across the river in Washington. It is a good thing to stimulate the economy by investing in infrastructure and human capital in ways that have a reasonable prospect of producing lasting returns on investment. But shoveling dollars out at a rate that would double the national debt in a decade, without the slightest clue how our children and grandchildren will pay for it all, looks less like a prudent policy or plan and more like unsustainable spending and debt.

At the state level, we don't have the luxury of deficit spending, and we should all be glad about that. We also don't have the luxury of Washington-style politics and budgeting.

If we want to lay a solid foundation for sustained economic success, the next four years cannot be about fast talk and glib promises and using Virginia's highest office as a stepping stone to another political job. It has to be about practical solutions, measurable results, and using Virginia's highest office to put in place the building blocks that will produce good jobs and high incomes for all Virginians.

The choice between stepping stones and building blocks is a basic one in this election. And the vast majority of Virginians agree on what those building blocks need to be:

- First, we need to send a clear message that Virginia is open for business, with a pro-business climate that stands out because of low taxes and incentives for job creation, limited and sensible regulation, a predictable litigation climate, and a fiscally sound and efficient government that lives within its means.
- Second, we need to act now to implement a comprehensive pro-jobs, pro-market energy independence policy that will tap all available sources and make Virginia the East Coast capital for clean, abundant, and low-cost energy production.
- Third, we need to recognize that our strong Right to Work law is a powerful magnet for business investment in Virginia and an essential tenet of worker freedom. It is now in real danger as a result of federal proposals like the card check bill, which would deny the secret ballot to workers and replace contract negotiations by businessmen with binding arbitration by bureaucrats.
- Fourth, we need to bring the public and private sectors together as partners in creating an innovative and workable transportation system for the 21st century, so that we can shorten commute times and boost economic development throughout our state.
- And we need a variety of other innovative economic measures—other building blocks—to make sure that economic recovery and expansion reaches into all Virginia communities:
  - policies that will empower small businesses to innovate and create new jobs;
  - policies that will be a catalyst for investment by minority entrepreneurs and women business owners and others seeking to grow thinly capitalized ventures,
  - policies that will bring new hope to economically distressed communities in our central cities and in much of rural Virginia; and
  - policies that will set the stage early for great careers by improving performance in grades K-12, spending more of our education dollars in the classroom, and creating more opportunities for students to work and learn in the fields of math, science, technology, engineering and healthcare.

But none of this can succeed—none of these building blocks will provide a firm foundation—unless we prepare our workforce to seize the best job opportunities of the 21<sup>st</sup> century economy.

Study after study shows there is a very direct correlation between the degree one gains and the income he or she earns—between the educational attainment of a state and a state's per capita income. In fact, on average, those with a college degree earn about twice as much as those without one. So, workforce development is an essential building block for the new economy, and it's what I have come to discuss with you today.

When Dickens penned *A Tale of Two Cities* and coined the often-quoted phrase, “the best of times and the worst of times,” he described a world in the midst of a *political* revolution. Today, we are in the midst of a *technological* revolution.

We live in a time of unparalleled promise and discovery. And as fast as the change has already been, the experts tell us the pace of new breakthroughs will increase dramatically in the next quarter century.

There is also a whole new economic and educational paradigm. Today the competition is global, dynamic, and information-based. In the old economy, the primary strategy for economic success was to aggregate large amounts of stable capital and achieve competitive advantage by marginal reductions in cost. But, more and more, in a global marketplace super-charged by technology and innovation, the focus is on what one noted economist has termed “creative destruction.” What counts in this intensely competitive era, with new ventures emerging and disappearing with mind-boggling speed, are knowledge and entrepreneurship, new ideas and new technologies. And that is where enlightened state policy must focus.

The stakes could not be higher. Earlier in this decade, the federal bipartisan commission on national security chaired by former Senators Gary Hart and Warren Rudman issued a detailed report that said this:

Second only to a weapon of mass destruction detonating in an American city, we can think of nothing more dangerous than a failure to manage properly science, technology and education for the common good over the next quarter century.... The harsh fact is that the U.S. need for the highest quality human capital in science, mathematics and engineering is not being met.... This is an ironic predicament, since America's strength has always been tied to the entrepreneurial energies of its people. America remains today the model of creativity and experimentation, and its success has inspired other nations to recognize the true sources of power and wealth in science, technology, and higher education.... Other countries are striving hard, and with discipline they will outstrip us.... In a knowledge-based future, only an America that remains at the cutting edge of science and technology will sustain its current world leadership.... [O]nly a well-

trained and educated population can thrive economically, and from national prosperity provide the foundation for national cohesion.

