

  
**West Virginia**  
A VISION SHARED

# Culture, Creativity, and Innovation

## West Virginia in the New Economy

**COVER ART:**

*"The Diamond of Appalachia,"  
acrylic painting on wood by  
Charles Jupiter Hamilton.*

*Charly is a full time  
professional fine artist  
who resides in  
Charleston.*

**PREPARED BY:**  
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Maple Creative, LLC

**FOR**  
A Vision Shared: Creative Class Work Group  
& The Industry of Culture Initiative

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Charles Jupiter Hamilton creates highly expressive wood relief paintings, sculpture, and prints that combine the vitality of contemporary art with rich and resonant figurative imagery. Known for his vivid colors, elaborate mosaic patterns and studied primitivism, Hamilton makes captivating images laced with unbridled enthusiasm that might seem almost child-like were it not for his sophisticated techniques and satirical humor. His thoughts suspend in a teeming spectacle that seduces the eye, encouraging the viewer to search past the work's surface, beyond the intricacy of arabesque designs, to reveal images within images - mythological beasts, whimsical animals, and animated figures.

The use of wood is central to his work. The wood is shaped and etched free-hand with a carpenter's router and then brightly painted in bursts of hot and cold colors. To use Charles Jupiter Hamilton's own words, his use of color "goes immediately for the nervous system."

Charly's work receives warm recognition beyond West Virginia's border, and has been exhibited in galleries and museums in Boston, Atlanta, Chicago, Miami, Tampa, and Washington, D.C. His works have won numerous purchase prizes and awards and are held in several museum and corporate collections including The Clay Center in Charleston, WV; Susquehanna Fine Art Museum in Harrisburg, PA; Thompson Cigar, Tampa FL; and Fidelity Investments, Boston, MA.

Charly was born in Princeton, New Jersey in 1948 and received his art training at the University of North Carolina at Chapel Hill. His inspiration comes from American pop-culture cartoons and billboard advertising. Traditional Appalachian wood carvings and renderings of gargoyles from European cathedrals have also influenced him.



ABOVE: "Blue Spiral" acrylic painting on wood

BELOW: "Gossip" acrylic painting on wood



**INTRODUCTION**

- I. Summary Points
- II. Introduction: West Virginia in the New Economy
- III. West Virginia's Transition Challenges
- IV. Talent and Human Capital
- V. Openness and Diversity
- VI. Technology-Based Economic Development
- VII. Conclusions and Next Steps

**APPENDIX A:**

Creative Community Development in the New Economy – An Assessment Tool for Leaders

**APPENDIX B:**

A Summary of Success Metrics

**APPENDIX C:**

A Summary of Ideas for Consideration

**APPENDIX D:**

Creative Class and New Economy Resources

**APPENDIX E:**

Agencies and Organizations Providing Creative Economy Programs

## Culture, Creativity, and Innovation: West Virginia in the New Economy

- The New Economy is defined as that sector which creates, manages, grows, and monetizes intellectual property.
- Driven by information-oriented industries and jobs in healthcare, bio-tech, biometrics, technology, academia, and the creative arts, this segment of the national economy represents 31% of workers, yet 48% of wages.
- Thirty-eight million workers in this knowledge-driven segment make twice the average salary, and their numbers are growing rapidly – far more rapidly than “old” economy industries such as manufacturing. However, even within old economy industries, high-tech “creative” roles are becoming a requirement for existence.
- In the context of global market trends and a thriving information-based economy, West Virginia’s traditional economic emphasis on extractive industry and manufacturing is waning in relevance as a growth strategy. It is inherently more difficult to compete for a share of a shrinking pie vs. defining a successful slice of a growing pie.
- New economy workers, often referred to as the “Creative Class,” are highly mobile and tend to cluster in areas that have high levels of talent/educational levels, tolerance/diversity and technology access and usage; because many can live and work anywhere they want, they focus on “quality of place” to determine their preferred location.
  - This paper illuminates West Virginia’s many “quality of place” strengths, suggests positive direction for growth, discusses new opportunities provided by the New Economy and threats faced by not embracing relevant change. It champions the strategic partnership between economic/business development and arts/culture and addresses sensitive cultural factors that can advance or impede change.
  - This paper does not attempt to answer every question, but provides a framework for dialogue and a recommended roadmap for empowering local communities to answer key questions themselves and begin a critical planning process for change.
  - Change is not an end in itself, but a means to advance larger, progressive goals: higher incomes, new economic freedom, greater dignity and more autonomy for working people, and stronger communities.

**Richard Florida, author *The Rise of the Creative Class*,**  
interview in *The Washingtonian*, August 2006

*“In our Gallup surveys on what makes a [place] great, safety and education are frequently mentioned. But more surprising were two factors: the physical beauty, or aesthetics, and its openness to different kinds of people.”*

**The Brookings Institution Center on Urban & Metropolitan Policy,**  
*“Human capital - not land, buildings, or machinery - is the economy’s most important asset.”*

**Signs from Census 2000,” January 2004**  
*“Labor Supply Pressures and the ‘Brain Drain’*

**David M. Fryson, Charleston Gazette contributing columnist, November 20, 2006**  
*“We should remember that the voices that have the potential to improve our condition will probably not be popular, comfortable, or convenient.”*

new  
economy

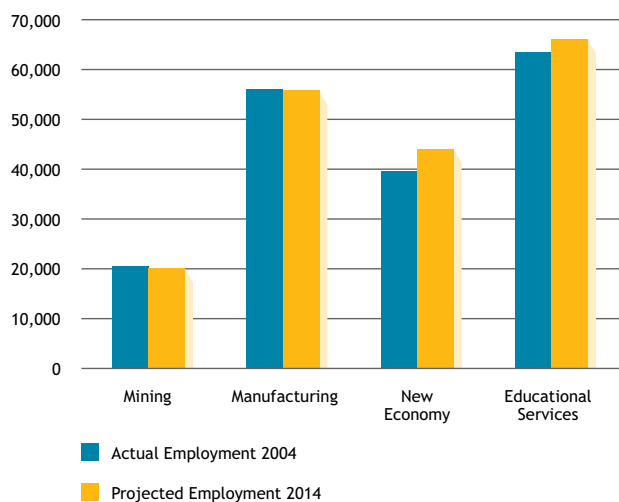
The “creative” or “new” economy – that sector which creates, manages, and grows intellectual property – has taken hold. Driven by information-oriented industries and jobs in healthcare, biotechnology, biometrics, technology, academia, and the creative arts, this segment of the national economy represents 31% of workers, yet 48% of wages. Thirty-eight million workers in this knowledge-driven segment make twice the average salary, and their numbers are growing rapidly – far more rapidly than the numbers in “old” economy industries such as manufacturing. In the context of global market trends and a thriving information-based economy, West Virginia’s traditional economic emphasis on extractive industry and manufacturing is waning in relevance as a growth strategy.

The United States Department of Agriculture’s Economic Research Service (ERS) defines Creative Class job roles as those jobs that involve a high level of “thinking creatively.” This skill element is defined as “developing, designing, or creating new applications, ideas, relationships, systems, or products, including artistic contributions.”

According to the ERS, Creative Class jobs grew 19.7% from 1990 to 2000, growing in overall share from 15.1% of all jobs in WV to 19.7%. By contrast, overall employment in WV declined -1.3%.

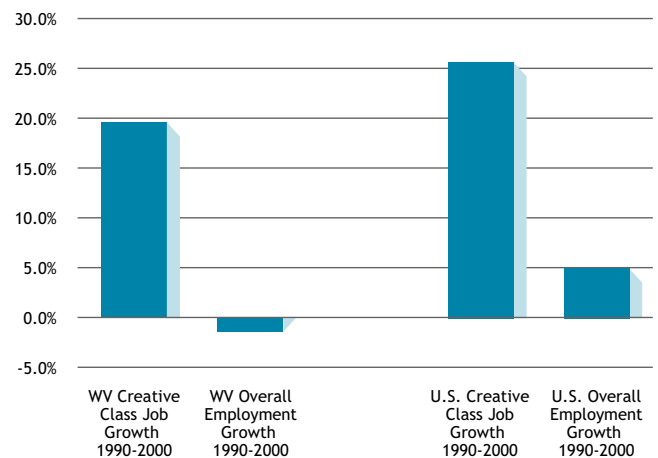
Creative Class job growth by West Virginia county can be found in Appendix F. More details on these classifications can be found at <http://www.ers.usda.gov/Data/CreativeClassCodes/methods.htm>. The average salary for a high-tech worker in West Virginia in 2005 was \$55,490 compared with \$30,545 for the average private sector employee. (Bureau of Labor Statistics).

In terms of actual and projected employment in West Virginia, comparing select industries is illustrative of the growth of new economy jobs.

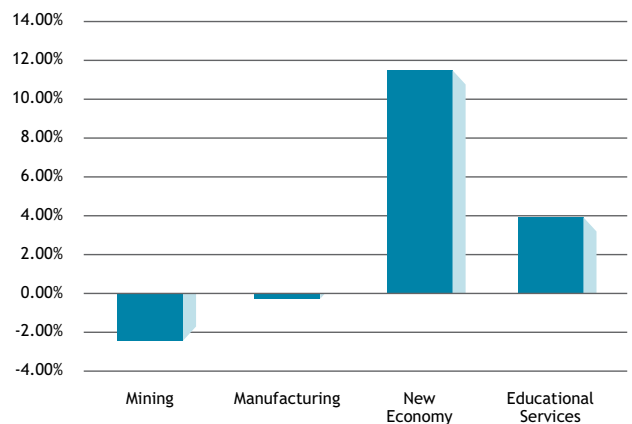


Source: Workforce West Virginia 2007

Creative Class Job Growth vs. Overall Employment Growth



Projected Employment Growth 2004-2014



Source: Workforce West Virginia 2007

It is important to note that even within seemingly “old” economy industries such as mining and manufacturing, a great deal of future job growth in those sectors is related to “creative class” style jobs in engineering, R&D and technical roles focused on finding new, efficient, “green” process methods. The influence of technology and the related push for constant innovation has penetrated almost every industry sector imaginable. Rather than wait to be the recipient of this R&D, West Virginia should push to locate centers of R&D and innovation excellence within the state to grow new, higher-paying jobs.

A great deal of research and debate has evolved over the past five years on the intimate connection between the “creative class” (those who work in industries primarily in the business of creating and monetizing new intellectual property), the “quality of place” they seek to live and work, and the growth of the new economy sector. For that reason, two of West Virginia’s new economy initiatives are coming together to share resources and commentary on how our state can evaluate our position in a world increasingly driven by driven by the Commerce of Ideas: knowledge-based dynamics, creativity, technology and intellectual human capital. We will attempt to illuminate West Virginia’s many “quality of place” strengths which have often been overshadowed by its real and perceived weaknesses, and to provide a positive, supportive direction for meaningful change, while also being direct about the threats we face by not embracing the new economy.

**A Vision Shared** is a comprehensive economic development initiative that builds on West Virginia’s strengths and seeks solutions to challenging issues. It identifies initiatives that need to be strengthened and establishes performance measures to gauge success in creating a new West Virginia economy. A Vision Shared’s long-range process takes a holistic approach to economic diversity, encompassing all elements that potentially could affect our success (e.g., health care, education, tax reform, and infrastructure). The four key focus areas are 1) intellectual infrastructure, 2) new economy, 3) results-based government, and 4) “building bridges” (connecting people) and empowering citizens. The volunteer work group within A Vision Shared supporting and advising this paper is the Creative Class work group within the New Economy focus area. Members of this group represent backgrounds in business, community development, non-profit development, law, communications, technology, and the arts.

Like A Vision Shared, the **Industry of Culture (IOC)** is a volunteer-based initiative made up of professional people committed to improving West Virginia’s economy, but with a special focus on maximizing the economic impact of the arts and improving the ability of artists and other creative people to make a living with their work. Advocacy, tourism, marketing, education, technology, entrepreneurship, and community are all key areas of interest for this group. The management team consists of top leadership in state government and private business, as well as arts entrepreneurs and appointees to commissions in arts and culture.

By engaging in this shared project, both initiatives intend to demonstrate their continued commitment to bringing their full resources and experience to the conversation. We can make West Virginia a better place to make a living – and to make a life – by focusing on the key forces that attract new economy workers and organizations. Simultaneously, there will be a proactive effort to emphasize those aspects of our traditions in the arts and arts education that support the economy and culture framing West Virginia’s evolution.

Leadership is a critical component of this work. Volunteers from both IOC and A Vision Shared must maintain high standards for reviewing information and establishing their best recommendations. Those who receive the strategic advice and are charged with

implementation – public, private, state, and local – must be willing to consider seriously the consequences of not making change, however uncomfortable or unpopular in the short-term that change may be. Rather than finding the new economy a threat to our way of life in West Virginia, we may very well find a successful transition is what will allow us to keep the best of who we are.

It is important to note the unique nature of this initiative in that it:

- Accentuates out the integrated nature of several new economy success pillars (e.g., talent development, tolerance/diversity, and technology) and how they work together for growth. For this reason, A Vision Shared's Creative Class team and the IOC acknowledge the contributions of other Vision Shared volunteer working groups in the Intellectual Infrastructure, New Economy, Results-Based Government and Building Bridges and Empowering Citizens categories.
- Champions the critical relationship between what traditionally have been considered different spheres of influence – the arts and culture vs. economic and business development.
- Addresses sensitive cultural factors that can advance or impede change.
- Does not attempt to answer every question, but provides a framework for dialogue and a recommended roadmap for empowering local communities to answer key questions themselves and begin a critical planning process for change.

The true objective of policy efforts in the new economy is to help West Virginia be well-positioned to experience strong growth, particularly in per capita incomes. These changes are not ends in themselves, but means to advance larger, progressive goals: higher incomes, new economic freedom, greater dignity and more autonomy for working people, and stronger communities.<sup>1</sup>

## The Ice House, Berkeley Springs, WV "A cool place for hot art."

**New Economy factor:** *A fine and successful example of "creative reuse" of an old economy structure, the Ice House helps revitalize the Berkeley Springs downtown, serves as a hub for working artists' studio space and commercial and community activities, and is a home base for the Morgan Arts Council (MAC). The Ice House has helped contribute to Berkeley Springs' "quality of place" and positioned it as a desirable living destination drawing thousands of new citizens into the Eastern Panhandle*

For nearly 20 years, the Morgan Arts Council was a gypsy organization, "getting art out there" wherever there was space. That changed in June 1996 when U.S. Borax, a local corporate citizen, gave MAC a 40,000 square foot former storage building in the center of Berkeley Springs.

Built circa 1910 to store apples, the four-floor yellow brick building evolved into a furniture store, a health club, and a teen center before its current use as an arts space. Renovation is ongoing. Nearly \$400,000 has been invested in utilities and access. The first floor now has a Great Hall, three classrooms, MAC office, darkroom, and gallery funded by state and Benedum Foundation grants as well as individual and business donations.

The Ice House Development Fund has been established to raise funds for continued renovation. Operation of the Ice House is to be self-sustaining. Literally thousands of people have enjoyed, bought, practiced, and made art in the Ice House since its acquisition. The future promises even more.

Like other states, over the past decade West Virginia began a challenging transition from an economic development model based on raw materials, natural resources, and physical labor to a new economy where "wealth, value, productivity and profit are coming more from our heads as opposed to our arms, backs, and legs."<sup>2</sup> Where once man-hours and their physical products measured economic strength and success, economic preparedness now is measured by knowledge, creativity, and skill - the human capital factor of production. It is the shift from a physically-based product to a knowledge-based product, and it is reverberating around the globe and in our state. Examples of industries in this category include biotech, biometrics, software development, and professional service industries.

