# ENTERPRISING STATES

# **Policies that Produce**









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### **About the Report**

The report was prepared by Praxis Strategy Group and Joel Kotkin. Authors from the Praxis team include Delore Zimmerman, Mark Schill, Matthew Leiphon, and Ryan Aasheim. Zina Klapper provided editing and additional research. Praxis Strategy Group is an economic research and community strategy company that works with leaders and innovators in business, education, and government to create new economic opportunities. Joel Kotkin is an internationally recognized authority on global, economic, political and social trends.

# About the U.S. Chamber of Commerce

The U.S. Chamber of Commerce is the world's largest business federation representing the interests of more than 3 million businesses of all sizes, sectors, and regions, as well as state and local chambers and industry associations.

#### **About the National Chamber Foundation**

The National Chamber Foundation (NCF), a nonprofit affiliate of the U.S. Chamber of Commerce, is dedicated to identifying and fostering public debate on emerging critical issues. We provide business and government leaders with insight and resources to address tomorrow's challenges.

# **About the Campaign for Free Enterprise**

The Campaign for Free Enterprise (CFE) is the U.S. Chamber of Commerce's comprehensive, multiyear campaign to support free enterprise and entrepreneurship through national advertising; grassroots advocacy; citizen, community, and youth engagement; and research and ideas leadership.

The opinions and conclusions expressed or implied in the report are those of the research agency. They are not necessarily those of the National Chamber Foundation and the U.S. Chamber of Commerce.

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June 13, 2012

# Dear Colleague,

As the U.S. Chamber of Commerce celebrates its 100<sup>th</sup> anniversary, the National Chamber Foundation, along with the Campaign for Free Enterprise, is reaffirming our commitment to free enterprise, history's premier economic system and an important aspect of America's greatness. As part of that commitment, we are releasing the third edition of our study, *Enterprising States*, which takes a comprehensive look at how states are creating an environment in which the private sector can thrive.

The nation's top priority continues to be our economy, and as you will soon read, our study focuses on what states are doing to address this challenge, invest in the future and create jobs. The ability to implement forward-looking economic policies that allow the private sector to expand is vital to this country's future, and each state is tasked with doing so to achieve growth.

In addition to updating the data for the overall economic performance along with the five specific policy domains for each state, this year's *Enterprising States* has a section highlighting the states that are most likely to grow, create jobs and prosper in the coming five to 10 years. A key component to growth is providing the tools, support, and tax and regulatory environment to allow businesses to innovate and be competitive.

As in the past, we hope that you find this study to be interesting and useful in understanding the important role that states serve in our nation's economic future and success. The U.S. Chamber of Commerce looks forward to the next hundred years of standing up for free enterprise and encouraging an environment in which businesses and entrepreneurs can prosper.

Sincerely,

Margaret Spellings

President

U.S. Forum for Policy Innovation

# **Executive Summary**

# Beating Expectations: How States Defy the New Normal

Troubled by economic stagnancy and high unemployment, many pundits and policy makers are referring to the U.S. economic malaise as the "new normal," claiming that we have reached both technological and economic plateaus. To be sure, the relative weakness of the current recovery – arguably the weakest in contemporary history – does support the "new normal" thesis.<sup>1</sup>

Not everyone, or every state, accepts the notion of inevitable, slow growth and gradual decline. From the onset of the recession, some states have largely avoided the downturn. By the end of 2011, six states – North Dakota, Wyoming, Alaska, Utah, Texas, and Montana – showed more than 8% job growth over the past decade. Another 22 had shown some, although less robust, employment increases compared to 2001.

More important still, nearly every state enjoyed some overall private-sector job growth between January 2011 and January 2012. Most critically, growth has spread to many states hardest hit by the recession, including Michigan, California, and Florida. The strongest job growth continued to take place in other states, notably Louisiana, Oklahoma, Texas, Utah, and North Dakota.

The new geography of growth reflects many of the intrinsic strengths of the U.S. economy often missed by many policymakers and commentators. After a brief lapse, the country is already outperforming all its traditional high-income rivals in Europe, as well as Japan, as it has done for most of the past two decades.<sup>2</sup> Key U.S. assets include surging agricultural and energy production, the general rebound in U.S.-based manufacturing, and unparalleled technological supremacy. The country remains attractive to both foreign investors and skilled immigrants.

For the U.S. to be successful, this new geography of growth needs to extend across the 50 states and expand for long enough to significantly lower the high rate of unemployment. This will require something more than a single-sector focus. Attention must be paid to both basic and advanced industries since innovation and technology growth alone cannot turn around most regions and states.

More than anything, governments and business leaders need to appreciate how these sectors interact with each other. To be effective across all geographies, innovation must be applied to a broad array of industries, including but not limited to computers, media, and the Internet. Innovation and new technologies are also a means to unlock the productive potential of both mundane traditional industries and the service sector.

States striving to do well in this environment face many barriers to fostering economic growth and creating jobs. These barriers include the high level of debt in many states; a growing skills mismatch between the workforce and the jobs available within a state; and outdated regulations and taxes that serve as barriers to free enterprise.

#### **Policies that Produce**

In the ebb and flow of the global economy, states can no longer rely solely on strategies of keeping costs low and providing incentives to attract footloose, commodity-based branch plants or offices. Instead, states must create the right business climate that allows companies and entrepreneurs to create 21st century jobs.

Dramatic changes in the scope and scale of the global economy have significantly altered the nature of foreign competition. Jobs are the new currency for leaders across the globe, and those who can create good jobs will own the future.<sup>3</sup> With 95% of the world's customers now living outside our borders, trade with other countries is a key part of our economy that will continue to be important long into the future.

Businesses need a highly skilled workforce – which includes many workers with certificates or two-year degrees – that is able to perform the jobs of a 21st century economy. States that are able to get students involved in the STEM fields – science, technology, engineering, and math – will be the most competitive.

Innovation, now the essential driving force for creating and sustaining economic opportunities, is much more multidisciplinary and global in scope than ever before. Innovation and market cycle times are much shorter and continue to accelerate. This makes it more important than ever that states provide the tools, support, and tax and regulatory environments

for companies to continuously innovate without onerous delays and burdensome costs that put their entrepreneurs and businesses at a competitive disadvantage.