When it comes to this knowledge-based future, we in Virginia are in a “Dickens” of a situation—these indeed are the “best of times and worst of times.”

Let me talk about the “best of times” first.

Virginia is among the top ten states in per capita income and around the top ten in various measures of educational attainment. We have long enjoyed an exceptional higher education system, with institutions that routinely receive high national rankings. We have led the way in the national education standards movement, and our elementary school students continue to be among the Nation’s high performers in math and reading as measured in the standardized National Assessment of Education Progress (NAEP) tests.

Our progress, according to these and other measures, has been most impressive. Just a half-century ago, the hallmarks of Virginia’s education system were mediocrity, deprivation, and discrimination based on race and gender. Even a decade and a half ago, before Governor Allen put us in the forefront of the academic accountability movement with new SOL tests, we were investing billions but had little measurable educational progress to show for it. Since then, through bipartisan cooperation, we have made major strides forward by combining new resources with real reform and academic rigor.

But if these are the “best of times” compared to our past, future generations may well look back on them as the “worst of times” in terms of vision and investment—at least, in higher education.

Consider, first of all, the gap between the education level that is needed for success in the new economy and the education level that most Virginians now are attaining. The Virginia Business Higher Education Council recently reported in a survey that more than 75% of Virginians believe a college degree now is essential in order to succeed in the knowledge-based economy. Yet, currently, only about 35% of college-age Virginians are enrolling in a four-year or community college, and only about 42% of working-age Virginians have college degrees.

That is a huge gap—a startling gap between expectations and reality.

It is not enough to set a new floor, as we have done with the Standards of Learning. We also must promote excellence and opportunity by lifting our sights and raising the ceiling.

Many people my age and older worry that the next generation of Virginians may be the first not to enjoy greater economic opportunities than their parents—that the American Dream may be dimming for our children and grandchildren, and that other nations may pass us by in innovation and competitiveness. And while that may be unduly pessimistic, we certainly cannot afford to be blindly optimistic.

The hard reality is this: The 21<sup>st</sup>-century economy requires increasingly high skill and knowledge levels. Too few Virginians are going to college and getting that preparation. And our present state policies are doing far too little about it.

In fact, our present state policies are making the challenge worse.

Higher education ought to be among our top priorities for investment. It is one of the areas of state government spending that produces the highest return on investment in terms of jobs and economic growth, and ultimately tax revenues:

- Not only do our colleges and community colleges prepare young people for the good jobs and high incomes of the future, but they also provide the new skills that adults need to stay well-employed in the fast-changing economy.
- They play a vital role in our economic development programs that attract new, job-producing businesses to every region of our state. Just ask the executives and employees of companies like Rolls Royce, and SRI, and AREVA, and Canon, and Continental, each of which located or expanded facilities here in reliance on the advanced educational opportunities we made available.
- Our colleges also partner with business on research that creates new discoveries, new jobs, and a substantial return on investment.
- And study after study shows that a wide range of costly social ills—from crime and welfare to health and wellness issues—all correlate to lower education levels.

In short, our investments in higher education pay big dividends in both increased economic activity and reduced social costs, resulting in a higher quality of life for our citizens.

Now, you would think that in a decade in which we have faced two recessions, one thing we'd be sure to do is focus our state resources on the government programs that produce the highest economic return.

But that has not been true when it comes to operations of our colleges, universities, and community colleges. Instead, the pattern has been that whenever the economy turns downward, higher education gets cut big.

The budget Governor Kaine proposed late last year included a little over \$6,000 per student in state support for educational programs at our four-year colleges and universities. In constant dollars, that is down from over \$10,000 per student in 2000.

Let me put that in focus for you.

During a decade when the general fund budget in Virginia has risen about 50 percent and total state spending has increased roughly 70 percent in nominal dollars—yes, it has increased by 70 percent—we have had roughly a 40 percent cut in constant-dollar funding for higher education on a per-student basis. (The “stimulus” package will provide some temporary relief but it is merely postponing the inevitable).

And while this is not a partisan issue, it should be noted that the Republican-controlled House of Delegates year after year has done what it could to resist this disinvestment trend. Since 2003 the House-passed budget has routinely awarded higher education a larger percentage of state funds and more total dollars than in the budget introduced by the Governor.

The effect of this short-sighted policy of disinvestment has been to jeopardize the essential quality and capacity of Virginia’s higher education system at the very time when we need it most—when we should be laying the foundation for sustained economic success in the new, knowledge-based economy of the future.