Another dimension of this shift involves the transition from more-or-less linear assembly-line processes of thinking and producing to more versatile, integrated and interconnected spider web frameworks of thinking, producing and innovating. These processes often are more abstract and feature greater complexity but show considerable promise for the future. For instance, synthetic DNA is a promising biomaterial for nanoscale construction. Its complementary bonding and conductance properties allow strands to be "programmed" such that they self-assemble into nanostructures that can be used for a variety of purposes, including molecular sensing (i.e., the recognition of specific molecules), signal detection and transmission.

One of the most stunning new realities for West Virginia is that the new economy simply requires fewer people to perform physical labor, and relies heavily on increasing the number of people whose education and innovation will improve work processes and efficiencies. Time is becoming the most precious resource, and competition is time-based.<sup>3</sup> Additionally, because so many national economies now invest in one another, our concepts of global trade are changing. According to Richard Florida, the academic and author who popularized the "creative class" concept:

PROFILE



"There are no more national production systems. Every economy in the world, with the potential exception of Japan, is inter-penetrated by the investments of companies from other countries. A multi-national company is a non-national company. These companies will divide national corridors. The creation of far-flung, functionally integrated but geographically dispersed production systems are the cornerstone of the new era."<sup>4</sup>

With tumultuous change comes new opportunities which require a different way of looking at the world. Unfortunately, this can be difficult for those invested in the status quo, and their fear and resistance is to be anticipated and addressed sensitively, but not allowed to slow progress. While the rules of economic growth have changed, a new opportunity to re-position what is attractive about West Virginia has emerged.

The dynamics of the global, Internet-connected economy mean that geographic proximity to physical markets and materials is less important *than the attractiveness of a region from cultural, educational, environmental, and social perspectives*. In a world where executives and workers can choose to live anywhere and stay connected to team members around the world, the elements that make a specific site attractive in the new economy are not proximity to markets or supply chains, but proximity to human talent clusters and ubiquitous communications connectivity.

How will West Virginia compete, grow, and thrive?

By growing into a more attractive place for new economy workers to live, innovate and connect with each other.

How can this happen?

This paper attempts to answer that question, as well as to share honest and important stories about our strengths, weaknesses, opportunities, and threats. We will examine issues of education, diversity, and technology-based economic development. We will use this paper in draft form to generate discussions between A Vision Shared and Industry of Culture leaders, as well as other key leaders in business, academia, government and the arts.

We will take a final draft of this paper "on the road" to a diverse group of West Virginia communities to provide a foundation for the issues and to solicit further recommendations for policy development and strategic change to maximize positive outcomes in West Virginia's necessary transition to a knowledge-based, new economy.

**The State New Economy Index establishes 26 indicators divided into 5 categories that best capture what is new about the New Economy:**

1. Knowledge jobs
2. Globalization
3. Economic dynamism
4. Transformation to a digital economy
5. Technological innovation capacity

After each section of this paper, we will highlight some of those 26 for consideration; ideally, West Virginia will address issues in all categories, and give attention over time to all indicators in the Index. The bad news is West Virginia ranks 50th in its overall score in the 2007 Index. The good news is we can do better by focusing on the most important drivers that will improve these indicators; developing breakthrough, innovative ideas; and managing to clear goals and milestones.

Our first examination will be arguably the most important: talent and human capital.

*A demographic wave is sweeping across our nation, and it will be a decisive force in shaping the economic destiny of communities. As cities move increasingly into a knowledge-based, new economy, the kind of talented people each attracts will determine whether it wins or loses in the campaign for future prosperity.*<sup>5</sup>

Andrew James White | 28 years old | Morgantown, WV

**New Economy factor:** Andrew completed his B.A. at WVU in 2001 with a dual degree in Philosophy and Spanish. He owns two small businesses in Morgantown, both of which are in the musical instrument industry. He builds high-end custom acoustic and classical guitars and has a web-based retail business selling steel drums that he imports from Trinidad and Tobago.

Andrew was born in Chelmsford, MA, and grew up in Annapolis. In 1997, he enrolled at West Virginia University after visiting several schools in the few surrounding states from Maryland. He decided to come to WVU after experiencing some of the “wonderful outdoor activities and awesome landscape.”

**On West Virginia in the new economy:**

“I feel like West Virginia has been a perfect place to start and grow both of these businesses. West Virginia is currently putting a great amount of effort into attracting and keeping entrepreneurs in the state. I have received a tremendous amount of support both financially and in the education, training, as well as motivational support. As an artist and craftsman, I believe there are few places where my talent and skills are really appreciated. In West Virginia, we have a strong pride in our musical history and in our craftsmanship. I am proud to continue in that culture. I feel fortunate that I can do that without feeling like I am swimming up stream. I am encouraged to practice my skill not only because I can make a living and build a business that will contribute to the economy, but because it also contributes to our culture.

I would like to see the Appalachian culture be shown off a bit more. I have been in West Virginia for ten years and I really feel that if I had not sought out the experience and culture of Appalachia, then I would not have found it. I understand and appreciate the small, tight knit community feeling that is so cherished by West Virginians that live this culture, but find that West Virginians don't seem to see the value in exploiting their culture in any way. I appreciate the concern that their way of life runs the risk of being threatened by tourism, promotion, etc., but I do believe that Appalachian culture could be showcased in a manner that keeps it preserved and true.

At times I have felt as if I could not, or should not, share my success, particularly financial success, for fear that I would be viewed as showing off, or putting myself above others because I had worked hard and achieved some success. This, from my perspective, is perhaps due to some insecurity in our culture, or a lack of self awareness and pride in what West Virginians do have. Perhaps, it is that fewer people place value on financial success and are satisfied with the status quo on many levels. It is unfortunate that success cannot be fully appreciated without fear. If the culture around you makes you feel bad about your success, there is less desire to succeed and seek excellence.

I have found a community of people where success is appreciated and where healthy competition builds excellence, but for me, these communities often lack other aspects of West Virginia culture that I enjoy.

I have yet to find a community with a strong character that represents a West Virginian culture, but also appreciates a dedication to excellence as opposed to mediocrity. It seems to me that both worlds exist in WV, but have not managed to intermingle themselves.

PROFILE

Justin Siebert | 30 years old | Wheeling, WV

**New Economy factor:** *In the coveted 25-34 year old age bracket, Justin represents a positive example in immigration of young, well-educated knowledge workers choosing to establish innovative business and family life in West Virginia.*

Justin was born in and grew up in Wheeling. He spent seven years in Los Angeles, California, where he met his wife. After the birth of their first child, he began thinking about moving to a place he felt was right to raise his family. When his wife became pregnant with their second child, the call of a family support network was more powerful than ever. Though their first choices were Denver, Raleigh, and Nashville, the attraction of being close to a family network overrode those options, and he returned to Wheeling with his wife and children in 2006.

Justin has a BA degree from Vanderbilt University, and a variety of technical training experiences which include Google, Yahoo!, Marketing Experiments, and GM.

Currently he is owner and President of Direct Online Marketing ([www.DirectOM.com](http://www.DirectOM.com)), an online marketing firm that specializes in generating leads and increasing sales for businesses through search engine marketing.<sup>6</sup>

**On West Virginia in the new economy:**

"There is not a lot of direct competition for my company (internet marketing), and if I can educate the business community and show value to clients, I think we have a great opportunity to help companies state- and region-wide before growing to the point we can better compete on a national level.

We need a new stereotype of West Virginia for both West Virginians and people outside the state. A more diverse, tolerant society would greatly help in breaking through existing barriers and perceptions about the state. We need some people who think differently from the existing people in business and political power that are willing to push new ideas hard and follow through on them.

I feel very connected to the rest of the world, in large measure due to the changes the Internet brings. That's one reason I'm so hopeful that our future could be brighter with the hard work of a few dozen people."

PROFILE

Monica Larson | 43 years old | Shepherdstown, WV

**New Economy factor:** *Ms. Larson has a BFA from Syracuse University in Editorial Design, did graduate work towards an MAS at John Hopkins University, and currently is working on an MFA from Academy of Art University in San Francisco. From 1995-2001 Ms. Larson was a high-tech entrepreneur, focusing primarily on web development. She now teaches classes in new media at Shepherd University.*

Ms. Larson was born and raised in Syracuse. She and husband wanted to leave the Baltimore Washington area when they were expecting our first child, and they moved to Shepherdstown in 1995. Their business required that they be no farther than 1 hour from a major airport and city.

PROFILE

**On West Virginia in the new economy:**

"We really love the natural beauty of the state, and hope that West Virginia will recognize its greatest asset is being 'wild and wonderful.' As strong proponents of public education, the only thing I could see making us leave the state is if the school system no longer adequately served our children. When I recruited employees for my businesses, concerns about quality school systems was by far the greatest hindrance in having people relocate.

While a West Virginian will go far to help their state, there is a provincial aspect to the social scene. In Shepherdstown, the population is much more tolerant to different views and backgrounds. I imagine the same may hold true in the other University communities across the State. During the "dot com" years we survived because we could relax with writers, retailers and farmers. We didn't run into another high-tech worker at every corner Starbucks.

I would educate the youth and expose them to a variety of viewpoints. Rather than solely using a philosophy of importing businesses into the area, the state needs to raise its own entrepreneurs if it wants future businesses to respect the resources of the state. We have so much potential, yet we need to be sure that businesses recruited into the state actually view the state as their home, not a resource to be ravaged. While K-12 education may not bear the same immediate boost to the economy as a new University research center, in the long run it will be a strong investment!"

Amy King | 32 years old | Charleston, WV

**New Economy factor:** *Amy is another example of a state native who left and returned with compelling education and experiences. She also represents the critical 25-34 year old demographic that can help lay a foundation for West Virginia's future by infusing new energy and new ideas.*

Amy was born in San Diego and grew up in Charleston. After living outside of the state for several years, she determined West Virginia "offers the best of both worlds – great business opportunities and quality of life." She received her undergraduate degree in business with a concentration in accounting from the University of Richmond, her JD from Washington and Lee University School of Law, and is a certified public accountant licensed in North Carolina. Currently, she is a corporate and finance attorney with the firm of Spilman Thomas & Battle.

**On West Virginia in the new economy:**

"West Virginia is a great place to live and do business. There is a sense of collegiality among professionals in the state – both in the business world and the legal community. Furthermore, West Virginians value the importance of good business and giving back to the community. It is remarkable to live in an area that places such a strong emphasis on the significance of business and community involvement.

There is a reluctance to change in West Virginia – people tend to be comfortable with the status quo. I think it is possible to embrace change while maintaining the pride and sense of community that sets West Virginians apart.

There are certain parts of the state that have great access to technology and others that have none. It makes it difficult for me to spend too much time in areas that don't have connectivity. I am in constant contact with my clients and it is important to me to be available at all times.

As the world keeps evolving, it is increasingly more important to receive a higher level of education than it has been in the past. West Virginians should embrace the conveniences of the new economy – encouraging technology, education, entrepreneurship, the arts, etc. These elements will allow West Virginia to move forward without sacrificing the qualities of the state that make it so unique.

West Virginia needs to compete on a national level to retain professionals. As modernization continues, West Virginia is losing bright, talented people. In addition, as the population ages, we need to replace that portion of the population. We can't afford to lose that talent!"

### The Chuck Mathena Center: A Performing Arts and Multi-Purpose Facility

***New Economy factor:** The Center represents local commitment to the importance of community access to the visual and performing arts. By prioritizing a sense of partnership with the community, the Center brings the importance of culture front and center in daily life. An extensive list of founding campaign contributors demonstrates the investment of local business in supporting arts and education. Local officials support the Center as an economic development strategy as well.*

Scheduled to open in 2007, The Chuck Mathena Center will serve Mercer County and the surrounding region for the presentation of the performing and visual arts, for outreach and educational opportunities, and for service to community gatherings and events. The Center will feature a 1,000 seat, multi-purpose auditorium for presenting a variety of performing arts programs such as concerts, plays, and ballets. It is intended to be a facility where all citizens of the community and surrounding areas feel ownership, partnership, and welcome through a diverse and active programming and event schedule.

The Center will provide all forms of entertainment, conduct workshops and seminars, host community gatherings and provide a meeting place for all who want to dream, grow, produce, learn, share and enjoy culture as it applies to each individual. The Chuck Mathena Performing Arts Multi-Purpose facility is all about positive growth and preparing for a better tomorrow.

Local developers say, "The quality of performances we'll have here will draw people from southern West Virginia, Southwest Virginia, and from quite a distance away. Hopefully, this will build the local economy to support this and other projects." [www.thechuckmathenacenter.com](http://www.thechuckmathenacenter.com)



PROFILE

### The Purple Fiddle Coffeehouse and Mountain Market Thomas, West Virginia

***New Economy factor:** Purple Fiddle Coffeehouse and Mountain Market is a family- friendly and non-smoking music venue, restaurant and gift shop located in the old DePollo General Store in historic Thomas, West Virginia, in the beautiful Allegheny mountains. Every week, and always on Friday, Saturday and Sunday nights, the Purple Fiddle presents Mountain Music Weekends, when professional mostly-acoustic bands play original and traditional music. Its unique environment and “third place” qualities make it a hub for creative energies far and wide, helping establish it and the nearby town of Davis as one of the “Top Ten Coolest Mountain Towns” as rated by Men’s Health magazine – right up there with such notable locales as Park City, Utah, and Whistler, British Columbia.*

The Purple Fiddle lies near the heart of the West Virginia tourism activity: Located just 1 mile from Thomas’ MountainMade.Com artisan gallery, 3 miles north of Blackwater Falls State Park, 10 miles north of Canaan Valley National Wildlife Refuge, 13 miles north of Canaan Valley State Park, and just beyond that is Dolly Sods National Wilderness Area. Another 30 minute drive and you reach Seneca Rocks. The Purple Fiddle boasts of being located at the head of a new rail-trail that connects Thomas with Elkins – an incredible 30-mile downhill journey through the Blackwater Canyon.

***John Bright, owner, on the Purple Fiddle:***

“It was June of 2001 when Kate and I first peered into the vacant DePollo Store on Front Street in historic Thomas. We immediately had a common vision for the space – good coffee, a varied and healthy deli menu, a community gathering space, and live Appalachian-based acoustic music. Another thing for which we strived, was for consistent high-quality professional entertainment every weekend, but we never anticipated the overwhelming success we have had. Since opening, we have never missed presenting a performance every Friday and Saturday night at 8:30 pm! Sure there has been some wicked weather up here at 3000 feet, resulting in some last-minute cancellations, but somehow we are blessed by amazing and responsive musical creatives who have always responded to our call at the eleventh hour. These days our music schedule practically fills itself six months in advance with nationally-touring professional acts eager to play our great-sounding, intimate space.

The best attribute of the Purple Fiddle is the people. They generate a keen and ardent life- force here. What is cultivated here is heart-warming and very much in the spirit of long- time DePollo Store owner, Mr. John DePollo, and his impromptu social gatherings. It is more than just a place to meet and greet, it has become the heart of an amazing community, where tender and creative souls gather to nurture powerful ideas and build surprising futures.”

West Virginia by almost any measure is a state with low population. The entire state has approximately 1.8 million people – fewer people than in several individual metropolitan areas across the country.

According to figures released by the U.S. Census Bureau on December 22, 2006, West Virginia experienced a slight increase in population between 2004 and 2005. The state’s population rose from 1,812,548 to 1,816,856, which was an increase of 0.2%. (Florida, with an increase of 404,000, showed the greatest increase. The survey showed that Nevada had a 3.5% increase, and for the 19th consecutive year was the fastest-growing state, followed closely by Arizona.)<sup>7</sup> Year to

year fluctuations, however, are essentially meaningless. Long-term projections to the year 2030 from the US Census Bureau show our state losing another 100,000 people in the next 23 years.<sup>8</sup>

West Virginia's low-density populace is not *inherently* a problem. As developed areas become more crowded and real estate values increase, more rural regions with a lower cost of living, become increasingly attractive. The question becomes, what else are people looking for in relocating and establishing themselves in a community? If it were only inexpensive real estate and outdoor amenities such as river rafting, we would be turning people away at the border; clearly, that is not all that is needed to draw new citizens.