Enterprising States 2012 takes an in-depth look at the specific priorities, policies and programs of the 50 states and Puerto Rico. Generally, the states fostering economic growth and creating jobs today – and those most likely to grow in the next decade – are defined by the following broad policy approaches:

Parlaying their natural resources and historically competitive industry sectors into 21st century job-creating opportunities

- Paying attention to and addressing their competitive weaknesses
- Supporting their companies' business development efforts to reach an expanding global marketplace
- Creating a fertile environment and workforce for a technology-based and innovation-driven economy
- Investing in infrastructure digitally and physically engineered – that meets the operating requirements of business and connects businesses to markets and customers
- Getting government, academia, and the private sector to collaborate effectively to make sure that more new ideas developed by companies and in research labs scale up into industries
- Taking steps to make existing firms more productive and innovative, creating an environment in which new firms can emerge and thrive
- Maintaining an affordable cost of living for middleskilled and middle-class employees
- Promoting education, workforce development and entrepreneurial mentoring to continually fill the talent pipeline
- Fostering an enterprise-friendly business environment by cleaning up the DURT (delays, uncertainty, regulations, and taxes), modernizing

government, and fixing deficiencies in the market that inhibit private-sector investment and entrepreneurial activity.

State policies and programs that most effectively promote job creation are rooted in market reality. This means building on the existing core industries and technological advantages of a state while pursuing opportunities in growing and emerging sectors. Building on and sustaining existing economic momentum remains a key means of guaranteeing success in the future.

Huge increases in food exports, domestic energy investment, a revived manufacturing sector, a burgeoning tech sector, vital demographics, and increased investment from abroad create a strong base for long-term secular recovery of the U.S. economy. Rather than facing a dismal future of the new normal, we may actually be on the cusp of a recovery that could become one of America's finest moments. The key to making this work, for the states and the nation, lies in policies that promote broad-based, long-term economic growth.

# **Beating Expectations: How States Defy the New Normal**

Since the financial panic of 2008, "the new normal" has become the phrase of choice to depict the future of the American economy. Coined by Mohamed El-Erian at PIMCO, the phrase has been used to describe our world as one "of muted western growth, high unemployment and relatively orderly delivering," by Bill Gross, the company's managing director.

This notion of reduced expectations has been widely accepted by economists on both the left and the right. Libertarian writer Tyler Cowen, in his landmark work *The Great Stagnation*, makes many of the same points, claiming that the U.S. "frontier," has closed technologically as well as in terms of human capital and resources. He maintains that we already have harvested "the low-hanging fruit" and we now rest on a "technological plateau," so any future economic progress will be difficult to achieve.<sup>2</sup>

To be sure, the relative weakness of the current recovery – arguably the weakest in contemporary history – does support the "new normal" thesis.<sup>3</sup> But not everyone, or every state, accepts the notion of inevitable, slow growth and gradual decline. From the onset of the recession, some states have largely avoided the downturn. By the end of 2011, six states – North Dakota, Wyoming, Alaska, Utah, Texas and Montana – showed more than 8% job growth over the past decade. Another 22 had shown some, although less robust, employment increases compared to 2001.

More important still, nearly every state enjoyed some overall private-sector job growth between January 2011 and January 2012. Most critically, growth has spread to many states hardest hit by the recession, including Michigan, California, and Florida. But the strongest job growth continued to take place in other states, notably Louisiana, Oklahoma, Texas, Utah, and North Dakota.

## **Understanding the Geography of Growth**

The new geography of growth reflects many of the intrinsic strengths of the U.S. economy that many commentators on either side of the spectrum often miss. After a brief lapse, the country is already outperforming all its traditional high-income rivals in Europe as well as Japan, as it has done for most of the past two decades. Key U.S. assets include surging agricultural and energy production, the general rebound in U.S.-based manufacturing, and unparalleled technological supremacy. The country remains attractive to both foreign investors and skilled immigrants.

Resource growth, notably in energy and food, helped propel the strongest states to defy the "new normal" of low employment and income growth. Texas, the states of the Great Plains and parts of the Intermountain West never suffered from either the housing bubble or from high unemployment. The 2012 Forbes "Best Cities for Jobs" list is largely dominated by metropolitan areas in these regions, including five of the top 10 fast-growing large regions and seven of the top 10 overall. Small cities in the Great Plains have done particularly well. Five of the six best cities for "starting over in 2012," according to TheStreet.com, were located in the Dakotas, lowa and Nebraska.<sup>5</sup>

This reflects the reality that, since the onset of the new century, much of the sustained growth in the world has taken place in regions that produce basic commodities like energy and food, rather than in the financial or information capitals. In the high-income world, the consistently best performing countries since 2008 have also tended to be resource-rich ones such as Norway, Australia and Canada.<sup>6</sup>

The key here lies in commodity and energy markets that are increasingly global and driven by expanding markets in the major developing countries. This also has helped keep energy prices high, particularly for oil. Texas alone has added nearly 200,000 jobs in its oil and gas sector over the past decade while Oklahoma has added some 45,000. These jobs have been an outstanding driver of high-wage employment, with an average salary of upwards of \$75,000.<sup>7</sup>

More recently, the momentum of prosperity has spread to the manufacturing sector. In the last two years the nation has added more than 400,000 manufacturing jobs, led by states traditionally strong in the industry, yet hit hardest by the recession. Though these gains are small compared to the losses earlier in the decade, the growth is encouraging. In a stunning reversal, Midwestern employers have seen the fastest jump of any region of the country – some 18.5% – in planned hiring of college graduates. Unemployment there now stands below the national average.<sup>8</sup>

Finally, after a long period of stagnant job growth, the country's tech sector has also begun a rapid expansion. Not surprisingly, much of this is occurring in hot beds such as California's Silicon Valley, and in Washington state, Utah and Massachusetts. But when we take a broader measure of STEM (science, technology, engineering and mathematics) job creation – covering

technically skilled workers in all industries – the most dramatic growth over the past two years has taken place in states with strong manufacturing and energy economies, including Michigan, South Carolina, North Dakota, Texas, Alaska and Ohio.