It’s the very time when we need to be closing the gap between the 75% of Virginians who know a college education is essential for success and the 35% of college-age young people who currently enroll.

To some extent, our institutions of higher education have absorbed the cost and provided space for thousands of additional students anyway. They became more cost-efficient by necessity, and they will need to become even more so in the years ahead to keep higher education within reach for all Virginians.

To a large extent, colleges have passed on those state funding cuts to tuition-paying Virginia students and their parents. And so, during tough times when Virginia families had to cope with job loss and insecurity—seeing their incomes sag, and their investment portfolios deflate, and their home values plummet—they endured the added insult and injury of experiencing more than a doubling of tuition and fee costs just since 2000. This trend is unacceptable.

Some parents have watched as their child’s opportunity for a college education—perhaps the first in their family to have that chance—slipped from reach. Others have seen their kids’ future buried under a mountain of college loan debt. And middle-income families have especially felt the squeeze, because they do not have ready cash to pay the higher tuition bills yet generally don’t qualify for need-based aid.

At the very time when the tough economic situation made getting a college or community college degree or professional certificate even more crucial for getting a good job, misplaced priorities in state government made it tougher for ordinary Virginians to afford it.

That's why these are both the "best of times" and "worst of times" for higher education and workforce preparation in Virginia. We have excellent institutions and enormous opportunities, but we run the very real risk of squandering our opportunities—of grinding up our seed corn—if we do not decisively change our approach.

My purpose is not to look backward and assign blame, but to look forward and identify solutions. And the good news is that, with different policies and priorities, we can boost job creation and raise incomes for many more Virginians in the years ahead.

So let me tell you what I propose to do as Governor to lay a sturdy foundation for success in the new economy through a strong, sustainable commitment to both investment and innovation in higher education.

We will be spelling out additional proposals and details throughout the campaign, and we will be listening to the people of Virginia—to tuition-paying parents, loan-saddled students, and to business and higher education and community leaders—for new and innovative solutions that will be part of this plan. I particularly solicit your recommendations. But as a broad policy blueprint, here is the five-point program I envision.

### **I. 100,000 More High-Quality Associates and Bachelors Degrees**

First, we must commit our Commonwealth to awarding 100,000 additional associates and bachelors degrees over the next 15 years. That number is over and above current degree-granting levels, but with the same high quality.

Nothing happens without vision and commitment. This is a big goal, and it will take a sustained effort. As Governor, I will make sure this commitment is written into the policies of the Commonwealth, just as the Standards of Quality codifies our ongoing commitment to elementary and secondary education.

What we are talking about here is a major effort to expand access to higher education—and the economic potential it unlocks—for thousands more Virginians. Achieving the goal of 100,000 cumulative additional degrees over the next 15 years will move Virginia to the national forefront of educational attainment, putting us on track to have 55 percent of Virginians between ages 25 and 64 with college degrees. That's an important milestone. According to the respected National Center for Higher Education Management Systems, a degree increase of that magnitude would place Virginia in the top rank of states and countries in terms of educational level and personal income. That's essential for our economic future.

Here in Virginia, we face intense competition from fast-growing and smart-investing states immediately north and south of us, and across the United States. But, as the Hart-Rudman commission and others have emphasized, we are also competing with forward-looking countries that are already moving out ahead of us. Currently, the United States ranks behind such countries as Japan, Korea, Belgium, Canada, Norway and Finland in educational attainment by younger adults, and we could easily fall behind numerous others if present trends continue. Especially in the disciplines most vital for our future security and prosperity—science, technology, engineering, and math—we are seeing many countries outpace the United States in producing graduates.

It is time for Virginia to show the way to American leadership again. In the last two decades, we have provided an example for the nation on matters ranging from academic standards and welfare reform to truth-in-sentencing and public-private partnerships. Now we need to show the way forward on higher education and workforce preparation.

Obviously, our current fiscal pressures will limit our immediate investment. And even those who favor raising taxes on Virginia businesses and individuals have to concede that higher taxes would only weaken the damaged economy further.

This does not mean, however, that we cannot act. The fact is we must act, and there are two things I will do as Governor to make this 100,000 additional degree goal financially feasible. First, I will immediately make investment in higher education a priority again in the budget process. And, second, I will build bipartisan consensus behind a blueprint for innovation and annual investments that will, when enacted into law and implemented with discipline, achieve the 100,000 additional degree goal over the next 15 years.