A March 2007 report by Battelle Memorial Institute reported the out-migration of 4,691 individuals aged 25 to 39 with at least a bachelor's degree from 1995 to 2000. Of its four key gaps highlighted as requirements for building a strong high-tech economy, Battelle highlighted the Talent/Education issue along with early-stage seed capital, entrepreneurial know-how, and overall image.

While the situation in some ways is complex and multi-layered, it is important that we avoid making issues more complicated than they are: Talented and well-educated people attract one another, and West Virginia is suffering from a grossly inadequate level of educational attainment to compete in the new economy and to draw the energies and talents of innovative knowledge workers. Recent demographic studies have revealed a net migration of educated West Virginians to other states and a net influx of citizens to West Virginia with a high school education or less. West Virginia has a relatively large number of clusters in lower-wage, lower-skill industries like agriculture, mining, tourism, and a growing reliance on big-box retailing for job growth. While these sectors are important elements in a diversified economy, all of these industries are associated with below-average educational attainment and therefore prone to significant wage pressures.<sup>9</sup>

The *national* post-secondary educational attainment of the population ages 25 years and over grew slightly from 26.7% to 27.7% between 2002 and 2005. West Virginia's college degree attainment dropped from 15.9% to 15.1%. ***We rank 51st on the educational attainment list that includes the District of Columbia.*** Only four other states rank less than 20%: Alabama, 19.8%; Arkansas, 17.5%; Kentucky, 18.9%; and Louisiana, 19.6%. By comparison, the top five ranked states (DC is excluded here, with a 46.9% level) were Connecticut, Colorado, Maryland, Massachusetts, and New Jersey – all just slightly over or under 36%.<sup>10</sup> Not coincidentally, the leading academic attainment states are all associated with strong new economy industry growth.

**“The mass relocation of highly skilled, highly educated, and highly paid Americans to a relatively small number of metropolitan regions, and a corresponding exodus of the traditional lower and middle classes from these same places, represents a geographic sorting of people by economic potential, and it is happening on an unprecedented scale.**

Research at the University of Chicago and at Harvard in 1970 showed human capital evenly dispersed throughout the United States, and nationally 11% of 25 year olds had a college degree. The percentage of Americans holding a degree had more than doubled to 27% by 2004, but those gains are not evenly spread. What is happening? More and more often, the most talented and ambitious people need to live in urban areas to realize their full economic value. There are multiplier effects that stem from this talent-clustering that some economists consider the primary determinant of growth. As Richard Florida states, “The more smart people and the denser the connections between them, the faster it all goes.”<sup>11</sup>

### STRATEGY SIDEBAR

#### Three potential sources of 25-34 year-olds for West Virginia:

1. Those who were born elsewhere, but who we want to attract.
2. Those who left, but may want to return.
3. Those who are here, and who we want to encourage to stay.

Nationally, there is another dynamic that requires attention and consideration. Though the U.S. population overall is increasing, the growth masks the declining numbers of young adults in our country. The metropolitan U.S. had three million fewer 25 to 34 year olds in 2000 that it did in 1990 – a decline of 8%.<sup>12</sup> Currently, West Virginia has approximately 56% of its population in the 35- 85 years and older age range. Only 12.7% of our population is in the 25-34 year old demographic. With the trend towards urban clustering among a smaller pool of young, educated adults, is it realistic to think that a huge influx or retention of 25-34 year olds could be in West Virginia's future?

What we *can* strategize to influence is the long-term educational attainment of our residents in general, and of that younger demographic in particular. Research tells us that *the actual size* of the 25-34 year old age group *is less important* than the education level of residents when it comes to having positive influence on metropolitan areas with high populations, strong arts scenes, and large numbers of high tech jobs.<sup>13</sup> This would indicate that policy makers should balance their focus from trying to increase the quantity of certain types of workers (recruitment), toward embracing the longer-term goal of human capital development.

Paired with amenity strategies for younger workers and more workplace flexibility for older workers, policies to raise the stock of knowledge in the region can “split the difference” between demand-side and supply-side labor market interventions.<sup>14</sup>

Worker quality, as measured by new economy standards, must be the human resources policy goal. It is also important to remember that human capital means not only years of formal education, but may also mean a large amount of industry- or technology-specific knowledge. Educating and retaining the right people who are here now must be blended with capturing the right kind of immigration.

Studies tell us that as educational attainment goes up, so does the propensity to migrate. Again, that means West Virginia has to have a two-pronged approach of human capital development and retention with amenity strategies that highlight and nurture a sense of exciting, quality place where highly educated workers thrive.

Finally, entrepreneurship is the spark that lights the potential of educational attainment. No amount of education or skill sets will generate regional economic growth until and unless someone is able to take available knowledge and create new products and companies. Policies, programs, and incentives to grow the entrepreneurial muscle in West Virginia are crucial.

#### Talent Indicators to Watch in the State New Economy Index<sup>16</sup> :

- Managers, professionals, technicians, scientists and engineers as a share of the total workforce
- Workforce education – a weighted measure of the educational attainment (advanced degrees, bachelor's degrees, associate's degrees, or some college coursework) of the workforce
- The adjusted number of entrepreneurs starting new businesses

#### From the Portland study, Toolkit for Cities, 25-34 year olds:<sup>15</sup>

1. Deliver an appealing reality (substance is what counts)
2. Put values on display (local media stories, chamber discussions, what do public officials say and do?)
3. Keep in touch with former residents, and use their “voice” in communications
4. Create opportunities for civic involvement - nonprofit and public boards. These young voices must be deliberately sought out for their views to be considered.
5. Use internships to connect with young adults (major public and private employers) - their experience should be “managed” to help them connect with the city and other bright young people
6. Survey young adults regularly (community attitudes and progress)
7. Celebrate young entrepreneurs and civic contributors (young people can and should lead) - ex. West Virginia Executive magazine's Young Guns awards
8. Communicate development plans to young adults (don't let them think no one is working on it if they are)
9. 10. Promote a young adult lifestyle (find friends, enjoy themselves, and succeed) - both soccer mom issues and fun now are on the minds of 24-25 year olds.



State and local leaders understand *that talent drives economic growth*. It is the fuel of the new economy. What we are just beginning to understand is that in 2007, talent is attracted to places that are open and tolerant, and which offer a desirable quality of life. Strategies to improve the business environment must take into account how to improve the cultural environment which draws the types of leaders who grow businesses. A key decision factor for many of these individuals is the level of diversity and tolerance in a region.

The targeted living destinations of talented people are becoming more important than the geographic locations of companies and firms. As we begin to understand that businesses increasingly will go where talented people are located, it is essential to evaluate West Virginia's status as an open and tolerant community of people.

Diversity and talent are interlocked in the new economy. Next, we will look at West Virginia's diversity and tolerance factors as potential attractors of the all-crucial clustering of talent that will improve our participation in the new economy.

Expressed most simply, cities that want to attract and keep smart young people must be open to newcomers as full participants in the community's civic, social, and business life.<sup>17</sup>

*“Tolerance is a reflection of high levels of acceptance of ethnic and lifestyle differences.”*

Arlington Economic Development, Issue Paper No. 6,  
 “Benchmarking the Creative Class in Arlington, Virginia”, January 2005

**Lewis Ferguson | 38 years old | Charleston, WV**

***New Economy factor:** Lewis represents aspects of strengths in the new economy in both his professional and personal commitments. He lives in a historic neighborhood in Charleston with his partner of eleven years, Rick. He has an advanced degree and has made his career in arts and arts education.*

Lewis was born in and grew up in Charleston. He has his Masters Degree in Business/Strategic Leadership from Mountain State University, and has a Bachelors Degree in Fine Art with a concentration in photography and art history from WV State University. He is the Director of Visual Arts and Science Education at the Clay Center; as amazing as the Center is, he wishes West Virginia had more museums and arts/science centers throughout the state.

***On West Virginia in the new economy:***

“Though there may not be enough formal arts institutions, West Virginia does have a very strong artist contingent, which is a huge plus.

“I feel very fortunate to have the Internet and cable television so as not to be cut off from the rest of the world, but it seems as if you don’t have to travel too far in any direction from Charleston (or Huntington, Parkersburg, etc.) to find people who aren’t as fortunate and are definitely not connected to the rest of the world.”

“I feel like I can be myself if I am in good company in downtown Charleston, but that may change out in some rural area where the ‘real’ me might not be accepted. In my particular realm, there are open-minded individuals (for the most part), who accept me for who I am and appreciate my contributions for what they are as well.

“I feel that WV is getting its due in many ways like the West Virginia Film Office bringing in productions like ‘We Are Marshall.’

“West Virginia needs to focus on healthy living and healthy lifestyles, access to technology in schools, and educational attainment. It is absolutely critical, in our state or anywhere else!”

PROFILE

**Gregory Hernandez | 31 years old | Charleston, WV**

***New Economy factor:** An African-American in the coveted 25-34 year old age bracket, Gregory represents a positive example in immigration of young, well-educated knowledge/new economy workers choosing to establish innovative business and family life in West Virginia.*

Gregory was born in Brooklyn and grew up in Kingston, New York. He moved to West Virginia because of its location and small town feel. He received a football scholarship to West Virginia University (WVU) and decided to move in 1994. He enjoys the fact that people here are “more approachable and less suspicious” and views that as a strong aspect of building a successful future. He received his BA degree from WVU. Currently he is a financial advisor in Charleston and is engaged to be married.

PROFILE

### *On West Virginia in the new economy:*

"West Virginia's strengths are in its size. You can have a conversation with your state delegate, congresswoman or even your governor just as easily as having a conversation with your attorney or financial advisor. I feel very connected to the rest of the world here.

I feel accepted here, but to my knowledge there are not many professionals who share my demographic. I do have a wonderful church as well as a fantastic home group affiliated with my church, which consists of young professionals. I can live my values here, and I have a high quality of life. My dollar goes farther, allowing me to afford a home, an SUV, a boat for recreation, and the ability to travel abroad!

It would be wonderful if West Virginia would provide a more culturally diverse selection of food, music, arts, and entertainment. I'd like to see improvements in access to health education and health care, as well as an extended public school year. Our rural areas need expanded cellular service and broadband access."

### Fundraising for a state Leon Sullivan Center for Civil Rights in Charleston



GLOBAL SULLIVAN PRINCIPLES  
of Social Responsibility

*New Economy factor:* This project represents the community's prioritization of civil rights education, which is especially relevant and important in West Virginia, one of the least racially diverse states in the U.S. It is also an excellent example of creative re-use of historic structures to revitalize downtown areas.

The Harden Gilmore House, located at 514 Leon Sullivan Way, is owned by Simpson Memorial United Methodist Church. The structure is listed on the National Register of Historic Places and has a rich history as the home and business of Mrs. Elizabeth Harden Gilmore, one of the Kanawha Valley's leading African American business owners and civil rights advocates. The rich historical context for the house is well-documented in the nomination to the National Register of Historic Places.

There has been a surge of interest in using the facility as an interpretative center for the life and work of Reverend Leon Sullivan, a Charleston native who is known internationally for his advocacy work related to human rights and social justice issues. Since his death, Reverend Sullivan's work has been carried on by his family through the Leon H. Sullivan Foundation. The Sullivan Foundation has embraced the concept of this project. It is envisioned that not only will the family donate artifacts from Reverend Sullivan's life to the Center, but that they will also partner with the Center to provide outreach and programming on the issues that were of utmost importance to him: self-help, education, human equality and dignity.

As envisioned, the Center will include two types of activity: 1) interpretative exhibits and visual representations; and 2) outreach and programming. Exhibits and archives may include Reverend Sullivan's papers; a showcase of Reverend Sullivan's and Mrs. Harden Gilmore's lives through a variety of media and communications styles; a showcase of the African American neighborhood that surrounded Leon Sullivan Way in the early 20th century; exhibitions of local collections of African American art and music; interpretation of the lives and accomplishments of West Virginia's remarkable nationally known African-American leaders in the fields of civil rights, entertainment, education, law, journalism, architecture, medicine and other fields.

PROFILE

As we have referenced, traditional economic performance has a long history of reliance on diversity, but that tended to mean the diversity of businesses or of regional industrial structure. In the new economy, research tells us that ethnic, social, and cultural diversity are just as important, if not even more important, to success.<sup>18</sup> This diversity is what allows innovation to occur naturally. Additionally, this is increasingly true in the realm of company and employer demand and expectation. However one feels about it, the reality is that companies are measuring and posting success through the new “triple bottom line” – financial, social, and environmental.

Corporations are now expected to play leading roles in promoting diversity...developing communities...and upholding human rights. And they must govern not just themselves, but also take responsibility for the behavior of companies up and down their supply chains.

Call it the age of accountability...Today’s smartest companies are embracing these expectations and turning them to their advantage. For example, PepsiCo’s commitment to diversity is central to its business strategy of developing and selling new products in growing markets, resulting in increased sales of over \$100 million.

By finding the intersection between their business interests and those of society and the environment, responsible companies can align their good with the common good and increase their chances of long-term success.<sup>19</sup>

With its embracement of diversity, corporate America is increasingly expecting its law firms to share similar values. A diverse workforce comprised of minorities and females not only reflects the make-up of America, but it also simply makes good business sense.<sup>20</sup> Companies are also finding that having more diverse representation on their governing boards is good business because it can lead to better products and services for growing minority and international markets.<sup>21</sup>

### What are West Virginia’s special challenges in this area?

Going straight to the point, the U.S. Census Bureau’s 2005 American Community Survey highlights paint a telling picture. From a total household population (not including students in dorms or other group quarters) of 1,771,750 people, 1,751,397 are categorized as white – 98.9%. Only 19,302 West Virginians are foreign-born residents.<sup>22</sup>

With its difficult mountain territory and Scotch-Irish settlement, West Virginia has a long history of the white Protestant demographic. While there is nothing inherently wrong with our pervasive demographic, a lack of exposure to new ideas and new ways of seeing the world fundamentally weakens any group. In the global economy of 2007, this lack of exposure and lack of diversity is a serious threat to West Virginia’s ability to grow and succeed.

Immigrant entrepreneurs are making a major impact on the United States’ economy, and West Virginia should take notice. Consider the recent study by the National Foundation for American Policy which examined the nativity of the founders of all U.S. venture-backed publicly traded companies, and surveyed privately held venture-backed companies to understand their views on immigration policy and to obtain demographic data on their founders.

### The key findings concluded:

- Over the past 15 years, immigrants have started 25% of publicly-traded, venture-backed companies.
- The current market capitalization of these companies in the U.S. exceeds \$500 billion.

- These companies are concentrated in the cutting edge sectors of high-technology manufacturing, information technology (IT) and life sciences.
- Immigrants started 40 percent of the companies operating in high- tech manufacturing today.
- Some of these companies include Intel, Solectron, Sun Microsystems, eBay, Yahoo and Google.

While the state itself cannot control an open legal immigration system nationally, we must take the steps we can to make West Virginia attractive to those considering residency in the state. Immigrant entrepreneurs are important to job creation and innovation, and communities and universities should take honest stock of their efforts to both recruit and retain foreign-born professionals and students.

Many communities find it difficult to welcome new and different residents. Immigrants in a multi-city study survey nationwide all said similar things about feeling their ideas are discounted or dismissed. They expressed the opinion that long-time residents were attempting to hold on to their way of doing things, and in some cases, their power. "People with the control to change this city don't want it to change. They want it to be the city their grandfather grew up in."<sup>23</sup> Where this mindset exists, it must be challenged and changed on every level to realize progress in the new economy.

### **What about other types of diversity, such as sexual orientation, age, and race?**

It is difficult to measure sexual orientation demographics, but one can make observations and may certainly draw reasonable conclusions from interviews and conversations. Overall, West Virginia is a traditionalist state. Support groups and communities certainly exist for diverse populations, but theirs is not an easy road. One man interviewed for this paper explained he felt comfortable being himself "in good company downtown," but less so in rural areas where "the real me might not be accepted." One interviewee for this project stated that our "socially conservative mindset" led two gay friends to feel disconnected and shunned, and that they eventually left the state because of it.