For the U.S. to be successful, this new geography of growth needs to extend across the 50 states, and expand for long enough to significantly lower the high rate of unemployment. This will require something more than a single-sector focus. Attention must be paid to both basic and advanced industries. Technology growth alone cannot turn around most regions and states. For example, Silicon Valley's social media boom may have propelled it once again into the ranks of the fastest-growing employment centers, but the nearby Oakland area lags near the bottom, as do most California metros.<sup>9</sup>

More than anything, governments and business leaders need to appreciate how these sectors interact with each other. To be effective across a broad array of geographies, technology needs to be applied to a broad array of industries, including but not limited to computers, media and the Internet. These technologies are also a means to unlock the productive potential of both mundane traditional industries and the service sector. Technology, as the French sociologist Marcel Mauss once put it, "is a traditional action made effective." <sup>10</sup>

America's great advantage in overcoming "the new normal," then, lies in melding the power of "creative"

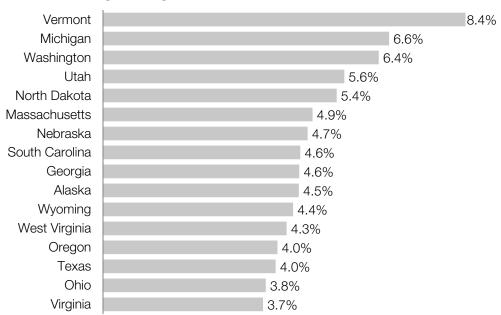
entrepreneurs with broader-based innovation throughout the overall economy. The primary driver for this process must lay in the appeal the country still has to its current residents, as well as to companies and ambitious people from around the globe. Despite the setbacks of recent years, the United States remains the ultimate locus of opportunity and innovation on the planet.

# Back to Basics: The Enduring Importance of the Agricultural Economy

With the rise of the information age, many have argued that countries rich in brains – expressed in the ability to manipulate abstract concepts, images and media – would establish dominion over the brawn of producers of raw materials. Ironically, Taichi Sakaiya, the best-selling Japanese author and futurist, argued that his country's "greatest advantage" stems from its lack of natural resources. Thomas Friedman cites the experience of east Asian countries such as Taiwan and Japan, and of Scandinavian countries as suggesting that a lack of natural resources actually sparks innovation and economic health, while too great a concentration generally hinders progress. 12

This approach misses the fundamental point that the primary advantage of the U.S. lies in its *combined* richness in both resources and technological prowess. Unlike most high-income nations, the United States remains extraordinarily resource-rich; its ability, for example, to feed both itself and the world remains one of its critical competitive advantages. The U.S. is resource-rich and talent-rich at the same time.

# Fastest Growing States for Science, Technology, Engineering, and Mathematics Jobs, 2009-2011



Source: EMSI Complete Employment, 2012.1. Includes technicial-level jobs requiring a two-year degree or certification.

Today, countries with large agricultural surpluses – Australia, Canada, and Brazil, as well as the U.S. – possess intrinsic economic advantages. Globally the business of agriculture is booming. The International Food Policy Research Institute (IFPRI) reports foreign investors sought or secured between 37 million and 49 million acres of farmland in the developing world between 2006 and mid-2009. Investors, including hedge funds and overseas companies, are also investing heavily in U.S. cropland.<sup>13</sup>

Of course, having a strong food resource base does not guarantee a strong overall economy; witness Argentina over the last century. But it does give a leg up to those countries that employ their agricultural surplus as a base for wider economic growth.<sup>14</sup>

This process is accelerating. In 2010, the U.S. achieved a record for the number of acres planted with soybeans nationwide, with the states of Kansas, Nebraska, North Dakota, and South Dakota seeing some of the biggest year-over-year increases. In 2012, growers planted a 75-year-high in corn acreage, led by increases in lowa, Idaho, Minnesota, and the Dakotas. This expansion has been led by a boom in agriculture exports: In 2011, the U.S. exported a record \$135 billion, with a net balance of \$47 billion, the highest in nominal dollars since the 1980s. 16

Much of this growth has been paced by demand from China,<sup>17</sup> which accounts for the consumption of almost 60% of the world's soybean exports and 40% of its cotton. China, simply put, lacks the water and land resources to feed its people, much less its awesome industrial machine. It has effectively dropped the old Maoist goal of self-sufficiency, and now seems ready to rely more on food and fiber imports from leading agricultural countries like the U.S.

The ability to meet this growing demand from China and other developing countries is tied directly to the high technological level and productivity of the U.S. farm sector. American farms do more with less. Among crops measured by the federal government since 1866, 20 record national yields-per-acre have been set since 2007, particularly in 2009 and 2010. Given strong global demand, the agricultural economy never really fully felt the Great Recession. Agriculture's new normal has been overwhelmingly positive. Farm states – notably the Dakotas, Nebraska, and lowa – rank among those places with the nation's fastestrising incomes, best new job growth, and lowest unemployment rates.

## The New Energy Boom

In the last half of the 20<sup>th</sup> century, America devolved into a major importer of raw materials, especially oil. A persistent negative balance in energy has accounted at times for close to half of U.S. imports. Rising prices devastated the economy, while providing little spur to energy employment here. Some of the more histrionic pundits, such as James Howard Kunstler, predicted a coming catastrophe due to depleted resources and ever-rising prices that would usher in an end to the largely suburban "American way of life." <sup>18</sup>

Such predictions seem particularly overwrought given recent shifts in energy discoveries. Due in part to new or improved technologies such as hydraulic fracturing – fracking – and horizontal drilling, estimates of North America's energy resources have skyrocketed. By 2020 these new sources from shale will represent an estimated two-thirds of U.S. oil and gas production. By then, according to the consultancy PFC Energy, the United States will surpass Russia and Saudi Arabia as the world's leading oil and gas producer.

A westward shift in energy development is on, with North America emerging as the lead player. In 2011, the United States became a net exporter of petroleum products for the first time in 62 years. American imports of raw petroleum have fallen from a high of 60% of total to less than 46%.<sup>19</sup>

Overall, according to Amy Myers Jaffe, Director of the Energy Forum at Rice University's Baker Institute, U.S. oil reserves now stand at more than two trillion barrels; Canada's reserve is slightly more. Together, this constitutes more than three times the total estimated reserves of the Middle East and North Africa.<sup>20</sup> Observers such as the New America Foundation's Michael Lind believe that new discoveries, particularly of natural gas, mean that we might actually be living in an era of "peak renewables," and at the onset of a "very long age of fossil fuels."<sup>21</sup>

The energy boom has supercharged the economies of the states that have welcomed this growth, including Texas, Oklahoma, Louisiana, North Dakota, Wyoming, and Alaska. These states have produced more jobs, and enjoyed generally the best GDP and income growth over both the past decade and last two years. Ohio and Pennsylvania, where there have been significant new finds of shale oil and gas, hope to use this production to spur the growth of their more traditional industrial economies.

# The Revival of Manufacturing

Many media members and pundits believe that America's industrial base will continue to atrophy over time. Some even hold that manufacturing constitutes, as John Naisbitt observed two decades ago, "a declining sport." To be sure, over the past twelve years the country lost 5.5 million manufacturing jobs, nearly one-third of the manufacturing workforce.

