



# VIEW*S* & VISIONS

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## The Economic Engine: Higher Education Fueling West Virginia's Economy

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Dr. Brian O. Hemphill joined West Virginia State University as its 10th president in 2012. His emphases since arriving on campus are three-fold: to establish a commitment to excellence; to create a culture of accountability; and to be student-centered in every process at State.

Before assuming the presidency at WVSU, Dr. Hemphill served eight years as vice president for Student Affairs & Enrollment Management and as associate professor at Northern Illinois University (NIU), where he was responsible for all aspects of student life and enrollment management.

Prior to joining NIU, he served as an associate vice chancellor and dean of students at the University of Arkansas-Fayetteville, associate dean of students at University of North Carolina-Wilmington, assistant dean of students at Cornell College and coordinator of minority recruitment and retention at Iowa State University. He currently serves on the Charleston Area Alliance Board of Directors, the Thomas Health System Board of Trustees and the West Virginia Roundtable Board of Directors.

Dr. Hemphill earned a PhD in higher education administration from the University of Iowa, a master of science degree in journalism and mass communication from Iowa State University of Science and Technology, and a bachelor of arts degree in organizational communication from St. Augustine's College.

Last year, our nation celebrated the 150th anniversary of the Morrill Act, legislation that expanded the focus of higher education from the traditional studies to include applied curriculum of a more technical, agricultural and innovative nature. Both Senator Justin Morrill (1810-1898), who crafted the Act, and President Abraham Lincoln envisioned colleges and universities as being economic engines that would transform and advance this great nation.

The Morrill Act was signed in the darkest of times during the American Civil War. Never before, or since, has our country's existence been so threatened. Yet during this time of upheaval, visionary leaders enacted a plan that improved education and set a path for economic innovation that has framed the academic and industrial success of the United States for more than 150 years.

The contributions to innovation and economic development by our college and university systems are numerous and, to some extent, are reflected by the investment each institution makes in research and development toward creating knowledge, technology transfer and commercialization – all of which result in tangible and useful innovations that grow our economies and benefit our communities.

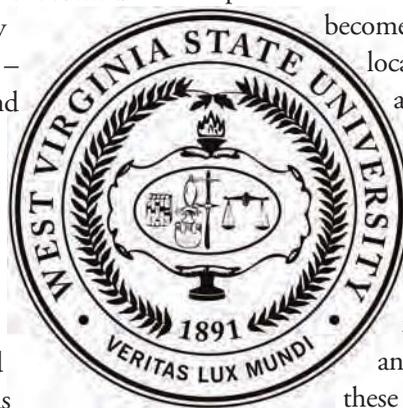
In 2010, the total number of direct and indirect jobs created by four-year public colleges and universities in West Virginia was approximately 40,600. From 2001-2011, of the 115,730 students who graduated from West Virginia's four-year public colleges and universities, 55,675 were working in West



*WVSU alumna and plant biotechnology researcher Robin Turner*

Virginia, a work participation rate of 48.1 percent. Based on inflation only, and not accounting for institutional growth, higher education's estimated economic impact for fiscal year 2014 is nearly \$13.5 billion. We have partnered successfully with local industry to become innovative, economic hubs for local, regional and national trade and development.

Research universities serve as magnets for high-technology industries that are anxious to take advantage of the intellectual capital, the facilities and the culture associated with these institutions. Research parks that often develop around universities, in turn, provide significant stimulus to local and state economies. It's also known that campus-based research stimulates economic development



in the forms of business incubators and public seed capital funds, which link our universities to industrial innovation.

For some time now, West Virginia universities have contributed to local innovation through technology transfer and, in some cases, share their laboratory discoveries by patenting and licensing intellectual property to local firms. Our universities produce a highly skilled labor pool and provide professional development for local industries and government entities.

One university in West Virginia recently created the “Linking Innovation Industry and Commercialization” project, which is designed to accelerate the commercialization of research results and strengthen the regional economic impact. The objective is to create new partnerships between industry and West Virginia’s regional entrepreneurial universities. Another West Virginia university has created a program to advance economic development through entrepreneurship and commercialization of scientific discoveries. Its purpose is to create

intellectual property through innovation, enhancing economic development and advancing intellectual infrastructure, thus increasing employment opportunities in West Virginia.