... People want to be in an environment where they can be themselves rather than act out a stereotype. The open-mindedness of the community allows them to be who they are without "working against type," which as one gay African-American man described it, is "draining."<sup>24</sup>

West Virginia must also contend with an image and a reputation. Persistent stereotypes of run-down rural housing, conflict resolution by shotgun, and "good old boy" networks in business and government make it more important that we strive to not only change but promote that change vigorously at every level – state and local, public and private, group and individual.

One study of multiple cities conducted web searches by someone in the 25-34 year old target demographic to determine an outsider's impression of the city. The sites reviewed were the official web site for the city, the convention and visitor's bureau, and other sites that would contain general information on the community, rather than sites devoted to specific institutions within the city. To ensure consistency, the review centered on nine questions:<sup>25</sup>

1. Does the material demonstrate ethnic/cultural diversity in the community?
2. Does the material show an active, contemporary cultural scene?
3. Does the material show people participating in active outdoor recreation?

4. Does it show young people enjoying the community?
5. If the name of the city were taken off the materials, would you know where you were? Is there a unique sense of place demonstrated in the materials?
6. Does the material show an active, inviting quality of life and urban lifestyle (focus on urban design, pedestrian traffic, mass transit, busy city streets)?
7. Are unique neighborhoods highlighted and promoted?
8. Is the music/bar/nightlife scene of the city shown?
9. Does the community/state portray a dated or progressive image of itself?

**West Virginia communities would do well to self-assess their image and realities with similar methods.**

Studies, trends, and even common sense tell us that young people and well-educated people are seeking a diversity of community that goes well beyond race and ethnicity. Diversity is a reflection of a community’s open-mindedness and sophistication. Diversity of attitude, and even of income, is interpreted as an asset. Young people especially are seeking the diversity of distinctive neighborhoods, shops, restaurants, and history. They want to live their values through options like recycling and alternative transportation. Young people want to make a difference where they live, but are keenly aware that long-time residents can be the biggest barrier to creating a new history. As one person in an Oregon study said, “There is an emerging group, ready to create the next chapter. But there is a big difference between people who never left and the new people.”

How will breaking down barriers to diversity and welcoming non-traditional people to the community build West Virginia’s new economy? One of the most obvious areas of growth associated with this change is also one of the most exciting and new for our state: technology. In our next section we will look at West Virginia’s growth and development in this important area of the new economy.

People in technology businesses are drawn to places known for diversity of thought and open-mindedness. These places possess what we refer to as low barriers to entry for human capital. Diverse inclusive communities that welcome gays, immigrants, artists, and free-thinking “bohemians” are ideal for nurturing creativity and innovation ...<sup>26</sup>

**Tolerance and Diversity Indicators to Watch in the State New Economy Index<sup>27</sup> :**

- The average educational attainment of recent migrants from abroad
- Other indicators TBD based on census and other consistent reporting sources

Additionally:

- The percentage of non-white and immigrant citizens

## MATRIC

***New Economy factor:** The goal of MATRIC is to execute research, development, and commercialization projects in areas where traditional disciplines converge. To accomplish this goal, MATRIC has developed effective partnerships with educational institutions, including West Virginia University, Marshall University, WVU Tech, West Virginia State University, and the University of Charleston. MATRIC performs research and development activities for a variety of governmental and commercial clients.*

The Mid-Atlantic Technology, Research and Innovation Center (MATRIC) is a world-class non-profit research and development corporation headquartered in South Charleston, WV.

The purpose of MATRIC is to become a nationally and internationally respected center of excellence for research and innovation in the disciplines of chemical and environmental technologies, health and life sciences, and advanced engineering systems, especially in the areas of confluence between two or more of these disciplines.

Services include research incubation of new products and processes, provision of facilities and technical talent for carrying out experimental work from laboratory scale to production scale, and the provision of other specialized technical services that meet regional, state, and national needs.

Keith A. Pauley is MATRIC's President and Chief Executive Officer. He brings more than 16 years of technical experience in the development of high technology systems for various governmental and commercial customers. Mr. Pauley provided management and technical leadership for NASA, the U.S. Department of Energy, and the U.S. Department of Defense as well as General Motors, Boeing, and Lockheed-Martin. He supported nuclear research for the Pacific Northwest National Laboratory for nine years and managed the \$500 million technology development program for the space shuttle and space station at the Johnson Space Center for seven years. He holds a BS and an MS in nuclear engineering from Oregon State University.

PROFILE

## Glenville State University's Wireless Broadband Network and the Gilmer/Braxton Research Zone

***New Economy factor:** As a result of its initiative to provide a wireless broadband network to the entire community, the college drew the attention of larger service providers who wanted to compete to provide service. This innovation ultimately brought new services to the community beyond the campus, and improved connectivity for the entire town. It provided a model for other communities that demonstrated small towns can create their own access in underserved areas.*

In 2003 Glenville was an example of a community taking the initiative to find an alternative to landline options. **Glenville State College** and the Center for Appalachian Network Access (CANA) at **Carnegie Mellon University** in Pittsburgh partnered to build a wireless broadband network there. The network consists of four towers placed on various campus buildings. From this initiative the **Gilmer/Braxton Research Zone** was created by legislation, and in 2004 the West Virginia Council for Community and Economic Development sanctioned the Zone. The Zone is the only one of its kind in the State of West Virginia. Brent Boggs, representing West Virginia's 34th District said, "Braxton and Gilmer Counties are very fortunate to have dedicated individuals working to move WV onto the broadband information highway." The research zones have completed the initial RFI and obtain responses from vendors. They are now obtaining rights to use towers and gather funding to move forward with this important initiative.

PROFILE

### The 2007 State New Economy Index says it best:

Perhaps the most important driver of the new economy is the *information technology revolution* that is *transforming virtually all industries and driving increased productivity*. The good news is that various industrial sectors such as health care, education, transportation, government, real estate and others are at the early stages of digital transformation, and as they transform, productivity promises to continue to grow. On the other hand, technology has ushered in a new global competitive challenge to state economies. It has made it possible for more work to be done at a distance prompting many developing nations to establish the infrastructure, skilled workforce, and business climate to be attractive locations for this work, and at a much lower cost. For example, in the past two decades, the number of industrial manufacturing relocations and significant expansions in the United States has fallen from an average of 5,139 per year for 1995-2000, to 3,162 in 2005.<sup>28</sup>

West Virginia has opportunities for significant change on two fronts. First, as detailed above, we need to embrace not only new technology industries, but the way in which technology itself is changing existing industry; therefore, the workforce will need new skills and education just to stay in place, much less make a leap-frog advance.<sup>29</sup>

The new policy emphasis on industry clusters further amplifies the need for specialized human capital. These clusters are sets of specialized industries and technical skills concentrated in a particular place, which gives that place a global competitive advantage. In cluster thinking, critical mass - especially of applied knowledge - is everything. As a result, some economic models hypothesize that a regional technology complex can collapse like a house of cards if the stock of local knowledge falls below a certain level. Development officials, then, face a two-fold dilemma. They worry that they will lose specialized skills in traditional manufacturing at the same time they fail to achieve critical mass in sectors, like information science and biotechnology that are more youth-driven. Both worries, at least to some degree, relate to migration and labor force decisions made by members of the young and old age cohorts in these places.<sup>30</sup>

Second, West Virginia needs ubiquitous connectivity and universal access to affordable broadband services. As we have seen, this is essential to attract out-of-state knowledge/new economy workers and businesses, and critical for current residents to improve participation in the wider economy. While some areas of the state are well covered, others remain isolated from affordable, available service. Industry statistics tend to obfuscate the reality of spotty availability by identifying an entire ZIP code as covered, when in fact it only takes one household within that code to claim total coverage.

Covering data from all of 2006, West Virginia continues to lag about 10 percentage points behind in the United States in computer ownership, Internet subscription, broadband access, and broadband subscription. Nationwide, 69 percent of households have computers, while in West Virginia on 59 percent of households have a computer ... Also, about 56 percent of West Virginia's 737,000 households are actually online, compared to 66 percent nationally.<sup>31</sup>

The March 2007 report developed by Battelle Memorial Institute for A Vision Shared's Technology-Based Economic Development team highlights many critical factors influencing West Virginia's ability to take advantage of new economy growth opportunities:

- West Virginia's technology industry base is growing but has yet to reach critical mass. In 2005, 8.1% of West Virginia's private sector employment was in high-tech industries, compared to 10.9% nationally. West Virginia overall has a 26% lower concentration of high-tech employment than the nation (Source: US Bureau of Labor Statistics, Battelle calculations)



- The I-79 corridor of North-Central West Virginia is benefitting from a sustained investment in building technology-based economic development infrastructure. This region, consisting of Monongalia, Marion, Harrison and Lewis counties, has a slightly higher concentration of high-tech employment than the national average, increasing 41% from 2001 to 2005.

However, the Battelle report highlights some promising opportunities and trends that should be studied and extended:

- West Virginia's research and development investment has been growing steadily, driven primarily by federal ly-funded R&D. it trails, however, on investment benchmarks for academic and commercial R&D. (Source: National Science Foundation 2005, Battelle calculations)
- West Virginia's universities have experience significant growth in their R&D activities, outpacing growth in academic R&D nationally. Academic R&D grew 85% from 2001 to 2005 vs. 40% nationally. (Source: National Science Foundation 2005, Battelle calculations)

A major area of improvement suggested by the Battelle report is in regard to developing stronger links between research institutions and commercial industry. Only \$4 million of \$130 million in R&D funding came from industry in FY04. While West Virginia's R&D expenditure growth is encouraging, surrounding and similar states have been aggressively moving towards establishing a strong new economy infrastructure:

- Kentucky Research Challenge Trust Fund – The program provides funds for Kentucky universities attract and retain nationally renowned faculty and researchers. The program, begun in 1997, provides \$350 million over six years to be matched with private contributions. Since the program's beginning, the market value of the universities' research endowment has increased 94% from \$454 million to \$878 million, and extramural R&D has increased from \$105 million to \$185 million (Source: Kentucky Council on Postsecondary Education 2005)
- The State of Maine adopted a Science and Technology Action Plan in 2005 that calls for increasing the R&D base to \$1 billion by 2010. Many of their technology and R&D investments have been financed through bond issues. A recent assessment of a \$25 million investment by the Maine Technology Institute, a statewide TBED (technology-based economic development) organization, revealed that employment in MTI-funded companies rose to 600, a growth rate of 6.2% vs. .9% for Maine overall.

We encourage leaders to study and support West Virginia EPSCoR's Vision 2015 plan located at <http://www.wvepscor.org>:

The West Virginia EPSCoR Office is responsible for development, administration, management, and implementation of the state's experimental research improvement program. The mission: to build "research competitiveness" within institutions, individual researchers, research teams, and collaborations between institutions throughout the state. Research competitiveness is achieved when faculty obtain peer recognition in their field and gain direct entry into mainstream research funding. WVEPSCoR accomplishes this mission by supporting new or existing faculty positions, equipment, laboratories and research ideas for limited periods of time.

WVEPSCoR's Vision 2015 calls for specific goals to strengthen West Virginia's R&D and technology base:

#### Human and Physical Infrastructure

- Increase the number of critical science, technology, engineering and mathematics (STEM) researchers at WVU and Marshall University by 20% by 2008

- Build at least one new science and engineering facility and MU and WVU of up to 100,000 assignable square feet by 2010, and develop a long-term plan to continue creation of new research facilities
- Create four nationally competitive research thrust/clusters by 2010
- Provide one-time \$1M each to WVU and MU libraries to increase electronic journal subscriptions in critical STEM fields by 2007 and \$.5M each on a continuing basis

#### Policy

- Develop policies and strategies to improve management of intellectual property (IP) on a statewide basis by June 1, 2006
- Each institution (WVU and MU) will revise promotion, tenure and workload policies to be more research and entrepreneurial friendly by June 30, 2008
- By 2007, increase Research Challenge Fund (RCF) proportion of racetrack video lottery proceeds to 1% - thereafter, increase the proportion until at least 5% is achieved by 2015

#### Research and Innovation

- Develop at least four new in-state emerging technologies businesses by 2010
- Double competitive funding from federal agencies every five years

#### Education and Outreach

- Align with or create a regional alliance including research universities, the private sector and government agencies by 2007
- Increase by 5% per year the retention completion rates of STEM students (with an emphasis on broadening participation)
- Increase by 10% per year the number of doctorates awarded in STEM fields through 2015
- Create a joint university-community and technical college (CTC)-business curriculum to train STEM technicians

#### Economic Development

- Create a Technology-Based Economic Development (TBED) office within the Department of Commerce by March 2007
- Create an early-stage, proof-of-concept gap fund of \$2.5M for technology development and commercialization by July 1, 2007
- Increase by 10% per year the number of STEM job opportunities in the state of West Virginia for graduates with bachelor's/master's degrees

By now, we are closing the loop on how human capital, diversity, and technology support and grow one another in a cyclical manner. Rather than follow straightforward, linear steps, it is important for West Virginia's state and local leaders in public and private sectors to internalize and understand that this dynamic functions on multiple levels and in "back-and-forth" ways. Improvements in each area advance the likelihood of improvements in others.

It is also important to take a long-range view, and to demonstrate commitment to developing both appealing amenities attractive to technology industries, and technology itself. A well-known example is the institutional approach, particularly in the area of higher education, that helps explain the present-day success stories of Austin and Raleigh-Durham; both communities' achievements were over 30 years

in the making. Such extended horizons are not always attractive to elected officials, but they are theoretically sound and have the best track record.

#### Technology Indicators to watch in the State New Economy Index<sup>33</sup>:

- Employment in Information Technology (IT) occupations in non-IT industries as a share of total jobs
- Jobs in “gazelle” companies (firms with annual sales revenue that has grown 20 percent or more for four straight years) as a share of total employment
- The number of independent inventor patents per 1000 people
- Technology in schools – a weighted measure of three factors measuring computer and Internet use in schools
- A weighted measure of the deployment of residential and business broadband lines
- Venture capital invested as a share of worker earnings

### WEST VIRGINIA IS APPROACHING AN INTERESTING CROSSROADS.

Clearly we have several positive building blocks in place to move forward in the new economy. Our four-season climate, low overall cost of living, and moderate pace of life are attractive to many over-burdened urban dwellers. The physical beauty and easy-access outdoor recreation culture help drive both tourism and support quality of life for those who live here year round. Though there can be a positive sense of distance from the rest of the world in some areas, West Virginia is actually within driving distance of more than 50% of the U.S. population, and a third of the Canadian population. The Boomtown Institute ranks “sense of place” as the #1 projected trend for new economy growth in the “agburbs” (small towns in rural America having the potential for successful markets) in 2007. This is followed by trends in the use of alternative energies and arts meccas, both important opportunities for West Virginia.<sup>33</sup>

The opportunity to know others and to be known is often cited as an important aspect of life here, as is the reputation for low crime and an overall safe environment. While we do lack certain forms of diversity, we have strong and unique examples of recognized creativity and innovation as referenced in our report profiles.

We must be willing to also look wholly at where we are, and not all of it is ideal. The 2007 State New Economy Index is a state-by-state analysis of how state economies are transforming from an old industrial economic model based on “smokestack chasing” in which economic development success is measured by the number of big company relocations rather than in the creation and retention of high value-added, high-wage jobs.<sup>34</sup> It uses 26 indicators from a variety of sources to rank each state on the extent to which their economies are structured and operate to effectively compete regionally as well as globally, and examines the degree to which state economies are knowledge-based, globalized, entrepreneurial, information technology-driven and innovation-based.