To put this in perspective, if general fund spending on higher education since 2000 had merely matched the growth of spending in the rest of the general fund budget—if it had only kept pace with *average* spending on all the other general fund programs—then we already would be investing \$300 million more in higher education annually without raising taxes one dollar.

The key is to get serious about aligning our spending priorities with the realities of the new economy. Producing 100,000 additional degrees will raise incomes, attract new businesses, create good jobs, and generate a large economic return on investment for our state, with a corresponding rise in tax revenues.

The value of our higher education institutions as engines of economic growth is well-documented. The University of Virginia, for example, generates nearly five dollars in direct outside revenue each year for every one dollar of state appropriations. In 2005, that translated

into a net revenue benefit of roughly a half billion dollars. The return on the state's investment is undoubtedly higher for UVA than for some other institutions, but the number I just cited did not even take into account the indirect economic impacts, which we know are substantial.

We also know that college graduates pay substantially more in state and local taxes than high school graduates—on average nationally, about \$2,800 more each year, according to Philip A. Trostel, a professor of Economics & Public Policy at the University of Maine. In today's dollars, 100,000 more degrees would translate into \$280 million in higher state and local tax revenues each year.

Likewise, there is a stark differential in what it costs taxpayers for welfare, Medicaid, corrections, and unemployment and workmen's compensation services based on education level. College graduates consume on average nationally about \$974 less each year for those services than do high school graduates, according to Trostel. For 100,000 degrees, that means annual savings of \$97 million in today's dollars.

Taken together, these tax collections and costs savings mean that, by 2025, our investment in 100,000 additional degrees will directly benefit Virginia taxpayers each year to the tune of nearly \$400 million dollars, based just on the improved economic situation of those additional graduates.

Our own Council on Virginia's Future, chaired by Governor Kaine, has commented at length on the direct correlation between education levels on the one hand and demand for state services on the other. And when you look at the data, the question is not whether we can afford to have a sustained policy of investment and innovation in higher education. Given the current economy, the truth is we cannot afford to be without one.

We know how to put this kind of sustained investment program in place. Last year, the Governor and General Assembly took the very positive step of adopting a long-term capital investment program for higher education with a nearly \$1.6 billion bond package. At least when it comes to bricks and mortar, we have done the smart thing.

When Governor Kaine responded to the persistent requests for capital investment from the higher education and business communities, I immediately reached across party lines and authored a column in the *Richmond Times-Dispatch* endorsing it. I was especially pleased that, through the innovative leadership of House Appropriations Chairman Lacey Putney and his team, a bipartisan consensus was forged in favor of a systematic and cost-effective new process for sustained capital investment in Virginia's colleges, universities and community colleges.

Now we need the same kind of vision, discipline, innovation and cost-efficiency on the operating side of the budget.

But if leadership is our mission—and it certainly is mine—then we must do more than just award more degrees the same old way it’s been done in the past. We need to become more cost-efficient. We need to fashion innovative and affordable new approaches that let more Virginians in varied circumstances access those degrees. We need to focus our investment on the kinds of degrees that will create the most opportunity and the highest incomes in the knowledge-based economy—in areas like math, science, engineering, technology, health care and teaching. And we need to forge highly effective partnerships in every region of Virginia, so we can bring together job-creating entrepreneurs and businesses, educational institutions, and state and local governments to pursue integrated strategies for job creation, workforce preparation, advanced research, and economic development.

Let me turn, then, to each of these additional points in our plan.

## **II. Restructuring the System for Affordability and Employability**

The second element of our program has to do with the price tag paid by students and families, and what both they and taxpayers have to show for it.

Not everyone in our society wants or needs to go to college, but we must give everyone a realistic opportunity. We must commit our Commonwealth to offering every capable and committed student in Virginia an affordable pathway to a good job through a college education. And that means restructuring the system to focus on both affordability and employability.

We know the problem. Higher education costs have been escalating nationwide, enrollments have been rising, and per-student funding in Virginia has been slashed. Instead of the Commonwealth paying the traditional 2/3 of the cost of higher education at our public institutions, it is now paying on average only about 1/2. So, parents and students have borne the brunt of having tuition and fees more than double in this decade.

The situation in higher education is much like what we need to achieve energy independence. The answer is not “this or that”—it is “all of the above.”

- We need to renew our commitment to higher education as a priority in the state budget process and pass legislation codifying a sustainable long-term investment strategy and funding source.
  
- We need to make a greater commitment as a Commonwealth to providing need-based financial aid for Virginia college students, and make it available to more middle-income families.