Yet this decline has not made industry less important. Manufacturing gains now take place primarily in high

value-added sectors, making them more integrated with the technical economy and more critical to the overall competitiveness of the country. As a recent report from the Breakthrough Institute puts it:

The reality is that manufacturing isn't dying – it's changing. Even as manufacturing has undergone a relative decline, it has actually become more important to the health of the U.S. economy. The sector is transitioning from low-tech, labor-intensive industries toward a manufacturing sector that is technology-intensive, high-productivity, and at the heart of our nation's innovation system. With a wide array of breakthroughs in technology, productivity, and management, a new manufacturing has taken hold.

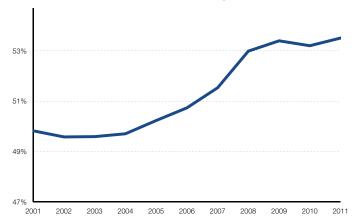
This new, or "advanced," manufacturing has several hallmarks that distinguish it from the low-skilled enterprise that still holds sway over popular conceptions of American manufacturing. Today's modern factory is heavily reliant on technology that allows manufacturers to engage in more precise and increasingly productive work.<sup>22</sup>

Manufacturing's role in promoting job and income growth is often understated, the report continues. This is particularly true in traditionally manufacturing-oriented locations. As University of Washington demographer Richard Morrill points out, communities with strong manufacturing economies tend to have more equal economies and better opportunity for the working class.<sup>23</sup>

Most critically, manufacturing activity drives growth in other sectors of the economy. About one in six of all private-sector jobs depend on the manufacturing sector, and every dollar of sales of manufactured products generates \$1.40 in output from other sectors, the highest of any industry.<sup>24</sup> The sector funds two-thirds of the nation's private research and development, and employs 64% of its scientists and engineers.<sup>25</sup>

The role of manufacturing in boosting state economies has been growing in recent years. Although manufacturing employment overall has dropped, the percentage of higher-wage, skilled industrial jobs has been climbing over the last decades, and wages for these workers have increased. Overall, the average American factory worker now produces \$180,000 worth of goods a year, three times (in today's dollars) what was produced by his or her counterpart in 1978.<sup>26</sup> Workers in the nation's manufacturing sector earned

High-wage Production Jobs as a Share of Total U.S. Production Occupations



Source: EMSI Complete Employment, 2012.1. Production occupations include all those classified under the U.S. Bureau of Labor Standard Occupational Classification system as production (SOC 51) along with production-related engineers and managers. Jobs grouped by median wage into three equal-sized groups according to 2001 employemnt.

\$73,000 on average in 2011, \$20,000 more than the average job.<sup>27</sup>

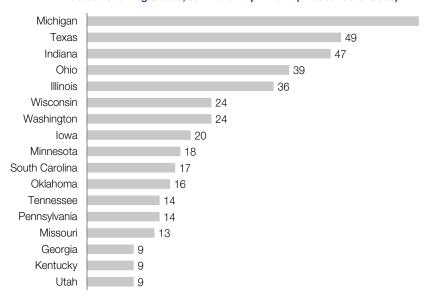
Economic output generated by the nation's manufacturing sector has remained strong even through job losses. Since 1988, value added by manufacturing has more than doubled, and manufacturing output is up sevenfold since 1947. The United States remains the world's largest manufacturer, accounting for one fifth of the world's value added in manufacturing, more than China, India, Brazil, and Russia combined.<sup>29</sup>

American industry is now growing faster than that of most of its major competitors, including Germany, Japan, and even China.<sup>30</sup> Part of this upturn can be traced to the energy boom, which has generated an increased demand for pipes and other equipment, sparking the growth of new factories even in such long-hard-hit places as Youngstown, Ohio. Ample supplies and low natural gas prices have led petrochemical companies to undertake major new expansions. It is no surprise that the biggest backers of shale gas exploration are prominent CEOs of industrial firms.<sup>31</sup> A recent study by PwC suggests that shale gas could lead to the development of one million industrial iobs.<sup>32</sup>

Industrial growth is a critical component in upending the "new normal." Mark Perry from the University of Michigan-Flint, a Chamber Foundation fellow, has demonstrated how manufacturing in the last year has expanded by three times the rate of overall GDP. About 425,000 jobs have been added, outpacing the

# **Manufacturing Job Gains**

Fastest Growing States, Jan 2010 - April 2012 (Thousands of Jobs)



Source: U.S. Bureau of Labor Statistics, Current Employment Survey, Seasonally Adjusted.

national average. It is not surprising, then, to see that the fastest turn-around in manufacturing jobs includes Michigan, Indiana, Ohio, Illinois, and Wisconsin, which felt the brunt of the collapse of the auto industry and other production.

As in energy and agriculture, global factors are again at play. Rising wage rates in China – from roughly one-third to one-half U.S. rates in a decade – and problems associated with protection of trademarks and other issues have led many executives to reconsider potentially expanding production in the U.S. Since 2010, the percentage of U.S. executives who have moved production back home has risen from 12% to 22%, according to a survey by the site MFG.com. One in three is studying the proposition.<sup>33</sup>

To take full advantage of these opportunities, states need to focus on technical training to avoid what may become major labor shortages. Rather than a surplus of industrial workers, the auto industry could face shortages of certain skills as early as 2013.<sup>34</sup> Even at the height of the recession in 2009, in a survey of manufacturers, 51% were experiencing worker shortages in skilled production areas. Concerns about skills shortages were particularly acute in leading industries such as aerospace and life sciences.<sup>35</sup> In 2011 there were 50,000 total U.S. job openings in industrial engineering, welding, and computer-controlled machine-tool-operating jobs alone.<sup>36</sup> Employers must be willing, however, to offer the pay

premiums and to invest in corporate training to attract specialized workers from within their region or from other states.

# The Techno-cultural Edge

Despite occasional assertions over the last decades about the country's erosion of scientific talent, the technical dominance of the United States remains firmly in place. In terms of published technical articles, for example, the United States alone produces three times as many as second-place Japan.<sup>37</sup> The U.S. has a wide lead in technical spending and dominates such areas as pharmaceutical research.<sup>38</sup>

The composition of the critical software industry has been particularly revealing. Of the world's top 500 software companies, the Anglosphere – the English speaking countries – maintains a huge lead. Nine out

of the 10 leading software firms are based in the U.S. (the exception is SAP, which is German).<sup>39</sup> As for the Internet, there is simply no significant foreign equivalent with the global reach of Microsoft, Amazon, Google, Apple, or Facebook.