As should be no surprise at this point in our report, states at the top of the ranking tend to have a high concentration of managers, professionals, and college-educated residents working in “knowledge jobs.” Their companies tend to be more geared toward global markets, both in terms of export orientation and the amount of foreign direct investments. All the states at the top of the ranking also show above-average levels of entrepreneurship, even those that are not growing rapidly in employment. Most are at the forefront of the information technology and Internet revolutions, with a large share of their institutions and residents embracing the digital economy. Most have a solid infrastructure that fosters and supports technological innovation and many have high levels of domestic and foreign immigration of highly mobile, highly skilled knowledge/new economy workers seeking good employment opportunities coupled with a good quality of life.

Conversely, states ranking at the bottom of the Index tend to depend on natural resources or on mass production manufacturing and rely on low costs rather than innovative capacity to gain advantage.<sup>35</sup>

West Virginia is one of the five states that have lagged the most in making the transition. *Our wake up call is now.*

With a foundation of less than 1.8 million people statewide, growing the new economy must be led by a statewide consensus about top-level messages, incentives, and approaches to change, *but individual communities must self-evaluate and make leadership decisions to develop their local strategy around a statewide vision.* Consistent statewide leadership and support will provide the opportunity for effective interpretation at the local level of creative communities in the new economy.

Areas in north central West Virginia, such as Morgantown where West Virginia University is located, and the communities of the Eastern panhandle outside of Washington, DC, are experiencing unprecedented economic growth. West Virginia must be willing to interpret itself not only as a single state, but as part of a larger region. As a single state, the challenges are overwhelming. Regionally, things become more connected to specific assets, and the positives more concretely definable and saleable. Internally, we should consider the strengths of ideas like metro-government and making small communities stronger through alliances with each other within a geographic region.

Many communities may become locked into selling only their local assets because a regional approach is politically difficult or the financial mechanisms do not exist to support it. In 15 focus groups held by a national consulting company, one of the most striking questions was, "What are our leaders willing to risk?" It is critical to show that leaders are working on the problem.<sup>36</sup> Additionally, the Boomtown Institute rounds out its top ten trends for 2007 with regionalism, noting, "As the world becomes smaller, the political boundaries of the 18th Century become less important. Visionary leaders are embracing the concept of regionalism to enhance the opportunities for their citizens."

Policies aimed directly at youth migration and at postponing the retirement of strategic workers may have a role to play in economic development, provided policy makers keep their eyes on the prize of human capital and the long-run development of technology. One thing seems clear: The broad demographic change the nation is now undergoing (aging of the baby boomers), combined with the human capital model of economic growth, ensure that labor supply policies will be on local and national radar screens for many years to come.<sup>37</sup>

### **The Importance of Dialogue: Remaining Questions West Virginia Must Ask**

*Build it and they will come, or they will come and build it?*

There is some controversy within academic and economic development communities over some of the ideas referenced in this paper, primarily "creative class" concepts and their exact connection to economic success. Rooted in the research and writings of Richard Florida and others, these assumptions may be challenged with a "chicken or egg" question: Are the regions of the world rated highly in new economy job growth successful because the creative class (e.g., artists, scientists, technologists, etc.) *preferred* to live in these centers and *then* developed these opportunities, or did opportunities in new economy industries *draw* the them to that region? Can West Virginia draw workers in new economy industries without first having a base of high-tech companies to hire them?

The consensus of the team chartered with delivering this paper is that it is not an either-or question. Efforts to convince existing companies to re-locate or open new offices within the state are important; this, combined with ongoing efforts to improve West Virginia's tax policies and overall business climate, are important elements to growth. *However, that the state's effort to "cultivate a garden" in which new ideas and companies can grow by investing in West Virginia's "quality of place" has been lacking.* Without an effort to assess, improve, package and promote West Virginia's quality of place assets to highly-mobile new economy artists, academics and entrepreneurs, the state is missing out on their tendency to create something new in the communities in which they decide to live.

The ideas of openness and diversity as requirements for new economy, creative class success also generate discussion, and are relevant to a homogeneous state's ability to effect change. Case studies referenced to refute Florida's assumptions in this area include such powerhouse growth regions as Seoul, South Korea, and Singapore, two relatively homogeneous, conservative regions

that have thrived in developing extremely successful high-tech sectors. Does their success erode the assumption that a highly tolerant, diverse culture is required for success in the new economy? Perhaps the “three T’s” Florida outlines – talent, tolerance, and technology – are best understood as ingredients that can be combined in different degrees based on a region’s strength and willingness to take risk. Have Seoul and Singapore made up for their lack of diversity “ingredient” by over-investing in their world-class educational system and government support for R&D?

Additional questions that will need to be sensitively, proactively and productively addressed during the course of this discussion include:

- How will citizens without higher levels of academic attainment respond to the recommendations that West Virginia cannot succeed without a higher percentage of advanced degrees? Can citizens from all backgrounds and economic levels benefit?
- Would dramatic change, particularly in the area of diversity, also change what makes us unique and special, i.e., our close-knit, small-town, everyone-knows-everyone appeal? Does a call for openness necessarily equate to a radical change in West Virginia’s traditional “values”? If so, are there both pros and cons to consider?
- Are the recommendations outlined here compatible with a truly bi-partisan roadmap towards progress?
- What is the role of government in spear-heading progress vs. the role of private sector market forces? What kind of bets should West Virginia be making with taxpayer money to develop “centers of excellence” (similar to North Carolina’s Research Triangle Park) that could spark new economy growth? What sort of broad tax policies and targeted incentives can have the most impact on reversing West Virginia’s positioning at the bottom of most new economy indicators?

On behalf of the Vision Shared Creative Class work group and the Industry of Culture management team, we hope you will be a partner in this critical transition for West Virginia’s future.

## CREATIVE COMMUNITY DEVELOPMENT IN THE NEW ECONOMY - AN ASSESSMENT TOOL FOR WEST VIRGINIA LEADERS

PREPARED BY:  
Terrell Ellis & Associates, Inc.

DESIGNED BY:  
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FOR  
A Vision Shared: Creative Class Work Group  
& The Industry of Culture Initiative



*Concepts used with permission from the State of Maine Department of Economic and Community Development for West Virginia's Creative Economy Initiative and modified for West Virginia by Terrell Ellis & Associates for A Vision Shared and the Industry of Culture*

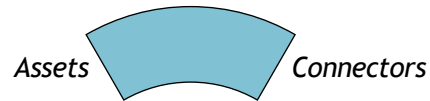
### How to Use This Tool

- This assessment tool is designed for communities that are interested in creative economy opportunities. "Communities" may mean either geographic areas, or areas of interest.
- Review the tool carefully to familiarize yourself with its concepts and questions. This will help you move strategically through the next steps. We also recommend that anyone using this tool also read the 2007 Vision Shared and Industry of Culture publication, *Culture, Creativity, and Innovation: West Virginia in the New Economy*. This will provide a broad context for your work, and help connect you to resources and examples of success in our state.
- Gather key stakeholders. This may include business leaders, economic development specialists, nonprofits, local leaders, working artists, town or city officials.
- As your asset identification and strategies progress, start developing your plan and process for your local creative economy initiative.
- Be sure to include a process for your group's review of the action plan you develop using the 10 Building Blocks model.
- Refer to the dynamics and ideas behind the case studies presented in *Culture, Creativity, and Innovation: West Virginia in the New Economy*. Consider applicability to your goals and situation.
- Determine your community's level of readiness, and review the Inventory of Resources section of the assessment tool. Consider what existing programs may assist your efforts.

## Ten Building Blocks of the Creative Economy

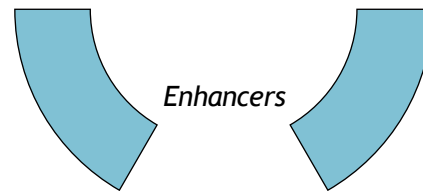
### Assets (A)

1. Creative People and Young People
2. Centers of Education
3. Cultural and Natural Amenities
4. Business Engagement
5. Infrastructure and Tourism



### Connectors (C)

6. Leadership
7. Networks
8. Strategies



### Enhancers (E)

9. Money
10. Time

The ACE Model describes a *system*. Assets grow and develop by virtue of the Connectors making Enhancers available to them.

<sup>1</sup> This worksheet for community self-assessment is used with the generous permission of the State of Maine, Maine Department of Economic and Community Development, Paul Brunetti, 02-05-2007; adapted from the publication "Maine's Creative Economy Community Handbook."



## Creative People and Young People:

Entrepreneurs, scientists, academics, employees of creative sector industries, visual and performing artists, workers in applied arts, managers of arts-related nonprofits. In a state with an aging population, it is essential also to factor in young people as assets as well.

### Self-Assessment Questions

- How do we locate and identify the creative sector?
- Are there civic organizations or a chamber of commerce that can collect information about the creative sector
  - Inventory both old and new
- Is there a critical mass?
  - Are there enough people involved to make a difference in quality of life/community identity?
  - If not, can strategies be developed to change that?
- Is the community currently fostering the arts and technology sectors? If so, in what ways?
  - Schools, business recruitment, lending practices, downtown revitalization, festivals, etc.
- What are the conditions for attracting and retaining creative workers?
  - Employment opportunities, affordable housing, presence of similar workers, cultural opportunities, a tolerant work environment
- Has the community conducted a public opinion survey concerning arts and culture, and if so what was learned?
  - Attitudes and needs of both visitors and residents can help understand how arts and culture fit into an overall development strategy
- What are the conditions for attracting and retaining people in the 25-34 year old age range?
  - Is there music, nightlife, and contemporary cultural scene?
  - Are there diverse social opportunities for “singles” and dating?
  - Are there outdoor recreation opportunities and clubs?
  - Are there wireless “third places” like independent coffee shops?

**Centers of Education:**

K-12, colleges and universities

**Self-Assessment Questions**

- Are there learning centers located in your community?
- How are information and programs shared among them, and within the community?  
Websites, newsletters, flyers, emails, brochures
- How effective are your K-12 gifted and talented programs? (These are unique education opportunities for both high-achieving and underachieving pupils who have been identified as gifted and talented.)
  - These programs require continuing support, especially in rural areas, to encourage talents contributing to creative endeavors
- What educational opportunities are available to local residents?
  - Non-degree participation, special arrangements for high school students, specialized training
- Have centers of education in the community contributed to “clustered” new economy businesses? (Ex. A local university has an exceptional graduate program in engineering, and companies needing a workforce with this specialty are drawn to the area.)

**Cultural and Natural Amenities:****Self-Assessment Questions**

- What are the cultural and natural amenities? (Natural amenities are those elements of the community not formed exclusively by people, but inherent to the area. Usually people have taken steps to enhance the natural amenity, such as river rafting or trail development. Cultural amenities are community assets created and sustained by people, such as a food style, art, or music.)
- Which institutions and organizations foster these amenities?
- What are the architectural treasures?
- Is there a town center?
- Does your community or region have a land trust?
- Where is the “third place” in the community?
  - Home and work are considered places one and two
  - The third place is a place where people congregate, such as a library, community center, school, church, or coffee shop
  - Because these places allow for unscheduled, often spontaneous interaction among creative entrepreneurs and leaders, they are critical components to a successful creative economy

- What is appropriate to develop or promote, and what is not?
  - Be realistic, but forward thinking!
  - Reflect the special qualities of the specific place

### **Business Engagement:**

The anchor businesses may not be creative themselves, but may act as a magnet for an eventual cluster.

### **Self-Assessment Questions**

- Is there a significant level of entrepreneurial activity?
- What local businesses doing to help support the creative economy?
  - Support can be financial, but may also include helping to get the word out and providing outlets for creative efforts, such as displaying local artists' work.
- What businesses are endorsing these efforts?
  - Are they some of the most influential?
- Who is involved – who are the partners?
- Is the cultural community engaged in the business community, and if so, how?
  - Remember, this is a two-way street!
- Has there been outreach to the traditional business community, both in public forums such as chamber breakfasts and in private meetings?
- What aspects of economic development do you want to grow?
- Are there existing creative economy businesses? (Ex. Software, biotechnology, communications, artists and art studios)
- Are your community assets meaningful to the business community? This is evaluated not by what business leaders say, but by what they do! (Ex. Is local business actively supporting the arts with corporate sponsorships?)
- Who are the stakeholders?
  - Which groups and businesses will benefit from the development of the creative economy?

**Infrastructure:**

The basic service framework that make economic support possible. Not all of the following are prerequisites, but examples: access to transportation networks and communication systems (including Internet access), affordable housing, hotel accommodations, hospitals, public safety. In West Virginia, a thriving tourism industry may function as an important framework for economic support as well.

**Self-Assessment Questions:**

- Do you have access to quality healthcare?
- What is the proximity to air service?
- Is there a variety of lodging opportunities?
- Are critical business services available? High-speed Internet, reliable overnight delivery, copy services, etc.
- Do you know how to access infrastructure that may not be readily available to community/region?
  - state and federal grants, regional partnerships
- What is the public safety image of the community?
  - family friendly, welcoming
- Do building re-use opportunities exist?
  - industrial or historic buildings, can they be refurbished for creative economy uses?
- Do current planning and zoning laws support the development of these buildings?
- What regional tourism opportunities exist?
  - Is there a vibrant tourism industry? This in part supports day jobs for artists.
  - Is there an effective regional tourism council with which to work?
- Is adequate affordable housing available?
  - Is it in a desirable place to live, or could it be made desirable?
- Are you aware of the business assistance tools that are available?
  - Inventory entrepreneurship resources

## CONNECTORS

### Strategies:

Purposeful plans involving tax credits, affordable housing, workforce training, other resource allocations.

### Self-Assessment Questions

- What is your community's overall strategy and vision?
  - Do you have an overall economic development plan that has both long- and short-range goals?
- What is the geographic area?
  - Is the community part of a larger region or metro area?
- Why do you or others want to live here?
- What is your niche? What makes you special? This sounds like a simple idea, but it is also very important. Don't try to compete with everyone on everything. Find what you do best, and focus resources and effort in that direction.
- Is the community ready for this type of development?
  - Readiness means infrastructure, but also feelings and expectations of the local community and people's ability to manage change.
- Who will lead the process?
  - An economic development organization that works closely with local government, business, and existing creative economy interests in the area can often successfully spearhead the process.
- What is the strategy to carry out the work?
- What are the desired outcomes or goals?
  - How do you want the community to "look" at the end of the process?

**Networks:**

May be formal or informal but must transcend public, private, and nonprofit sectors to be effective. Examples are Chambers of Commerce, trade associations, art councils, government agencies, and cross-sector stakeholder groups gathered for a project.

**Self-Assessment Questions**

- What networks are currently in place?
- What is there organizational structure?
- Where are the gaps?
- Does the network include private, public, and nonprofit partners?
- Are there trade associations in your community/region?
- Are there effective means of communication?
- Is the community connected to the networks?
  - Have designated representatives attend meetings and help communicate between all parties to enhance your effectiveness

**Leadership:**

The initial seed for developing creative class assets comes from the vision and commitment of either a single person or group of people. Continuing leadership over an extended period of time is necessary to ensure initiatives maintain their momentum.

**Self-Assessment Questions**

- Who are the leaders in your community?
  - Young people/students, retirees, and new arrivals can enhance a traditional leadership base
- Who are the potential leaders in your community? Think beyond how things have always been, and consider your local “next generation” of leaders. Start grooming them now!
- How do you identify leadership?
  - Are there community projects (festivals, charity drives, public forums) that are open to all members of the community?
  - Are young people encouraged to participate?
  - Who generally “runs” these types of activities?
- How might you cultivate leadership?

## ENHANCERS

### Money:

Regardless of sources (government, private, local fundraising), the higher the level of financial resources the faster the pace in developing a creative economy strategy.

### Self-Assessment Questions

- What funds currently exist to help support this initiative?
- Which government grants or technical assistance programs does the community qualify for?
- Is there potential for foundation support?
- Are there local and/or economic development organizations that are interested in this initiative?
- Is there local business participation in terms of investment? Is there local venture capital available?
- Once established, does this project/initiative have the potential to be self-sustaining?
  - Contingencies for sustainability should be developed in the event that prior funding sources are no longer available

### Time:

Building a creative economy takes time, in the neighborhood of 20 to 30 years. Even with strong financial investment, persistence over time is a necessary component.