- And we need to increase cost-efficiency and technology, and avoid duplication throughout our higher education system.

I have already acknowledged the good work of the institutions in finding efficiencies and absorbing increased enrollments despite state funding reductions. And a number of important system-wide improvements have been enacted, including the 2005 restructuring legislation.

But let's be candid about the substantial work that remains, because the pattern is all too familiar. Administrative creep and growth in programs without suitable metrics is a problem throughout government entities. To meet competitive pressures for the best students, colleges provide more and more expensive amenities to students. They also launch new programs that are often costly and duplicative of what is available at other public and private institutions. Programs, once created, are guarded zealously by faculty and are rarely eliminated even if they are academic "bridges to nowhere" that attract few students and do little to enhance the employability of those they do attract.

The State Council of Higher Education, which should be helping to address some of these challenges, has done little about them. In fact, there is little to suggest that the Council ranks employability and economy among its core missions. This will change dramatically when I am Governor.

- The nature of many 21<sup>st</sup> century technology and technical jobs makes community colleges the venue of choice for many students. We also need to expand the capacity of our community colleges, which provide excellent quality at great value. In fact, the average annual cost of tuition and fees for an in-state student at a community college is about \$2,600, while the corresponding cost at a four-year institution is about \$7,600—almost 3 times higher. Community colleges not only offer an affordable way to get two-year associates degrees; they also provide a less expensive way to get the first two years of credits toward four-year bachelors degrees. We need to build on the institutions' recent progress and make more of those transfer arrangements possible.
- We must also increase dramatically the level of collaboration between high schools, colleges and community colleges, so that far more early college courses, advance placement courses, and dual enrollment options are available to high school students in every community in Virginia. The old notion that, unless you are some kind of prodigy, you have to spend twelve years getting your high school degree, and then two or four full years in college, then whatever additional is required for post-graduate work, is outdated. Time means money, and if we can create good opportunities for students to get more degrees in fewer semesters, the savings can be enormous.

- We need to make far greater use of the new technology that is at our disposal so that more top courses are available in higher education centers and community colleges and other remote classrooms, and so that more instruction can be accessed by individuals online. There are numerous examples of this underway throughout the state, but so far we have only scratched the surface of the potential.
- There are many other things we can do with new technology. Just consider the cost of textbooks for a moment—it can run on average \$500 or more a semester. This little lightweight device is a kindle. It is electronic but reads just like a book. With digital texts available at roughly half the cost of regular books, families could save \$1,500 or more just on textbooks during a typical 4-year college experience. That’s one reason why a handful of innovative institutions, including the Darden School at UVA, are partnering with Amazon.com on a new pilot project involving these kindles. We need to put Virginia’s whole higher education system out front on cost-saving innovations like this, form a consortium to maximize our purchasing power, and drive down some these inflated higher education resource costs wherever possible.
- We also need to do much more to cultivate private-sector educational alternatives that cost the Commonwealth much less on a per-student basis. That means providing more tuition assistance—so-called TAG—grants to our excellent independent colleges in Virginia. And it also means providing incentives for both for-profit and not-for-profit educational enterprises to open up shop here, create jobs, pay taxes, and offer new instructional programs in Virginia. When the private sector is a partner, taxpaying citizens and tuition-paying parents typically pay less.
- We should explore the tuition moderation “rainy day” fund idea recently advanced by the Virginia Business Higher Education Council. It envisions setting aside state funds during boom times as a way to avoid, or at least minimize, the sudden spikes in tuition when the boom busts. We must explore every option to stabilize or reduce tuition for Virginia students.
- And, finally on a subject I hear parents talk about all over the state, we need to increase access for more Virginia students at our most popular four-year colleges and universities. We can do this by increasing capacity, both physically and online—not by imposing unfunded mandates that tie the institutions’ hands, but by setting a new goal of serving more Virginians, backed by a coherent investment blueprint and funding formula.

Out-of-state students pay upwards of 140 percent of what it costs to educate them, and so they subsidize the education of in-state students, keeping tuition from going even higher during these tough times. That is good, but it is not a reliable way to finance a higher education system over the long term, and it will not maximize opportunities for high-performing Virginia students. Instead, as we implement a sustainable funding plan, ease the

tuition burden, and develop more nontraditional, low-cost learning alternatives, we need to also be working with our four-year institutions to create more opportunities for our best Virginia students to attend our best Virginia schools.