The technology sector is, after a long break, once again growing in its three historic hotbeds: the states of California, Washington and Massachusetts. Vermont, Utah, Washington, Michigan, and New Hampshire all experienced even more rapid tech-job-growth per capita, over three percent last year.

Some believe we may be on the verge of a significant tech expansion that could last several years. The growth of the "app" economy has been particularly marked, with some estimates of employment at over 466,000 jobs today, up from zero in 2007, when the iPhone was unveiled. At the same time, demand for workers with "deep analytical skills" typical in high-tech industries, according to McKinsey, could reach a half million by 2018.<sup>40</sup>

The rise of social media and other Internet-based culture represents another U.S. area of strength. The cultural exports of the United States represent close to a majority of all audiovisual sales, easily dwarfing the old industries of countries such as France and Germany, as well as those rising from the developing world, such as Brazil and India.<sup>41</sup>

These cultural exports are not limited to English-speaking or high-income countries. In 2010, box office revenues were flat in the U.S. and Canada, but grew 25% in Latin America, while the Asia Pacific region increased by 21%, with China alone accounting for 40% of that region's box office take. The American predominance could also be seen in the music business, with American artists dominating the best-selling lists. This pattern has alarmed many Europeans for years, and recently led China's President Hu Jintao to seek measures defending the country's "culture" against American and other western influence. 42

# The Demographic Edge

Even though immigration has slowed in recent years, it remains a major source of new workers and innovation. The United States' record of healthy and sustained immigration marks a major strategic competitive advantage. Due largely to immigrants and their offspring, the U.S. is the only major high-income country with a birthrate above replacement; it's currently at 2.1%.<sup>43</sup>

In contrast, many of our major competitors face a future of rapid aging and slowly growing – or even declining – population. Close to half the world's population, notes demographer Nicholas Eberstadt, lives in countries with birth rates below replacement level. Rather than out-of-control baby making, the world, he suggests, is experiencing a "fertility implosion." Population stagnation – and even decline – has become commonplace in much of Europe and throughout Asia. Eastern Europe's population is dropping; western Europe's is stagnant. In Japan, since 2010 the total number of people has declined, and by 2015 there will be fewer births than deaths. 45

Even fast-rising countries in East Asia – such as Korea, Taiwan, Singapore, and China – face slow and even negative population growth. In all these countries, rapid aging, dramatically reduced marriage<sup>46</sup> rates, and low birth rates are now the norm.<sup>47</sup> This will have a big effect on workforces and markets. Between 2000 and 2050, for example, the U.S. workforce is projected to grow by 37%, while that of China will shrink by 10%, the EU will decrease by 21% and, most remarkably, Japan's workforce will fall almost 40%.<sup>48</sup>

Demography could prove ruinous to these economies in terms of consumption and growth, and, perhaps more importantly, in terms of their ability to support retirees. By 2050, barely one in five Americans will be over 60, while the proportion in Japan, Germany and Korea will be closer to two in five.<sup>49</sup>

America's "demographic exceptionalism," as Eberstadt puts it, represents an enormous advantage for the coming decades. <sup>50</sup> This will be particularly critical in terms of the innovation economy. "Youth," two researchers recently observed, "brings more than a base of workers or taxpayers; it brings the ineluctable energy that propels everything." <sup>51</sup>

Much of this useful energy will come from abroad. American universities continue to attract the most foreign students. <sup>52</sup> More than half of all skilled worker immigrants globally come to the United States. <sup>53</sup> Although it's likely that many of these students will be returning to their booming homelands, <sup>54</sup> many will not. At Tsinghua University, China's MIT, estimates are that about 50% of those who study abroad never go home. <sup>55</sup>

Perhaps the greatest impact of immigrants on state economies will be in the all-important entrepreneurial sphere. Immigrants by nature tend to be entrepreneurial, as most come to America to find a better life for themselves and their families. The immigrant role in creating new businesses has been particularly critical during the current recession. According to a recent Kauffman Foundation report, the foreign-born were the one bright spot in the country's otherwise shell-shocked entrepreneurial sector. Overall, according to Kauffman, the share of new entrepreneurs that are immigrants has risen from 13.4% in 1996 to nearly 30% this year.<sup>56</sup>

These businesses can be found in a broad array of industries, including food, retailing, manufacturing, and technology.<sup>57</sup> Perhaps most remarkable has been the movement of Asians into the technology industry. Between 1990 and 2005, immigrants, mostly from the Chinese diaspora and from India, started one of every four U.S. venture-backed public companies. In California, they account for a majority of such firms.

It would be a mistake, however, to see immigrant entrepreneurs as relevant largely to traditional technology hubs and big cities. Beginning in the 1990s, immigrants rapidly moved into regions once considered inhospitable to newcomers, particularly non-whites: exurbs, the Southeast, and the Great Plains. 58 Immigration has declined in virtually every

state since the recession, but some unlikely states have performed best in maintaining immigration rates, including Mississippi, Wyoming, West Virginia, North Dakota, Kentucky, and Montana.

Fostering immigration makes economic sense in the long term, particularly efforts targeted at skilled and working age people. The reasons for coming to America remain compelling: the generally high quality of life (particularly housing) available here, political freedoms, and, over time, a stronger economy. <sup>59</sup> This explains why many of China's new crop of billionaires seeks to emigrate to the United States: to protect property, to have a second child or to live a freer life. Indeed, among the 20,000 Chinese with incomes over 100 million Yuan (\$15 million), 27% have already emigrated and another 47% reported that they are considering it. <sup>60</sup>

# The Role of Foreign Investment

Many of these same factors – favorable demographics, natural resources, and a strong constitutional order – also attract firms from abroad. Long the world leader as a destination for overseas investment, the U.S. is extending its lead as the favored land for overseas capital.

Since 2008, foreign direct investment into Germany, France, Japan and Korea has stagnated. In 2009, overall investment in the European Union dropped 36%. In contrast, foreign investment in the U.S. rose 49% in 2010, mostly coming from Canada, Europe, and Japan. Foreign investment now stands at the fourth-highest level in history.<sup>61</sup>

The transformative role of foreign investment in America is nothing new. After all, the country started as a colony of England, and for much of the 19<sup>th</sup> century remained dependent on European investors for the building of everything from canals to railroads. Without European capital, the settlement of the west and the rise of cities such as New York would have been far slower.