### Self-Assessment Questions

- Is there a long-term commitment?
- How long have you been thinking about this?
  - A well-conceived and time-tested concept usually has a greater likelihood of success
  - Community input and a thorough knowledge of the interests of all stakeholders is necessary before embarking upon any development project.
- What is the proposed timeline?
- Does your community realistically have the ability to wait that long?
- Are other economic development plans also being explored in conjunction with the creative economy?

## A SUMMARY OF SUCCESS METRICS

### The 2007 State New Economy Index: Benchmarking Economic Transformation in the States

There are 26 indicators in the Index that may be divided into 5 categories that best capture what is new about the New Economy. They are presented here in a simplified format to help the reader quickly grasp the broad areas in which measurements may be established. Readers interested in further detail may find the full report online at The Ewing Marion Kauffman Foundation and the Information Technology and Innovation Foundation (ITIF), [http://www.kauffman.org/pdf/2007\\_State\\_Index.pdf](http://www.kauffman.org/pdf/2007_State_Index.pdf)

1. Knowledge jobs: Indicators measure employment of information technology (IT) professionals outside the IT industry; jobs held by managers, professionals, and technicians; the educational attainment of the entire workforce; employment in high value-added manufacturing sectors, and employment in high-wage traded services.
2. Globalization: Indicators measure the export orientation of manufacturing and services; foreign direct investment; and packaging exports.
3. Economic dynamism: Indicators measure the number of fast growing “gazelle” companies; the degree of job churning (which is a product of new business start-ups and existing business failures); the number of Deloitte Technology Fast 500 and Inc. 500 firms, the value of initial public stock offerings (IPOs) by companies; the number of entrepreneurs starting new businesses; and the number of individual inventor patent issued.
4. Transformation to a digital economy: Indicators measure the percentage of population online; the number of Internet domain name registrations; technology in schools; the degree to which state and local governments use information technologies to deliver services; Internet and computer use by farmers; and residential and business access to broadband telecommunications.
5. Technological innovation capacity: Indicators measure the number of jobs in technology-producing industries; the number of scientists and engineers in the workforce; the number of patents issued; industry investment in research and development; and venture capital activity.



2007 Rank Overall	2007 Overall Score
50	35.6

#### New Economy Scores by Overall Rank (2007)

IT Professionals (Rank/Score)	Managerial, Professional, Technical Jobs (Rank/Score)	Workforce Education (Rank/Score)	Immigration of Knowledge Workers (Rank/Score)	Manufacturing Value-Added (Rank/Score)
44 / 0.68%	31 / 19.8%	50 / 26.1	47 / 12.6	46 / 14.0%

High-Wage Traded Services (Rank/Score)	Export Manufacturing and Services (Rank/Score)	Focus of Foreign Investment (Rank/Score)	Direct Package Exports (Rank/Score)	"Gazelle Jobs" (Rank/Score)
48 / 8.0%	28 / \$18,817	36 / 2.1%	45 / 0.04	50 / 3.1%

Job Churning (Rank/Score)	Fastest Growing Firms (Rank/Score)	IPOs (Rank/Score)	Entrepreneurial Activity (Rank/Score)	Inventor Patents (Rank/Score)
22 / 25.3%	46 / 0.000%	44 / 3.28	49 / 0.17%	50 / 0.031

Online Population (Rank/Score)	Internet Domain Names (Rank/Score)	Technology in Schools (Rank/Score)	E-Government (Rank/Score)	Online Agriculture (Rank/Score)
47 / 51.5%	47 / 1.30	5 / 6.09	48 / 3.57	27 / 5.00

Broadband Telecommunications (Rank/Score)	High-Tech Jobs (Rank/Score)	Scientists and Engineers (Rank/Score)	Patents (Rank/Score)	Industry Investment in R & D (Rank/Score)	Venture Capitol (Rank/Score)
50 / 2.94	45 / 1.9%	34 / 0.29%	46 / 0.24	42 / 0.96%	37 / 0.03%

## A SUMMARY OF IDEAS FOR CONSIDERATION

**NOTE:** The following is a draft list of ideas and recommendations gathered to date from the Vision Shared Creative Class and Industry of Culture teams. Some re-iterate ideas and recommendations from other groups, some are new. The list is not meant to be authoritative or exhaustive at this stage, but to spark dialogue and rigorous debate towards final recommendations delivered at the fall 2007 Create West Virginia conference (see [createwv.com](http://createwv.com) for actual date and location).

Additional ideas will be captured, rated and reviewed by the public at large on the web site [www.createwv.com](http://www.createwv.com) to gain a more holistic view of the directions West Virginia should take across key pillars required to build the Creative Class and New Economy.

## TALENT

### Primary Objectives:

- Raise overall bachelors and masters degree attainment state ranking from last in the U.S. to 2nd quartile in ten years.
- Establish world-class leadership in a small number of academic niche areas related to New Economy industries.

### How to get there:

- K-12 School Districts
  - Consider choosing areas of excellence to invest in that set their students apart in highly valued creative and technical disciplines such as computer programming, web design, multimedia development or performing arts.
  - Invest in Advanced Placement course offerings
  - Develop a culture of curiosity and learning by inviting former students who have excelled back for speaking engagements and Q & A sessions with students.
  - Communicate success stories from the region; keep successful former students connected to the community regardless of where they live.
  - Expand career days and highlight job opportunities with high-growth, new economy potential. Clearly outline the educational attainment required to get there.
  - Develop a partnership with a nearby college or university to set up college student mentor relationships, frequent college days, visits to the campus.
- Colleges and Universities
  - Invest in centers of new economy excellence, delivering research, training, conferences and program offerings with a goal towards world class thought leadership.
  - Develop partnerships with local communities to deliver “idea festivals”, college experience days, creative arts programs and other innovative offerings.
  - Create special events that reach out to non-traditional students to de-mystify and encourage lifelong learning opportunities.

- Partner with the business community to develop stimulating new creative arts program offerings for local communities.
- Develop extensive internship programs with local businesses.
- State Government
  - Strengthen West Virginia testing standards to match more rigorous national standards in order to gain a more realistic view of how prepared our children are compared to peers across the country.
  - Create learning incentives for non-traditional students to complete their degrees
  - Evaluate viability of a West Virginia School for the Performing Arts or regional arts schools supported by multiple districts.
  - Develop special funding opportunities for any school districts interested in setting up new economy curriculum in technology, math, science or the arts.
  - Increase investment in summer arts, science and technology academies to expose West Virginia high school students to cutting edge ideas, mentors, internships and other learning opportunities.
  - Dept of Education: Ensure that West Virginia's leadership in K-12 technology education and integration remains among the best in the country.
  - Dept of Education: Open up new doors to Advanced Placement courses via online learning in partnership with colleges and universities.
  - Consider a targeted Promise Scholarship program that provides additional scholarship funding for students majoring in math, science and technology fields.
  - Consider a Promise Scholarship-style incentive program for West Virginians to pursue advanced degrees in new economy fields in math, science, engineering and technology.
  - Invest in Internet-enabled services that reduce service time and improve quality of service to constituents. Ensure that citizens know the availability and benefits of these online services.
- Business Community
  - Proactively develop internship opportunities and engage colleges and universities to fill openings.
  - Develop incentives, however large or small, to encourage employees to complete degrees or pursue advanced degrees.

## TOLERANCE AND DIVERSITY

### Primary Objectives:

- Establish a baseline understanding of where West Virginia relates compared to other states on topics of tolerance and diversity, and improve substantially the openness to new people and new ideas based on weaknesses discovered in the baseline study.
- Measure, assess and improve the image of West Virginia in core influential out-of-state and in-state audiences; establish ourselves as a place where anyone can come to create, innovate and grow.

- Track our progress towards openness and diversity by setting and achieving goals in growth of diverse community members represented in the state within ten years.

#### How to get there:

- Local Government
  - Create a partnership with business, academic and community leaders to promote tolerance and diversity proactively, including a well-understood communications channel for gaining understanding of different communities, reporting abuses, etc.
  - Hold International Festivals and Culture Days to celebrate different traditions while adding to the list of “things to do” in your town.
  - Publicly and visibly communicate the region’s commitment to diversity and equality via welcome signs and official communications.
- State Government
  - Develop proactive recruiting efforts within diverse communities to fill open positions.
  - Launch and invest in minority supplier programs.
  - Tourism – Create incentives for local International and Cultural fairs and festivals, or events that focus on bringing diverse voices and visitors to West Virginia.
  - Tourism – Partner with local community leaders to fully develop historic civil rights sites and promote them outside the state to diverse communities.
  - Tourism – Ensure that advertising and communications include diverse faces and activities appealing to diverse communities.
- Business Community
  - Invite speakers to Idea Festivals, Chamber of Commerce events, Rotary meetings, etc. who can articulate the value of diversity and how to get there.
  - Ensure that a proactive diversity plan is in place internally which includes outreach to diverse communities for recruiting talent to fill open positions.
  - Partner with local or state leaders of diverse communities to identify speakers who can engage your leadership team and employee base via speaking engagements or other educational programs.
  - Identify minority-owned suppliers and proactively reach out to them for bidding on projects.
- Community and Religious Groups
  - Participate in International Festivals and Culture Days events; highlight any programs designed to reach out to minority or international communities.
- K-12 School Districts
  - Partner with a “sister school” in an urban district, either within West Virginia or another state, and participate in student exchange programs.
  - Organize trips to civil rights historical sites in West Virginia or other locations.

- Build pride in West Virginia and Appalachian heritage while modeling and teaching respect and value for other cultures.
- Sponsor and support student groups that help facilitate cross-cultural understanding.
- Colleges and Universities
  - Ensure that the goal of building a diverse student population is clearly communicated in all public materials and communications.
  - Commit to building diversity within the faculty and staff of the school; publicize this goal and look to community leaders for support.
  - Partner with community leaders to develop programs that reach out to diverse communities to increase the percentage of minority students who attend and complete college.
  - Partner with local business and government leaders to provide mentoring and internship opportunities for diverse students to connect at local levels; encourage local connections between diverse students and the community.

## TECHNOLOGY

### Primary Objectives:

- Achieve notoriety as among the most tech-savvy small states states, including modeling advanced use of technology in rural and small town environments.
- High-tech and creative economy employment above national average within ten years.

### How to get there:

- State Government
  - Support innovative research initiatives, including those connected with college and university institutions who can deliver world class new economy “centers of excellence” in science and technology.
  - Ensure that suppliers inside and outside the state are aware of online procurement processes and provide favorable status in bidding to companies that can efficiently do business online with the government.
  - Provide wireless Internet service across all government-owned office buildings and gathering places. Encourage a “digital lifestyle” in the office.
  - Hold more public meetings online via webcasts to encourage broad participation in government across the state while reducing travel costs. Consider a monthly “Governor’s Webcast” town-hall style meeting to encourage interactive, frequent dialogue with citizens via the web.
  - Make sure that West Virginia government web sites are among the most useful and advanced as benchmarked vs. other states.
  - Provide funding and support for “Web Week” events held in local communities (see details under Local Government).

- Partner with service providers to develop innovative strategies for bringing broadband access – both landline and wireless – to communities lacking in connectivity.
- Local Government
  - Invest in wireless hot spots in public places, including parks, libraries and other gathering spots. Partner with local service providers and the business community to plan, implement and share the costs.
  - Promote the availability of wireless Internet service in your welcome signs, town web site or other communications. Make sure people know that they can be connected with the world while visiting or living in your town.
  - In partnership with schools, colleges and businesses, hold “Web Week” events that promote useful Internet applications and services and training on:
    - Economic growth (selling on eBay, marketing online, reaching wider markets via ecommerce sites, etc.)
    - Education (online learning and degrees)
    - Communication/connecting (YouTube, MySpace)
    - Internet safety training (filters, family Internet rules, etc.)
  - Consider viability of laptop loaner programs via libraries. Ensure that libraries have up-to-date PC labs with Internet availability for the public.
  - Wherever possible, place useful government information online and provide opportunities to interact with government services and leaders online.
- Business Community
  - For those “third place” establishments (restaurants, coffee shops, etc.), make sure that low-cost or free wireless Internet access is available. Promote it and consider joining with other businesses to promote the various wireless service locations around your town or region.
- K-12 School Districts
  - Consider piloting laptop programs for every student, similar to “schools of the future” found in major metro areas.
- Colleges and Universities
  - Ensure that campuses are fully wireless-enabled; consider partnering with local businesses to wirelessly-enable “third places” such as coffee shops and other hangouts.
- Community and Religious Groups
  - Develop laptop loaner programs for constituents.
  - Deliver PC and Internet training days for senior citizens; help them understand how to be more connected to family and friends around the country and globe via these tools. Partner with senior citizen centers and homes to provide PC labs.

**OTHER RECOMMENDATIONS:**

- Develop a baseline internal and external image study and build a targeted word-of-mouth based effort to strengthen the states image, particularly in among audiences that would be prime prospects for moving to the state, starting a business, investing, etc. Launch the campaign within one year and make dramatic progress on key brand and image metrics within three years.
- Launch tourism campaigns that are targeted to younger Creative Class members in target audiences that highlight the states cultural and outdoor amenities outside of traditional crafts. Consider strengthening West Virginia’s brand as an “extreme sports” capital of the East Coast, highlight or create intellectually-stimulating, progressive entertainment offerings, etc.
- Study who is most likely to be convinced to move to West Virginia with key demographic groups. Which stage of life? What minority groups? What are the tipping point triggers that would convince them to invest their creative talents in West Virginia? Launch a focused in-migration campaign on young, entrepreneurial Creative Class families who may be ready to invest their lives in a less congested, high-cost environment.

## CREATIVE CLASS AND NEW ECONOMY RESOURCES

The following resources may be helpful in understanding the changing economic and cultural landscape brought on by the connected, Internet-speed, innovation-minded world we live in. While debate carries on regarding the implications for labor rights, immigration, education, diversity and other topics, it is important for us to be aware of the definitions, assumptions and trends in the realm of Creative Class/New Economy discussion.