I don't claim to have all the answers today, but I do know we cannot continue on our present course. We need to mobilize the best minds in the education, business and technology communities, get these and other innovative ideas out on the table, and develop a comprehensive plan to make access to a high-impact college education a practical and affordable reality for all Virginia students with the ability to learn and the desire to succeed. More state commitment coupled with more system-wide efficiency will be the keys.

As Governor, I will lead the way to make this happen.

### **III. Targeting Science, Technology, Engineering, Math and Other High-Income Sectors**

My third major point is this. As we develop our detailed plan for conferring 100,000 additional degrees, we must place special emphasis on the high-income, high-demand sectors of the economy, especially science, technology, engineering, and mathematics.

Other than the weather, it's hard to think of anything that has produced more talk and less consequential action than increasing the number of so-called STEM degrees (STEM being the acronym for science, technology, engineering and math). Certainly some positive steps have been taken at the federal level and here in Virginia under the leadership of both parties, and I applaud those efforts. But the U.S. now ranks only 29<sup>th</sup> out of 109 countries in the percentage of 24-year-olds with math and science degrees. And if you are looking for evidence of a transformational plan here in Virginia—a first-tier, high-priority initiative, led by the Governor, that could really be a game-changer for our economic future—you won't find it.

In fact, if anything, the pattern of disinvesting in higher education that we have seen over the last eight years in Virginia has hit the so-called STEM programs hardest, because those degree programs are some of the most expensive to run.

Now, think about what we know.

We know the winners in the economic competition of the future will be those who possess knowledge and skills in the STEM disciplines. Those are the people who will earn the high incomes. Those are the states and communities that will attract the major business investments and research grants. It is also a vital matter of national security to support the military, to sustain our leadership in the technological revolution, and to promote Virginia's role as an energy leader, particularly with nuclear power.

And we know those high-income, high-demand professions are where the opportunity lies for our children and grandchildren—it's where the next generation of Virginians from all walks of life, especially underprivileged communities, will find upward mobility and the chance for a share of the American Dream.

And if all that were not motivation enough, we know that for our nation's security and survival, it is a contest we simply cannot afford to lose.

Where, then, is our strategic plan here in Virginia? Where is the leadership to forge a bipartisan consensus and sustained commitment? Where is the systematic collaboration between business and government and higher education necessary to make this happen for our future? Where's the sense of urgency, or sense of mission?

We don't have it. And, as Governor, I will be committed to changing that.

There are three interrelated ways to tackle this problem, and we need to focus on all three simultaneously because it's the only way to make a major impact.

(1) First, we need to tie state funding directly to this priority and create financial incentives for all our institutions of higher education, both two- and four-year, to emphasize these programs. We need innovative new pathways by which more Virginians can access these highly valuable degrees.

Everyone is impressed, for example, with the partnership among the University of Virginia's School of Engineering, Central Virginia Community College, and AREVA by which young people can get engineering degrees while earning good money and without ever leaving Lynchburg. We need to develop many more innovative and economical opportunities like that one.

We also need place particular emphasis on preparing more African-American, Latino, and other minority students for the high-demand, high-income jobs. Collaborations between institutions and with businesses and grant-making foundations can open new opportunities at our historically black colleges and universities, and throughout the higher education system.

We must do much more to leverage private investment in all of our STEM programs here in Virginia. But the bottom line is you get what you pay for. So when we draw up Virginia's blueprint for 100,000 new degrees and develop a funding formula to pay for it, my thumb is going to be on the scale in favor of STEM programs.

(2) Second, we need to do much more to encourage young people to get on the STEM track when they are in elementary and middle school, and of course, high school.

I mentioned our strong math test scores in the early grades. That's a great advantage, but right now we are not capitalizing on it.

Our young people need to hear early and often about the exciting and lucrative career opportunities in science, technology, engineering and math, and they need to hear it not only from guidance counselors and teachers, but from business and community leaders, and from people who do exciting, ground-breaking things every day in those professions.

I recently met with the folks at the Mid Atlantic Spaceport who told me about a great example of this. It is the FIRST program, which stands for “For Inspiration and Recognition of Science and Technology.” Currently, it reaches over 190,000 students and involves 60,000 volunteers nationally each year. Its LEGO League exposes elementary and middle school students to technical concepts and research. They explore a challenge topic, such as climate, power, volcanoes, oceans, Mars, or others, and they build and program a robot to complete tasks on a table-sized field.

We need more public, private and charter school options for specialized study in the STEM area.

And we need to provide tangible incentives. Students need to know their chances of getting into the college of their choice, getting scholarship money, and getting good work-study opportunities will be significantly enhanced if they are ready, willing and well-prepared to pursue STEM lines of study.