Now foreign firms are rediscovering America's intrinsic advantages. In particular, our relatively vibrant demographics contrast strongly with such key countries as Japan, Korea and Germany, all of which are aging far more rapidly than is U.S. Many investors, meantime, are reluctant to put their money in China, given the country's authoritative political system.

In addition to technology and trophy real estate, the investment boom encompasses more basic industries that are best suited to our large, resource-rich country. Investment in the burgeoning energy sector more than tripled to \$20 billion between 2009 and 2010. The shale revolution, in particular, has attracted foreign interest. Energy firms from China, France, and Spain all have made major investments in the shale fields of Ohio, Colorado, and Michigan. French giant Total recently paid \$2.3 billion for minority stakes in the vast oil and gas holdings of Chesapeake Energy. 62

Perhaps even more important has been a surge in industrial investment, which rose \$30 billion just between 2009 and 2010. Much of this growth is concentrated in the chemical industry, as well as in automobiles, steel, and other transportation sectors. Investment is heavily focused on the southeastern U.S. states and Texas; not coincidentally, most surveys reveal these locations have the country's most hospitable business climates. The states of the old Confederacy, according to a recent study by *Site Selection* magazine, boast all of the top five business climates, and ten of the top twelve.<sup>63</sup>

Foreigners, particularly from large global corporations, seem destined to play an active role in the nation's industrial revival. This trend has certainly been illustrated by companies such as Mercedes, whose largest U.S. plant is in Tuscaloosa, Alabama. Last year the company invested \$350 million in the facility.<sup>64</sup>

Mercedes is certainly not alone, however. Archcompetitor Volkswagen last year announced that it plans to build a new assembly plant in Chattanooga, TN. Nissan, Toyota, Rolls-Royce, and Kia all have announced major new plant openings or expansions over the past three years throughout the region.

These investments are not inconsequential. With the average cost of building these facilities at more than \$1 billion, and the higher-paying manufacturing jobs they represent, such plants constitute major employment generators themselves. They also bring with them parts suppliers and other industries related to auto manufacturing. Alabama, for example, has seen major steel mill investments, including \$4.6 billion from Germany's ThyssenKrupp.

Over the next decade, these investments could transform the nation's industrial structure. Alabama and Kentucky already produce almost as many cars

as does Michigan. According to the U.S. Department of Labor, Michigan still leads the country in auto employment with 181,000 jobs, followed by Indiana. But the next three states are Kentucky, Tennessee, and Alabama.

Battle tested in world markets, foreign manufacturing companies are often both sturdy competitors and reliable employers. Overall, according to the U.S. Department of Commerce, foreign manufacturing firms, in autos and other areas, have proven far less susceptible to layoffs than their domestic competitors. They also tend to offer higher salaries on average than U.S.-based firms.<sup>65</sup>

#### **Growth and America's Moment**

Huge increases in food exports, domestic energy investment, a revived manufacturing sector, a burgeoning tech sector, vital demographics, and increased investment from abroad establish a strong base for long-term secular recovery of the U.S. economy. Rather than facing a dismal future of the new normal, we may actually be on the cusp of a recovery that could become one of America's finest moments.<sup>66</sup>

The key to making this work, for the states and the nation, lies in promoting broad-based, long-term economic growth. Economist and National Chamber Foundation fellow Bret Swanson has found that there is absolutely no way the country – or the states – can avoid ever greater, debilitating deficits without economic growth. Many states must contend with growing unfunded pension obligations that provide a serious threat to maintaining adequate levels of investment in education, infrastructure, and other job creation efforts. State pension plans were funded at an estimated 78% in 2009, creating a total unfunded liability of \$3 trillion.<sup>67</sup>

In the past decade, the nation's GDP growth rate was a measly 1.67%, roughly half that enjoyed in the preceding three decades. Growth of three percent, or even four, would generate another trillion dollars in tax revenues a year by 2030. Low growth, even with high taxes, will bring ever-greater deficits, while faster growth with lower taxes keeps the deficit largely under control, Swanson concludes.<sup>68</sup>

To achieve growth of this scale, states have to target not one industry, but a broad array of endeavors. Expansion of one sector, such as high-tech, cannot generate enough jobs by itself to overcome lagging sectors; the impact of Silicon Valley's recent expansion has done little to improve conditions in nearby Oakland, much less in the rest of California.

Ultimately, only growth can overcome the new normal. Some states, such as Texas, Oklahoma, and North Dakota, appear to have already achieved this result. In large part, this has occurred by taking advantage of the energy and commodity boom as well as by expanding both manufacturing and technology-related jobs. In contrast, the growth of "green jobs" has remained far less than expected, suggesting that more traditional forms of energy production will remain paramount in the decade ahead.<sup>69</sup>

How to leverage these sectors marks a major concern for both state and national governments. Potential environmental problems associated with energy and manufacturing growth need to be balanced with a concern for the role of these sectors in engendering a broad economic recovery. Almost all of the fast-growth states have been those that have managed to expand not only tech, but also manufacturing, energy, and business services.<sup>70</sup>

Successful job growth strategies focus largely on the fact that most new jobs come from new and expanding businesses, not relocations. Places will have to generate more of their own opportunities. States also need to concentrate on attracting skilled and educated workers, many of whom work in the "1099" economy of self-employed professionals.<sup>71</sup>

Particularly critical will be an increased focus on fostering workers' scientific and technical skills. These fields tend to offer far better employment prospects than the humanities and social sciences.<sup>72</sup> Many states have taken aggressive steps to augment migration gains with programs to train local workers for middle-and higher-wage jobs associated with such things as high-end manufacturing.<sup>73</sup> States with lower population growth, in contrast, have often been forced to cut back their educational and training programs.<sup>74</sup>

Below, we will discuss the ways that states have looked for policies that lead to growth. Strategies differ, and often work better in some places than they do in others. Yet in the end, states that succeed will be those that focus on achieving the high rate of economic growth necessary to overcome the bitter scenario laid out in the new normal.

# **Enterprising States: Policies that Produce**

The Enterprising States studies for 2010, 2011 – and now 2012 – measure overall economic performance along with five specific policy domains wherein states can proactively and meaningfully impact and stimulate new economic opportunities, create jobs, and thereby advance improvements in the quality of life and prosperity for their residents.

The economic performance measurement category covers elements of job growth and growth of economic output, economic productivity, income growth, and family income adjusted for affordability.