### Creative Class/New Economy Culture

Creative Class Group: Richard Florida's site that started the wave of dialogue across the country  
<http://creativeclass.com/>

Daniel Pink's A Whole New Mind  
<http://www.danpink.com/>

US Department of Agriculture's Creative Class classifications and workforce report  
<http://www.ers.usda.gov/Data/CreativeClassCodes/>

National Assembly of State Arts Agencies' State and Creative Economies  
[http://www.nasaa-arts.org/artworks/creative\\_econ\\_brief.pdf](http://www.nasaa-arts.org/artworks/creative_econ_brief.pdf)

Smart Communities  
<http://www.smartcommunities.org/home.htm>

### **Cool Stuff from Other States:**

- Maine's Creative Economy Handbook  
[http://mainearts.maine.gov/mainescreativeeconomy/creative\\_economy\\_handbook.pdf](http://mainearts.maine.gov/mainescreativeeconomy/creative_economy_handbook.pdf)
- Kentucky's Idea Festival  
<http://www.ideafestival.com/>
- The Aspen Institute and Ideas Festival  
<http://www.aspeninstitute.org>
- Idaho filmmakers documentary on the Creative Class  
<http://www.customflix.com/208774>

### Arts Community, Culture and Trends

National Assembly of State Arts Agencies  
[http://www.nasaa-arts.org/artworks/creativeeconomy\\_initiatives.html](http://www.nasaa-arts.org/artworks/creativeeconomy_initiatives.html)

Americans for the Arts  
<http://www.artsusa.org/>

National Guild of Community Schools of the Arts  
<http://www.nationalguild.org/index.html>

### **Cool Stuff from Other States:**

- Vermont Creative Communities program  
<http://www.vtrural.org/files/Introductory%20Handout.doc>



- Matchbook, New England's online cultural marketplace sparking connection between artists, presenters and communities  
<http://matchbook.org/>
- Iowa's Cultural and Entertainment Districts  
[http://www.culturalaffairs.org/funding/cultural\\_and\\_entertainment\\_districts/index.htm](http://www.culturalaffairs.org/funding/cultural_and_entertainment_districts/index.htm)
- Iowa's Department of Cultural Affairs  
<http://www.culturalaffairs.org>
- Torpedo Factory, Alexandria, VA  
<http://www.torpedofactory.org/>

### **Technology, Science and R&D**

Commission on Professionals in Science and Technology  
<http://www.cpst.org/>

Computing Research Association  
<http://www.cra.org/>

National Science Foundation statistics  
<http://www.nsf.gov/statistics/>  
and Science and Engineering Indicators  
<http://www.nsf.gov/statistics/seind06/>

Progressive Policy Institute New Economy Index  
<http://www.neweconomyindex.org/index.html>

Smart Communities  
<http://www.smartcommunities.org/home.htm>

Our Technological Future  
<http://jwbats.blogspot.com/>

Muniwireless.com  
<http://www.muniwireless.com/>

### **Cool Stuff from Other States:**

- Montana Associated Technology Roundtables  
<http://www.matr.net/>

### **Broadband Connectivity**

Daily Wireless' Municipal Wireless discussion  
<http://www.dailywireless.org/category/municipal-wireless/>

WiMAX Forum  
<http://www.wimaxforum.org/home/>

WiMAX.com  
<http://www.wimax.com/>

Rural Development Telecommunications Program

<http://www.usda.gov/rus/telecom/>

USDA Rural Development Telecommunications Program

<http://www.usda.gov/rus/telecom/>

***Cool Stuff from Other States:***

- Vermont's universal broadband initiative  
[http://www.vermont.gov/governor/speeches/F2C%20Speech%203-2-07%20doc\\_Final.pdf](http://www.vermont.gov/governor/speeches/F2C%20Speech%203-2-07%20doc_Final.pdf)
- Connect Kentucky  
<http://connectkentucky.org/>

**Community and Economic Development**

Boomtown Institute: Mentoring America's Hometowns

<http://www.boomtowninstitute.com/>

Amazing Cities, from West Virginia's own Jim Hunt

<http://amazingcities.blogspot.com/>

Blueprint Communities

<http://www.blueprintcommunities.com/wv/>

Southern Growth Policies Board

<http://www.southern.org/>

CoolTown Studios

<http://www.cooltownstudios.com>

National Rural Economic Developers Association

<http://www.nreda.org>

Economic Development Research Group

<http://www.edrgroup.com/>

Creative Community Builder's Handbook

<http://www.fieldstonealliance.org/productdetails.cfm?PC=63>

Partners for Livable Communities

<http://www.livable.com/>

***Cool Stuff from Other States:***

- North Carolina's Rural Economic Development site  
<http://www.ncruralcenter.org/>
- Wisconsin's Entrepreneurs' Network  
<http://www.wenportal.org/>
- University of Nebraska's Rural Development program  
<http://lnn0203.nebraska.edu/>

**Tolerance and Diversity**

National League of Cities Inclusive Communities partnership  
[http://www.nlc.org/resources\\_for\\_cities/programs\\_\\_\\_services/7952.aspx](http://www.nlc.org/resources_for_cities/programs___services/7952.aspx)

Inclusive Communities Project  
<http://www.inclusivecommunities.net>

Tolerance.org  
<http://www.tolerance.org>

Parents, Families and Friends of Lesbians and Gays  
<http://pflag.org/>

**Cool Stuff from Other States:**

- Minnesota's Inclusive Communities initiative  
<http://www.lmnc.org/services/bicinitiative.cfm>
- Kentucky Fairness Alliance  
<http://www.kentuckyfairness.org/>
- Texas' Center for the Healing of Racism  
<http://centerhealingracism.org/index.htm>

**Education and Skills Issues**

Strong American Schools  
<http://www.edin08.com/>

Education Futures  
<http://www.educationfutures.com/>

Education Innovation  
[http://educationinnovation.typepad.com/my\\_weblog/](http://educationinnovation.typepad.com/my_weblog/)

National Math & Science Initiative  
<http://www.nationalmathandscience.org/>

National Science Teachers Association  
<http://www.nsta.org/>

Edvantia  
<http://www.edvantia.org/index.cfm>

**Cool Stuff from Other States:**

- Kansas City Urban Innovation Network  
<http://www.kckps.k12.ks.us/uein/>
- Vermont Science Initiative  
<http://www.vtscience.org/>

Please share additional resources at [www.createwv.com](http://www.createwv.com)

## **AGENCIES AND ORGANIZATIONS PROVIDING CREATIVE ECONOMY PROGRAMS**

Each of the following resources provides assistance in key areas of Affordable Housing, Downtown Revitalization, and Entrepreneurship; some offer assistance in more than one area.

### **West Virginia Housing Development Fund**

*For more information:* <https://www.wvhdf.com/index.cfm>

The WVHDF is a public body corporate, and governmental instrumentality of the State of West Virginia, established to develop and improve housing opportunities for its residents.

The WVDHF has provided \$280 million in housing assistance in 2002. It has one of the largest Loan Servicing Departments for a housing agency in the United States, servicing more than 25,000 loans totaling more than \$1.2 billion, and was awarded a Ford Foundation Innovation in State and Local Government award administered by the John F. Kennedy School of Government for one of its financing programs for low-income West Virginians in 1993.

### **West Virginia Development Office**

*For more information:* <http://www.wvdo.org/>

The WVDO includes a wide range of business assistance, the Small Business Development Office, a Community Development Division, and Workforce Development.

The WVDO employs a wide range of professionals who focus on meeting business and development needs. Infrastructure supports existing businesses that are retaining or expanding their operations as well as new industries. A variety of flexible incentives are available. For personal attention to a project, call the West Virginia Development Office at (800) 982-3386.

### **West Virginia Small Business Development Centers**

*For more information:* <http://www.sbdcwv.org/>

The West Virginia Small Business Development Center (WVSBDC) can provide virtually all of the preliminary information and paperwork needed to legally open a business. Visit [www.sbdcwv.org](http://www.sbdcwv.org), which provides detailed information about small business resources. The WVSBDC has 14 centers throughout the state. Center locations may be found at <http://www.sbdcwv.org/location.php>. The Administrative Office of the WVSBDC may be reached at 1-304-558-2960 or 1-888-982-7232 (Toll Free).

### **West Virginia EPSCoR**

*For more information:* <http://www.wvepscor.org/>

The West Virginia EPSCoR Office (Experimental Program to Stimulate Competitive Research) is responsible for development, administration, management, and implementation of the state's experimental research improvement program. The mission: to build "research competitiveness" within institutions, individual researchers, research teams, and collaborations between institutions throughout the state. Research competitiveness is achieved when faculty obtain peer recognition in their field and gain direct entry into mainstream research funding. WVEPSCoR accomplishes this mission by supporting new or existing faculty positions, equipment, laboratories and research ideas for limited periods of time. The WVEPSCoR Office

administers other grant and education programs in conjunction with the primary Research Infrastructure Improvement (RII) award from the National Science Foundation and provides proposal development assistance to researchers. The Office is also responsible for financial and programmatic reporting, outreach, infrastructure proposals, policy development and support to the state research advisory council.

### **West Virginia Tourism**

*For more information: <http://www.wvdo.org/tourism/index.html>*

The West Virginia Development Office continues to support the state's existing tourism businesses, providing help with workforce training and connections to financing and incentives packages as well as to West Virginia's various infrastructure programs. Tourism development plays an increasingly important role in West Virginia's economy. The Tourism Development Act provides a powerful incentive for the establishment of new tourist destinations as well as for the expansion of existing ones. West Virginia also offers incredible appeal as a tourist destination. The Tourism Development Act provides a renewed opportunity to broadcast tourism development opportunities in the state.

### **West Virginia Film Office**

*For more information: <http://www.wvfilm.com/>*

The West Virginia Film Office (WVFO) is a section of the West Virginia Department of Commerce, Division of Tourism, and is a member of the Association of Film Commissioners International ([www.afci.org](http://www.afci.org)).

The WVFO provides support for motion pictures, television programs, commercials, music videos, and other productions that occur in West Virginia. The WVFO connects its clients (such as, studios, producers, production companies, advertising agencies, etc.) with West Virginia's workforce and vendors; provides complimentary scouting of locations and coordination of client itineraries; assists in securing site access and filming permits; assists with mapping, research, and logistical and technical support; acts as a liaison between its clients and governmental agencies, economic development/tourism/community leaders, and private residential and business property owners; and provides media and additional support as needed.

### **Main Street West Virginia**

*For more information: <http://www.wvdo.org/community/mainstreet.html>*

Main Street provides technical assistance to designated state programs that continue to meet the national criteria for recognition as Main Street communities. It uses a common-sense approach to tackle the complex issue of downtown and neighborhood commercial district revitalization, capitalizing on the history and the resources of the community itself. Started in 1988, the program works with 15 designated communities throughout the state. The program provides technical services, such as design assistance, and continuous training of board/committee members and program managers in the four-point approach. Main Street West Virginia also serves as a liaison between various state agencies and organizations with designated communities. Any designated community that maintains national certification is eligible for technical assistance.

**West Virginia Chamber of Commerce**

For more information: <http://www.wvchamber.com/>

The West Virginia Chamber of Commerce is the largest, most influential general business organization, representing all business sectors in every region of the state. Members range from small business enterprises to mid-size manufacturers to tourism destinations to energy companies to Fortune 500 corporations. However, small businesses are the core of our membership -- making up 95 percent of the West Virginia Chamber's companies and firms. The Chamber's staff, leaders and volunteers work to give private-sector employers a voice in state politics and protecting business interests before regulatory bodies, the Legislature and the courts.

**West Virginia Commission for the Arts**

For more information: <http://www.wvculture.org/agency/boards.html>

The West Virginia Commission on the Arts serve as an citizen advisory board to the Division of Culture and History. Specific activities of the commission include providing guidance to the commissioner and agency directors in the establishment of a state plan for the Arts Section; approving and distributing grants-in-aid and awards from federal and state funds; encouraging and promoting the purposes of the agency; approving rules concerning the professional policies and functions of the agency; and advising and consenting to the appointment of agency directors by the commissioner.

**West Virginia Division of Culture and History**

For more information: <http://www.wvculture.org/>

The Division's main offices are in the Cultural Center at the State Capitol in Charleston. The building is home to the State Museum and Theater, the State Archives and Collections, and a library for genealogical research. The Division includes the West Virginia Commission on the Arts and the State Historic Preservation Office. At the Cultural Center, the Division programs a full year of events and exhibits. The Division also administers four historical sites, with their own program schedules, in other areas of the state. Grants are available in the areas of arts, historic preservation, and records management and preservation.

**West Virginia Department of Education**

For more information: <http://wvde.state.wv.us/>

The West Virginia Board of Education establishes policies and rules to assure implementation of education goals and to ensure the general supervision, oversight and monitoring of a thorough and efficient educational system. A Division of Technical and Adult Education Services is available, in addition to a K-12 system.

**Community and Technical College System of West Virginia**

For more information: <http://www.wvctcs.org/>

The mission of the is to deliver affordable, accessible high quality education and training that dynamically advances the economic and social development of West Virginia. All CTC's have websites online as links at <http://www.wvctcs.org/institutions.asp>.

**West Virginia Division of Labor**

For more information: <http://www.labor.state.wv.us/>

The West Virginia Division of Labor has diversified responsibilities that affects workers, employers and consumers. This includes but is not limited to investigating complaints from owners of manufactured housing; requiring bonds to guarantee payroll in the commercial construction and mining industries; offering employers a health and safety program to eliminate job-site hazards; verifying contractor licenses at job sites, issuing stop work orders to unlicensed contractors and working with contractors to obtain licenses; certifying the accuracy of weighing and measuring devices used by manufacturers and producers so their products can be sold at home and abroad.

**West Virginia Department of Transportation**

For more information: <http://www.wvdot.com/>

The WVDOT is comprised of the Division of Highways; Division of Motor Vehicles; Division of Public Transit; the Public Port Authority; the Parkways, Economic Development and Tourism Authority (W.V. Turnpike); the State Rail Authority; and the Aeronautics Commission. WVDOT provides essential services in transportation, tourism and economic development, including: modern operating standards for highways, rail and airport facilities; transportation services including public transit, railway operation and maintenance, airport and river port development and highway construction and maintenance; community and economic development through accessible roads, rivers, railways and airports; travel information, safety guidance, public involvement in transportation planning and continuing education.

**The Preservation Alliance of West Virginia**

For more information: <http://www.pawv.org/>

The PAWV was established in 1981 to meet the needs of building interest in, knowledge about, and legislative support for historic preservation through grassroots advocacy, education, and outreach. Officially incorporated the following year, the organization quickly began making significant, positive contributions to the preservation of West Virginia's vast, proud heritage. The PAWV has maintained a statewide, non-profit presence promoting historic preservation, with periodic newsletters, web site, technical assistance and advocacy, and annual conferences. A staple of PAWV's platform is the direct link between economic development, tourism, and preservation.

**West Virginia State Historic Preservation Office**

For more information: <http://www.wvculture.org/shpo/shpoindex.aspx>

The mission of the Division of Culture and History's State Historic Preservation Office is to encourage, inform, support, and participate in the efforts of the people of West Virginia to identify, recognize, preserve and protect West Virginia's prehistoric and historic structures, objects and sites. The Office administers both the state and federal historic preservation programs. The office aids federal and state agencies, local governments and the general public in identifying and preserving the physical historic and prehistoric resources of West Virginia. The information you need is not on the website, you may email your question to [shpo@wvculture.org](mailto:shpo@wvculture.org).

**West Virginia Humanities Council**

For more information: <http://www.wvhumanities.org/>

The West Virginia Humanities Council is a private, nonprofit organization providing lifelong learning opportunities to the state's citizens. WVHC serves as a state affiliate of the National Endowment for the Humanities ([www.neh.org](http://www.neh.org)). Grants, programs, festivals, and publications all serve to advance the Council's goal of helping and encouraging all West Virginians enjoy a rich, engaging, and mind-expanding experience through the humanities.

**West Virginia High Technology Consortium Foundation**

For more information: <http://www.wvhtf.org/>

The WVHTCF's provides innovative, technology-based programs, products and services to the global marketplace. It strives to be a vibrant, national technology organization driven by knowledge, excellence and innovation with West Virginia values and global capabilities. This is achieved through business development; technology transfer; product and service commercialization; research and development (R&D); managing intellectual property, technology, and research programs; a state-of-the-art technology park; educational resources and quality training programs; a presence in national and international marketplaces from business development to exporting assistance; diversifying and strengthening the West Virginia economy and its technology-based workforce.

**West Virginia Women's Business Center**

For more information: <http://www.westvirginiawbc.org/>

The Women's Business Center is committed to developing leadership, independence and entrepreneurship for the Women of West Virginia. Women are empowered with the tools to make informed decisions about business ownership through training, business coaching and mentoring. The Center is strengthening the state economy by assisting women to begin and expand businesses and by fostering a healthy business environment.

Services include training and workshops; business coaching; business library, computer, and Internet access; networking and personal services.

**The Tamarack Foundation**

For more information: <http://tamarack.terraddon.com/foundation/default.aspx>

The Tamarack Foundation is a nonprofit organization dedicated to fund important support programs for the artisans, craftspeople and specialty food producers of West Virginia. Donor support provides educational and training opportunities to help strengthen artisans in the development of their craft, opportunities to expand economic potential and assist artisans who face critical needs or are suffering hardships and career-threatening events beyond their control. Its goal is to help West Virginia artisans thrive in their entrepreneurial endeavors as citizens of our creative communities. Programs include access to resources; education and training; and financial support.