West Virginia State University (WVSU) is also capitalizing on the creative and innovative spirit of West Virginia by investing in programs designed to spur a new generation of entrepreneurs who will grow the economy. More than \$1.5 million in federal funds has been leveraged at WVSU’s Economic Development Center in Charleston, to target small business development among urban and rural communities. This innovative incubator and business training center has helped launch 32 businesses in just a few short years.

Last spring, WVSU expanded its offerings at the Center with the launch of the “Digital and Social Media project,” called DigiSo, a collaboration between West Virginia State, Create West Virginia, and more than a dozen professionals working in media design, production and Internet technologies. This inventive effort has

re-envisioned the role of the business incubator and created a co-working space that is attracting some of the top minds in West Virginia’s creative class of entrepreneurs.

WVSU’s Extension Service also is heavily involved in expanding local entrepreneurship through programs designed to develop young entrepreneurs. More than 250 students in Wyoming County are enrolled in entrepreneurship programs at the elementary, middle and high school levels. These youths are developing a basic understanding of the concepts of entrepreneurialism at an early age, with the intent that the exercise will stimulate their academic success – and eventually their success as local business developers. Research shows that youth entrepreneurship programs improve academic performance, increase problem-solving ability, boost educational expectations and attainment and, perhaps most importantly, improve school attendance. In the Appalachian towns targeted by WVSU’s initial entrepreneurship efforts, these positive outcomes can change the lives of the young people involved.

WVSU’s research portfolio maintains a strong focus on initiatives that spawn economic development. Recently, the University delved into the exploration of alternative and biofuel production. As West Virginia and the nation strive to become more energy self-sufficient, research scientists have been charged with leading the discoveries in this field. West Virginia State is increasing its human capital in this area and is in the process of hiring two new professors to investigate alternative and biofuel production.

In the past 12 years, WVSU has been awarded more than \$50.2 million in federal and state research dollars – some by formula funding and many via competitive faculty-submitted grants. These monies



*WVSU research associate Anoji Karunathilake*

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enter directly into the local and regional economy through the creation of new jobs, local purchases, upgrading and renovating laboratories and as salaries for students and graduate assistants.

It is time to reengineer ourselves once again in order to thrive, in spite of economic adversities. We must learn how others throughout history, facing equal or worse challenges, succeeded in educating their human capital and translating that into economic growth. In this global economy, those with the most proactive, innovative and entrepreneurial cultures will lead. Those who fuel the economic engine of their respective states, will position themselves to be leaders in this great nation. We, in West Virginia, must continue to invest in higher education to ensure the unlimited future of this state and the bright minds that propel us forward. ∞

## What Does the Future Hold for the Health Care Workforce?

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In summary, the American health care workforce is faced with many challenges as they seek to meet the increased demands for health care, despite the inadequate growth of health care providers. The future of health care will require health disciplines to work together in a coordinated effort to provide holistic, evidence-based, quality care through use of advancing medical technology, improved delivery models and educational preparation. ∞

### Footnotes:

- <sup>1</sup> United States Census Bureau.
- <sup>2</sup> Johns Hopkins University. (2004). *Chronic conditions: Making the case for ongoing care.*
- <sup>3</sup> Beurhaus, P., Staiger, D., & Auerbach, D. (2009). *The future of the nursing workforce in the United States: Data, trends, and implications* and Dill, M. & Salsberg, E. *The complexities of physician supply and demand: Projections through 2025.* Association of Medical Colleges.
- <sup>4</sup> The Council of State Governments. (2011). *Health care workforce shortages in rural America.*
- <sup>5</sup> United States Department of Health and Human Services – Office of Disease Prevention and Health Promotion. (n.d.). *Quick Guide to Health Literacy.*
- <sup>6</sup> American Society for Health Care Human Resources Administration (ASHHRA). (2012). *The future of the health care workforce.*