The five major policy areas include:

- Exports and International Trade
- Entrepreneurship and Innovation
- Taxes and Regulation
- Talent Pipeline
- Infrastructure

This study combines metrics for each economic development policy area to measure performance in each policy topic area. The policy areas are not mutually exclusive. Tax incentives can be used to stimulate entrepreneurship and innovation, while infrastructure, such as ports, is essential for exports. States were ranked in each metric. Top states were determined by a composite ranking of all metrics in overall performance as well as in each policy area.

Metrics in this year's analysis are consistent with previous years, except where updated data is unavailable or where improved measures become available. For a full description of all metrics and results for each state see the Rating the States section on page 25.

# Growth, Productivity, and Livability: The Top Performers

Now two years past the low point in the national jobs crisis, nearly every state in the nation is beginning to return to private-sector job growth. The resource-rich states of the Great Plains and Intermountain West lead the way, fueled by the rapid expansion of the energy economy and recent stability of agriculture.

At the same time, Virginia and Maryland in the Mid-Atlantic have outperformed the nation with strong science, technology, and professional services growth, driven in part by the strong performance of the entire Washington, DC region.

The top performing states are determined by a combination of the following measures:

- Long-term job growth
- Short-term job growth
- Overall expansion of gross state product
- Productivity: state output per job
- Productivity growth: growth in output per job
- Income growth: growth in per capita personal income
- Livability: median income of four-person households adjusted for state cost of living

Top Performing States:

- 1. North Dakota North Dakota was propelled to the top by a top-10 finish in six of the seven performance-ranking categories. The state is first in four growth categories: short-term jobs, long-term jobs, gross state product (GSP), and per capita personal income. It places second in productivity growth. While the state's metropolitan areas have beaten the nation in job growth for a decade, the Peace Garden State's economic prospects took off with the energy boom in western North Dakota in the past three years. Notably, the state has seen 34% growth in finance, 39% in professional and technical services, and nine consecutive years of growth in construction employment.
- 2. Wyoming Another energy state, Wyoming finishes in the top 25 in all seven performance measures and is among the top five states in five measures. The state is second in long-term job growth and GSP growth, and is third in productivity growth and income growth. Up 61% since 2001, the state's mining industry is 11 times more concentrated than the national average. The state's small manufacturing sector producing chemical products, metals and equipment remained stable over the past decade, avoiding large job losses seen in other states.

- 3. Virginia Virginia has the highest income in the nation for a family of four after adjusting for cost of living, making it perhaps the most "livable" state. The Old Dominion State is a strong performer overall, placing in the top 25 in all seven measures, including seventh in productivity growth and tenth in GSP growth. Already a major center for professional-services jobs, Virginia added another 135,000 jobs in these high-end services the past decade, with 36,000 new jobs in management consulting and 48,000 in computer-systems design.
- 4. Alaska Alaska is second in overall productivity, fourth in long-term job growth, and eighth in GSP growth over the past decade. Employment in the state's mining sector grew at 48% since 2001, helping to drive demand in locally oriented health care, finance, retail, accommodation and foodservice sectors.
- 5. Maryland Maryland places fifth overall with top-25 rankings in all seven performance measures. The Old Line State is fifth overall in adjusted income for a family of four and ninth in productivity growth. Benefitting from the recent economic stability provided by the nation's capital, Maryland is one of the nation's high-tech centers. Its most productive sector over the past decade has been professional, business, and technical services, particularly computer-systems design. Over the same time period, the state doubled its jobs in corporate headquarters and management offices.
- 6. Texas The Lone Star State's strongest categories are short- and long-term job growth (second and fifth) and GSP expansion (ninth), though it appears in the top 25 in six of seven measures. The energy economy and affordability help fuel widespread growth across nearly every super-sector of the state. Even so, the state is increasingly becoming a center for high-end services and business management; it has nearly doubled its management, scientific, and technical consulting jobs and nearly tripled its employment in corporate and business management offices to go with another 200,000 jobs in mining, and oil and gas extraction since 2002.
- 7. South Dakota South Dakota is known as a center on the Plains for back-office finance, but manufacturing has been its most competitive

- sector since 2001. The state has seen significant growth in chemicals, machinery, fabricated metals, and transportation equipment. At the same time, the Mount Rushmore State added more than 5,000 jobs in professional services for 35% growth. The state is moving toward higher-value, more productive industries, as shown by its fourth-place rankings in growth in GSP-per-job and per capita personal income.
- 8. Washington Led by the software industry, Washington is one of the few states with a growing information sector. Washington moved up five places into the top 10 largely due to its rapid short-term job growth over the past two years. The state's manufacturing sector led by aircraft and other transportation equipment building significantly outperformed the national manufacturing industry since 2001. The Evergreen State added another 65,000 jobs in professional, scientific and technical services; 19,000 in securities and commodity contracts and 12,000 in electronic wholesale markets.
- 9. Iowa lowa is rapidly increasing the value of its economy, placing fifth in growth in economic productivity, sixth in per-capita income growth and eleventh in GSP growth. The state's finance and insurance sector has seen 28% growth, led by 10,500 new jobs in commercial banking. The state is expanding its presence as a center for business and commerce, doubling its jobs in management offices and adding 7,800 new jobs in transportation and warehousing (11% growth).
- 10. New York The Empire State's large, complex economy performed well across all measures, placing in the top 25 in six of seven. The state moved up 11 spots in this year's performance rankings due to rapid GSP expansion and percapita personal income growth. New York is fourth in GSP per job and ninth in percapita personal income growth in the past decade. Much of this growth has been driven by the rebound in various high-value finance sectors. The state's private colleges and universities also expanded rapidly, adding nearly 55,000 jobs for a rate of growth of 30%.

# **Exports and International Trade**

Boosting exports by America's businesses is an essential element of a meaningful agenda for creating jobs in the next decade and beyond. Exports are expected to be increasingly important to the nation's businesses in the years ahead because up to 85% of the world's economic growth in the next five years is projected to take place outside the United States. Consequently, every state is now investing in strengthening the export acumen of businesses, both large and small, to reach international markets that are aligned with their most competitive sectors, manufacturing and service.

In 2012, the top-10-performing export states were determined by ranking states across four measures of export activity:

- Export Intensity: export activity as a share of gross state product
- Growth in export intensity
- Change in a state's share of total national exports
- Growth in overall gross exports since 2002

Only "manufactured exports" are included in the metrics, excluding bulk commodities that are often attributed to the state of the port location instead of the originating state.