Again, this is an area where our public commitment can leverage private contributions, because businesses are looking for young people with STEM-related education.

(3) Third, we need to attract, train, motivate, and reward many more excellent teachers in STEM disciplines.

We need more people with actual degrees in science, technology, engineering and math who will go into our schools to teach and motivate our young people.

I will support proposals to provide forgivable student loans to young people who earn STEM degrees in college and go back into our Virginia schools to teach for a sustained period of time.

I will support measures that encourage experienced STEM professionals to enter the teaching profession as second careers, or to make part-time commitments to teach and mentor young people in these areas.

And, as I have said many times, I support implementing a system of performance pay for school teachers, so that we attract, incentivize and reward excellence. My opponents are wedded to one-size-fits-all compensation, but this is something President Obama has right—the time for performance pay is now.

Now, by emphasizing STEM degrees, I don't mean to leave out other under-served occupations and professions that present major economic opportunities today and will for years to come. Nurses and other healthcare workers, teachers for disabled and at-risk children, and careers in advanced manufacturing are just some that come to mind. Educational programs that respond to these and other major shortages of high-skilled workers must be a priority as we craft an economic strategy for increased degree attainment here in Virginia. We must ensure our higher education system is graduating qualified people for the jobs in growing or shortage areas.

#### **IV. Comprehensive Workforce Training/Re-Training Led by Our Community Colleges**

The fourth area of initiative in higher education that I will pursue as Governor is the expansion of our community college system to provide comprehensive workforce training programs geared to identified employment opportunities.

Community colleges are a jewel in our higher education crown. They do not always attract the national attention of our flagship universities, but they are in every community producing a major positive impact every day. And our economic future depends on them.

I have already alluded to the increased role that our community colleges should play in providing more affordable and cost-efficient ways for more Virginians to get college degrees. And I have talked about ways they can contribute to higher degree attainment specifically in the STEM disciplines and other high-demand areas of study. In a few moments, I will conclude by talking about them again in the context of regional economic development initiatives.

But here I want to salute their importance in training—and especially retraining—people for a wide range of good job opportunities in our fast-changing economy. Because of the pervasiveness of advanced technology, most of the better-paying jobs go to people with some post-secondary education and technical training, and much of that education takes place at our community colleges. As Chancellor DuBois says, high school is no longer the finish line.

Some of the work at our community colleges results in associates degrees or transfer to four-year institutions. Some leads to professional certification. And in other cases the training is tailored to the specific needs of local businesses, some of whom partner with the community colleges for specialized programs. But the common denominator is that all of these programs provide access to better job opportunities for a wide range of Virginians—young people and adults, from varied backgrounds, all across our state.

Expanding these opportunities will be a key element of our blueprint for sustained success in the knowledge-based economy. Instead of 23 different workforce training programs, spread across 9 different agencies, I will make our community colleges the focus of a comprehensive workforce training system—one that is aligned with emerging economic trends and geared to identified employment opportunities in our fast-changing private sector.

This is not some far-off goal—with people out of work, we need to move fast. Last month, for example, one new governor announced an initiative to provide accelerated, six-month job retraining programs geared to 12 specific jobs for which shortages of skilled workers immediately exist—from nursing assistants and medical coding to plumbing and HVAC technicians. That governor is in North Carolina, our tough competitor to the south, and she is able to do it because they have integrated their community college, economic development and workforce training programs effectively.

#### **V. Public-Private Partnerships for Economic Development, Workforce Training, and Advanced Research in Each Region**

That brings me to my fifth and final point. We must develop strong and active new public-private and intergovernmental partnerships in each region of Virginia to promote economic development, workforce preparation and commercially viable research.

Virginia is a diverse state, and the differences between regions are enormous. The natural and human resources differ. The economic and infrastructure profiles differ. The opportunities for business investment and entrepreneurship differ.

To realize our full potential for economic recovery and sustained expansion in Virginia, we must do a much better job of strategic planning on a regional basis.

That will allow us to better tailor workforce training programs to the needs of existing enterprises and to the needs of the new businesses we are recruiting to each region

It will allow us to craft financial, workforce and other job-creation incentives that match the profile of businesses and business clusters in each region.

And it will allow us to better align university-based research and development activities with the regional potential for private sector investment and commercialization.