**Mountain Made**

*<http://stores.homestead.com/MMade/StoreFront.bok>*

With the assistance of the U.S. Small Business Administration and program income generated by the sales of artisan works, the MountainMade Foundation is able to support and develop West Virginia arts and crafts small businesses by assisting them with effective marketing of their work, expanding their businesses and increasing demand for their work, to promoting awareness of the distinctive artistic resources our state has to offer. Mountain Made strives to educate the public through heritage arts demonstrations and workshops, create jobs for West Virginia and encourage tourism to Tucker County.

## CREATIVE CLASS JOBS BY WEST VIRGINIA COUNTY

From the United States Department of Agriculture Economic Research Service:

Richard Florida's Rise of the Creative Class makes a compelling argument that urban development now depends on novel combinations of knowledge and ideas, that certain occupations specialize in this task, that people in these occupations are drawn to areas providing a high quality of life, and that the essential development strategy is to create an environment that attracts and retains these workers. While developed with urban areas in mind, this thesis may be particularly relevant in rural areas, which lose much of their young talent as high school graduates leave for college, the armed forces, or "city lights."

Our analysis of recent development in rural U.S. counties, which focuses on natural amenities as quality-of-life indicators, supports the creative class thesis. A repetition for urban counties also shows a strong relationship between creative class presence and growth, although natural amenities play a smaller role. However, our results depend on a recast creative class measure, which excludes from the original Florida measure many occupations with low creativity requirements and those involved primarily in economic reproduction (i.e., numbers proportional to population). Our measure conforms more closely to the concept of creative class and proves to be more highly associated with regional development than the original Florida measure.

The data sources and process of defining county-level creative class codes are described in the documentation located at <http://www.ers.usda.gov/Data/CreativeClassCodes/methods.htm>.

For more information: <http://www.ers.usda.gov/data/creativeclasscodes/>

Creative Class as reformulated by ERS	
Occupation title	Standard Occupation Code (SOC)
<b>Management occupations:</b>	
Top executives	11-1000
Advertising, marketing, promotions, public relations, and sales managers	11-2000
Financial managers	11-3030
Operations specialties managers, except financial managers	11-3010, 11-3020, 11-3040 through 11-3070
Other management occupations, except farmers and farm managers	
<b>Business and financial operations occupations:</b>	
Business operations specialists	13-1000
Other financial specialists	13-2020 through 13-2090
<b>Computer and mathematical occupations:</b>	
Computer specialists	15-1000
Mathematical science occupations	15-2000

Creative Class as reformulated by ERS (cont.)	
Occupation title	Standard Occupation Code (SOC)
<b>Architecture and engineering occupations:</b>	
Architects, surveyors, and cartographers	17-1000
Engineers	17-2000
Drafters, engineering, and mapping technicians	17-3000
<b>Life, physical, and social science occupations:</b>	
Life and physical scientists	19-1000 and 19-2000
Social scientists and related workers	19-3000
<b>Education, training, and library occupations:</b>	
Postsecondary teachers	25-1000
Librarians, curators, and archivists	25-4000
<b>Arts, design, entertainment, sports, and media occupations:</b>	
Art and design workers	27-1000
Entertainers and performers, sports, and related workers	27-2000
Media and communications workers	27-3000 and 27-4000
<b>Sales and related occupations:</b>	
Sales representatives, services, wholesale and manufacturing	41-3000 and 41-4000
Other sales and related occupations, including supervisors	41-1000 and 41-9000

Creative Class jobs by West Virginia county					
County	Creative Growth 1990-2000	Creative 2000 (number)	Employed Growth 1990-2000	Employed 2000 (number)	Creative 2000 (share)
Barbour County	23.1%	887	1.5%	6,048	14.7%
Berkeley County	48.6%	6,261	23.8%	36,229	17.3%
Boone County	48.5%	1,201	3.0%	8,788	13.7%
Braxton County	32.6%	710	5.5%	5,107	13.9%
Brooke County	5.1%	1,601	-6.6%	10,904	14.7%
Cabell County	9.1%	8,967	-3.1%	41,258	21.7%
Calhoun County	25.4%	366	-9.7%	2,541	14.4%
Clay County	29.9%	386	9.3%	3,199	12.1%
Doddridge County	51.3%	355	-3.4%	2,605	13.6%

Creative Class jobs by West Virginia county (cont.)					
County	Creative Growth 1990-2000	Creative 2000 (number)	Employed Growth 1990-2000	Employed 2000 (number)	Creative 2000 (share)
Fayette County	0.8%	2,481	-2.9%	16,152	15.4%
Gilmer County	-0.6%	391	-8.1%	2,470	15.8%
Grant County	25.1%	567	5.5%	5,016	11.3%
Greenbrier County	11.5%	2,017	-9.4%	13,495	14.9%
Hampshire County	33.2%	991	21.1%	8,586	11.5%
Hancock County	8.0%	2,079	-6.5%	14,477	14.4%
Hardy County	59.8%	779	19.8%	6,129	12.7%
Harrison County	21.8%	5,589	-2.1%	28,167	19.8%
Jackson County	50.5%	2,003	7.0%	11,468	17.5%
Jefferson County	53.6%	4,938	16.5%	21,581	22.9%
Kanawha County	8.0%	21,367	-5.5%	88,982	24.0%
Lewis County	41.9%	1,003	-5.4%	6,737	14.9%
Lincoln County	35.3%	904	2.6%	7,231	12.5%
Logan County	9.6%	1,747	-15.2%	12,283	14.2%
Marion County	46.0%	4,709	0.9%	23,809	19.8%
Marshall County	-4.5%	1,803	-7.7%	14,442	12.5%
Mason County	33.4%	1,215	-4.8%	9,363	13.0%
McDowell County	-28.0%	625	-36.2%	6,054	10.3%
Mercer County	-2.2%	4,031	-10.2%	23,451	17.2%
Mineral County	2.8%	1,616	-0.5%	11,788	13.7%
Mingo County	4.1%	960	-19.0%	8,046	11.9%
Monongalia County	32.2%	10,425	5.3%	37,534	27.8%
Monroe County	11.2%	549	2.5%	5,272	10.4%
Morgan County	47.6%	939	19.3%	6,659	14.1%
Nicholas County	12.9%	1,257	-0.5%	9,883	12.7%
Ohio County	1.7%	4,484	-12.9%	20,654	21.7%
Pendleton County	50.4%	435	-0.9%	3,523	12.3%
Pleasants County	17.2%	386	-2.8%	2,982	12.9%

Creative Class jobs by West Virginia county (cont.)					
County	Creative Growth 1990-2000	Creative 2000 (number)	Employed Growth 1990-2000	Employed 2000 (number)	Creative 2000 (share)
Pocahontas County	15.7%	530	-8.1%	3,640	14.6%
Preston County	40.4%	1,683	2.9%	12,042	14.0%
Putnam County	52.0%	5,783	23.1%	23,885	24.2%
Raleigh County	24.0%	5,629	3.4%	29,343	19.2%
Randolph County	22.8%	1,976	2.5%	11,579	17.1%
Ritchie County	13.3%	444	-5.6%	4,009	11.1%
Roane County	39.7%	778	-4.8%	5,475	14.2%
Summers County	5.8%	436	-7.7%	4,214	10.3%
Taylor County	42.9%	903	4.2%	6,277	14.4%
Tucker County	41.6%	494	-6.3%	3,003	16.5%
Tyler County	9.8%	451	-12.6%	3,482	13.0%
Upshur County	23.8%	1,564	0.0%	9,254	16.9%
Wayne County	23.1%	2,684	-0.7%	16,184	16.6%
Webster County	16.0%	272	-12.5%	2,906	9.4%
Wetzel County	3.7%	931	-17.7%	6,280	14.8%
Wirt County	51.7%	290	5.4%	2,263	12.8%
Wood County	15.1%	7,635	-5.1%	38,324	19.9%
Wyoming County	8.0%	915	-13.9%	7,600	12.0%
	19.7%	134,422	-1.3%	732,673	18.3%

By Growth Rate					
County	Creative Growth 1990-2000	Creative 2000 (number)	Employed Growth 1990-2000	Employed 2000 (number)	Creative 2000 (share)
Hardy County	59.8%	779	19.8%	6,129	12.7%
Jefferson County	53.6%	4,938	16.5%	21,581	22.9%
Putnam County	52.0%	5,783	23.1%	23,885	24.2%
Wirt County	51.7%	290	5.4%	2,263	12.8%
Doddridge County	51.3%	355	-3.4%	2,605	13.6%
Jackson County	50.5%	2,003	7.0%	11,468	17.5%
Pendleton County	50.4%	435	-0.9%	3,523	12.3%
Berkeley County	48.6%	6,261	23.8%	36,229	17.3%
Boone County	48.5%	1,201	3.0%	8,788	13.7%
Morgan County	47.6%	939	19.3%	6,659	14.1%
Marion County	46.0%	4,709	0.9%	23,809	19.8%
Taylor County	42.9%	903	4.2%	6,277	14.4%
Lewis County	41.9%	1,003	-5.4%	6,737	14.9%
Tucker County	41.6%	494	-6.3%	3,003	16.5%
Preston County	40.4%	1,683	2.9%	12,042	14.0%
Roane County	39.7%	778	-4.8%	5,475	14.2%
Lincoln County	35.3%	904	2.6%	7,231	12.5%
Mason County	33.4%	1,215	-4.8%	9,363	13.0%
Hampshire County	33.2%	991	21.1%	8,586	11.5%
Braxton County	32.6%	710	5.5%	5,107	13.9%
Monongalia County	32.2%	10,425	5.3%	37,534	27.8%
Clay County	29.9%	386	9.3%	3,199	12.1%
Calhoun County	25.4%	366	-9.7%	2,541	14.4%
Grant County	25.1%	567	5.5%	5,016	11.3%
Raleigh County	24.0%	5,629	3.4%	29,343	19.2%
Upshur County	23.8%	1,564	0.0%	9,254	16.9%
Wayne County	23.1%	2,684	-0.7%	16,184	16.6%
Barbour County	23.1%	887	1.5%	6,048	14.7%

By Growth Rate (cont.)					
County	Creative Growth 1990-2000	Creative 2000 (number)	Employed Growth 1990-2000	Employed 2000 (number)	Creative 2000 (share)
Randolph County	22.8%	1,976	2.5%	11,579	17.1%
Harrison County	21.8%	5,589	-2.1%	28,167	19.8%
Pleasants County	17.2%	386	-2.8%	2,982	12.9%
Webster County	16.0%	272	-12.5%	2,906	9.4%
Pocahontas County	15.7%	530	-8.1%	3,640	14.6%
Wood County	15.1%	7,635	-5.1%	38,324	19.9%
Ritchie County	13.3%	444	-5.6%	4,009	11.1%
Nicholas County	12.9%	1,257	-0.5%	9,883	12.7%
Greenbrier County	11.5%	2,017	-9.4%	13,495	14.9%
Monroe County	11.2%	549	2.5%	5,272	10.4%
Tyler County	9.8%	451	-12.6%	3,482	13.0%
Logan County	9.6%	1,747	-15.2%	12,283	14.2%
Cabell County	9.1%	8,967	-3.1%	41,258	21.7%
Kanawha County	8.0%	21,367	-5.5%	88,982	24.0%
Hancock County	8.0%	2,079	-6.5%	14,477	14.4%
Wyoming County	8.0%	915	-13.9%	7,600	12.0%
Summers County	5.8%	436	-7.7%	4,214	10.3%
Brooke County	5.1%	1,601	-6.6%	10,904	14.7%
Mingo County	4.1%	960	-19.0%	8,046	11.9%
Wetzel County	3.7%	931	-17.7%	6,280	14.8%
Mineral County	2.8%	1,616	-0.5%	11,788	13.7%
Ohio County	1.7%	4,484	-12.9%	20,654	21.7%
Fayette County	0.8%	2,481	-2.9%	16,152	15.4%
Gilmer County	-0.6%	391	-8.1%	2,470	15.8%
Mercer County	-2.2%	4,031	-10.2%	23,451	17.2%
Marshall County	-4.5%	1,803	-7.7%	14,442	12.5%
McDowell County	-28.0%	625	-36.2%	6,054	10.3%
	19.7%	134,422	-1.3%	732,673	18.3%

- 1 The 2007 State New Economy Index.
- 2 Chamber Executive, "Economic Development for the New Economy," Richard Florida in Pittsburgh, August 1999.
- 3 Ibid.
- 4 Ibid.
- 5 "The Young and The Restless: How Portland Competes for Talent," Joe Cortight and Carol Colletta for the Westside Economic Alliance and the Portland Development Commission, 2004.
- 6 A search engine is an information retrieval system designed to help find information stored on a computer system, such as on the World Wide Web, inside a corporate or proprietary network, or in a personal computer. The search engine allows one to ask for content meeting specific criteria (typically those containing a given word or phrase) and retrieves a list of items that match those criteria.
- 7 The State Journal, "West Virginia Shows Modest Population growth," December 22, 2006.
- 8 <http://www.census.gov/population/projections/SummaryTabA1.pdf>.
- 9 The Brookings Institution Center on Urban & Metropolitan Policy, "Labor Supply Pressures and the 'Brain Drain': Signs from Census 2000," January 2004.
- 10 Source: U.S. Census Bureau, Current Population Survey, Educational Attainment in the United States: 2002-2005. <http://www.census.gov/population/www/socdemo/educa-attn.html>
- 11 "Where the Brains Are," The Atlantic Monthly, Richard Florida, October 2006
- 12 Cortight and Colletta, 2004.
- 13 The Brookings Institution Center, "Labor Supply Pressures.....," January 2004.
- 14 Ibid.
- 15 Cortight and Colletta, 2004.
- 16 The 2007 State New Economy Index.
- 17 Ibid.
- 18 The Brookings Institution Center on Urban & Metropolitan Policy, "Technology and Tolerance: The Importance of Diversity to High-Technology Growth," June 2001.
- 19 Andrew Savitz, "Expecting corporate kindness," Boston.com for The Boston Globe, July 25, 2006.
- 20 Martindale-Hubbell Diversity Profile, [martindale.com](http://martindale.com)
- 21 Pepi Sappal, "Companies Seek Diversity in the Corporate Boardroom," CareerJournal.com for the Wall Street Journal.
- 22 This survey is limited to household population and excludes the population living in institutions, college dormitories, and other group quarters.
- 23 Cortight and Colletta, 2004.
- 24 Ibid.
- 25 Ibid.



- <sup>26</sup> The Brookings Institution Center, "Technology and Tolerance...", June 2001.
- <sup>27</sup> The 2007 State New Economy Index.
- <sup>28</sup> Ibid.
- <sup>29</sup> It is most accurate to say that the nation's technology centers attract the better-educated, including those in the 24-34 year old age bracket (not just the young). Determining whether above-average concentrations of educated young workers actually contribute to technology-oriented economic development over time, as implied by Richard Florida's 'creative class' idea, merits further research. The Brookings Institution Center, "Labor Supply Pressures...", January 2004.
- <sup>30</sup> Ibid.
- <sup>31</sup> The Charleston Gazette, "2006 Was a Good Year for Broadband," April 25, 2007.
- <sup>32</sup> The 2007 State New Economy Index.
- <sup>33</sup> Boomtown Institute is a firm specializing in Rural America, with a mission to provoke innovative thinking, encourage leadership, and foster investment in communities across the U.S.A. [www.boomtowninstitute.com](http://www.boomtowninstitute.com).
- <sup>34</sup> The 2007 State New Economy Index.
- <sup>35</sup> With the economic indicators as a reference, the Index also outlines a nine-point public policy framework of "best practices" that state officials can use as a guide to transform their economies and ensure raising standards of living for their residents. Many of these types of recommendations are included in this paper. The full list included as Appendix B.
- <sup>36</sup> Cortright and Colletta, 2004.
- <sup>37</sup> The Brookings Institution Center, "Labor Supply Pressures...", January 2004.