We have had various mechanisms for regional collaboration in Virginia, and they have achieved varying degrees of success. As Governor, I will work with the General Assembly, local governments, our colleges and universities, and business and community leaders to create new or revitalized strategic partnerships in each region of Virginia. These public-private and intergovernmental planning units will bring together the region's higher ed institutions and K-12 leaders, state and local economic development officials, those responsible for infrastructure development and maintenance, research park managers, and business, government and community leaders, among others, to develop and implement specific regional action plans for economic progress.

It is time for us to take a quantum leap forward in Virginia in the quality of our strategic planning and implementation at the regional level. And to provide a catalyst for it, I will work with the General Assembly to review existing funding streams and weave financial incentives for regional collaboration and public-private partnerships into the state budget. At the same time we will establish and implement metrics to measure performance of these programs. Only things that actually work will be funded.

Research and development, especially commercially viable research, is a crucial part of this initiative because it produces an especially large return on the state's investment. In 2007, Virginia Tech generated 9 dollars in additional research grants for every 1 dollar in research funding it received from the state. The University of Virginia generated private and federal research funding 1.7 times greater than the Commonwealth's total operating support for the entire University.

The Commonwealth Research Initiative, which provided state funding to catalyze new university-based research, has been funded and then de-funded over the past several years despite studies showing the positive return on investment in research. This is just another example of why we need a long-term blueprint for investment and innovation that doesn't change with the rise and fall of the stock market or the inauguration of a new governor.

That long-term blueprint needs to include sustained efforts along the lines of the Commonwealth Research Initiative, but it also needs to include innovative incentives for commercially viable R&D activities on a regional basis.

Last month, as part of a comprehensive energy plan proposal—another key building block of our economy for the future—I proposed a number of ideas to increase research and development at our colleges and universities. We will use a portion of the revenues from offshore drilling for oil and natural gas to help fund alternative and renewable energy research and development, much of which will occur at universities.

I also announced a major public-private initiative to make Southside and Southwest Virginia the new energy corridor for the east coast, a hub for both traditional and alternative energy research and development. We will leverage \$100 million for energy R&D provided by the Tobacco Commission to attract private sector investment, seek federal stimulus funding, and coordinate grant opportunities with our colleges and universities. A new Virginia Energy Institute will serve as a catalyst for this collaboration on research, and a Center for Energy within the Virginia Economic Development Partnership will help state, local and private promoters maximum the potential for energy-related investment and job creation in the Southside and Southwest.

In this competitive new economy, we must employ the next generation of economic development strategies. Those new strategies must concentrate more on workforce knowledge and skill, especially the knowledge and skill needed for high-demand, high-income jobs in the industry clusters we know will grow in the years ahead—things like energy, healthcare, defense, IT, telecommunications, and environmental technology, among others.

It has been nearly two decades—back under Governor Allen—since we overhauled both our economic development apparatus and strategy here in Virginia. The world has changed since then, and so has the competitive environment. As Governor, I will lead the effort to put in place a new-economy growth strategy, and, more than ever before, the colleges and community colleges in each region will be called upon to play a leading role. I know they will meet the challenge.

### **Conclusion**

I hope I can count on your help in implementing this ambitious, five-point agenda as Governor. One of my first actions in office will be to form a Governor's Commission on New Economy Growth and Opportunity through Higher Education Investment and Innovation. I will seek broad-based participation—from tuition-paying parents and students, from taxpayers, from business and community leaders, from public servants in both political parties, and from higher education leaders—so that we can move forward in a responsible and sustainable, bipartisan and business-like manner to seize the educational and economic opportunities that are vital to Virginia's future.

Let me say a final word about the times we live in.

The challenges are great, but the fundamentals of economics—especially the power of free people and the free market—remain constant. Your excellent scholars in the Department of Economics and the Mercatus Center understand this. I love the analogy used by your own Professor Peter Boettke: “If you bound the arms and legs of gold-medal swimmer Michael Phelps, weighed him down with chains, threw him in a pool and he sank, you wouldn't call it a ‘failure of swimming.’ So, when markets have been weighted down by inept and excessive regulation, why call this a ‘failure of capitalism’?”

We will withstand the economic shocks of today, and we will withstand even some of the well-intended but misguided remedies. The economy will grow again; there will be winners and losers again; and I intend to be the Governor who looked to the future and did what it took to place Virginia among the winners!

I will be the serious Governor who brought people together and put in place the *building blocks* for a future of great jobs, high incomes, and fruitful careers for all Virginians, but we will also have fun accomplishing these goals.

I ask you, regardless of party, region or background, to join me in this crucial cause.

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*Authorized by Bob McDonnell. Paid for by McDonnell for Governor*