## **Top Export States**

- 1. Louisiana Louisiana is the top export state, ranking no worse than fourth on all four metrics; it is also increasing its share of the nation's export activity faster than all but one state. Oil is the state's top export, along with other agricultural and energy commodities. Twenty percent of the state's exports go to China and Japan, with another 10% exported to Mexico.
- 2. Utah Utah is a top-five performer on all four export metrics and is the second-fastest growing export state overall. The state's exporting of nonmonetary gold has nearly tripled since 2008 and accounts for a majority of the state's exports by value. Other important exports from the Beehive State include electronic memory circuits, aircraft parts, vehicle airbag systems, and x-ray equipment and tubes. Utah's biggest trading partners are the United Kingdom, at 35%, and Hong Kong at 20% of total exports.

- 3. South Carolina Fast becoming an industrial hub in the southeast, South Carolina is now the second-highest state for export intensity. The state's exporting sectors continue to be competitive; it ranks sixth in growth of its share of the nation's total exports. Nearly 28% of the state's export output is in large passenger vehicles, a category that has increased 150% since 2008. South Carolina is also a major exporter of gas turbines, and parts and tires. Sixteen percent of its goods are exported to Germany, 15% to Canada and 12% to China.
- 4. Texas The Lone Star State is the nation's top exporter in terms of activity as a share of the total state economy. Texas is a major exporter of oil and its derivatives, but its broad-based economy is a major source of other products including boring machinery; electronic parts and telecommunications equipment; chemicals; civilian aircraft; and, increasingly, automotive components and large vehicles. More than a third of the goods leaving the country from Texas are destined for Mexico.
- 5. Mississippi Mississippi is the fifth-fastest growing state for overall gross exports and for growth in exports as a share of GSP. Much of the state's exporting is based upon oil and other chemicals and pigments, but the state has seen rapid growth in the past year in exports of passenger vehicles and automotive parts. The state's top three trading partners are Canada (16% of exports), Panama (14%), and Mexico (10.5%).
- 6. **Delaware** Delaware is the nation's 16<sup>th</sup>-ranked state for export intensity and the ninth-ranked state in gross export growth since 2002. In 2011, the state exported more than \$2 billion in medication and pharmaceuticals, a jump of more than 75% since 2008. More than 44% of the state's exports are destined for two countries: Canada (27%) and the United Kingdom (17%).
- 7. Georgia The Peach State finishes in the top 25 in all four exporting measurements, but is growing its share of the nation's total exports faster than all but four other states. Georgia exported \$5 billion in civilian aircraft, engines, and parts in 2011, up 63% from 2008. Over the same time period, Georgia's exports of automobiles tripled to 917 million in 2011. Other major products include wood pulp, gas turbines, and frozen chicken.

- 8. Nevada While exports still comprise a smaller share of the state's economy, Nevada makes the top 10 because it's the fastest-growing export state and is increasing the share of exports in its economy the fastest. Gold accounts for 45% of the state's total exports, followed by copper ore, coinoperated games, and non-industrial diamonds. Exports of integrated electronic circuits have more than doubled since 2008.
- 9. Tennessee Tennessee's top exported product in 2011 was surgical and medical instruments, followed by civilian aircraft and parts, and digital-data-processing machinery. The state exported \$721 million in large piston engines in 2011, up from just \$30 million in 2008. Forty percent of the Volunteer State's goods are destined for Canada and Mexico, with another 12% headed to China and Japan.
- 10. Iowa lowa's agricultural prowess is reflected in its major exports. Corn and pork products account for 15% of the state's output, with another 13% in tractors, front-end loaders and other equipment. The state placed no worse than 17<sup>th</sup> in any export measure, and is the ninth–fastest-growing state for overall export value.

# **Export Programs that Produce**

Top-ranked **Louisiana** has the nation's farthest inland port for sea-going ships, Baton Rouge, and America's only port capable of handling super ships, the Superport. Louisiana has six onshore deep-water ports and one offshore deep-water super port that handle only oil and gas. In addition, Louisiana has 4,500 miles of navigable inland waterways, advanced road and rail facilities, and international air service. More than 25% of the nation's waterborne exports are shipped through the state's ports.

Louisiana's 2011 worldwide merchandise exports increased by 33.3% over 2010, breaking the previous single-year record set in 2008, according to a report released by the World Trade Center of New Orleans. For the year, Louisiana exports totaled \$55.12 billion, compared with \$41.35 billion in 2010 and far exceeding the previous record of \$41.9 billion. Oil accounted for 25% of Louisiana's exports in 2011, a 68% increase from 2010.

Louisiana's export numbers include both Louisianaoriginating products and some major commingled bulk commodities, such as grain and coal that are produced in other states, shipped abroad from Louisiana's ports, and recorded as Louisiana exports because of Department of the Census standards used to calculate exports.

Louisiana Economic Development's International Services office works with the state's goods and services companies to export and assist companies from around the world to identify strategic partners and locations for business development in the state. The International Services office works cooperatively with other economic development agencies, and the World Trade Center in New Orleans to help grow companies through international trade.

**Utah's** exports grew by 37% from 2010-2011, surpassing the national export growth rate of 16%. The top items being exported out of Utah include gold and silver, computer and electronic products, chemicals and transportation equipment. Utah's Department of Workforce Services estimates that of the 1.2 million jobs in Utah, around 360,000 – or about 30% – are export-related.

The Utah International Trade Hub consists of the World Trade Center Utah, the U.S. Commercial Service and the Governor's Office of Economic Development - International Trade and Diplomacy Office (ITDO). The trade hub partners help companies assess their export potential and then connect with the most relevant global partners, contacts, service providers and government agencies. The trade hub partners work together to assist companies in developing markets for their products and services throughout the world.

Internationally, ITDO recruits foreign investors, connects Utah businesses to global partners, touts Utah's economic sectors and educates foreign audiences about Utah's technological opportunities. ITDO also serves as the state's diplomacy advisor and leverages diplomatic contacts to develop and expand foreign markets for Utah. ITDO hosts dozens of foreign trade visitors as well as many foreign business representatives each year.

The agency maintains international trade representatives in Chile, Mexico, Japan, France, Germany, China and South Korea.

# **Entrepreneurship and Innovation**

Innovation is the key to driving growth and prosperity. Economists estimate that up to 50% of U.S. annual GDP growth can be attributed to increases in innovation. There is widespread agreement that new companies are a potent force for creating jobs in the nation. For this reason, states are increasing their investments in entrepreneurship and small business programs. Often, states are directing their efforts and resources to emerging-growth companies (EGCs) or high-growth firms that account for a disproportionate share of net job creation. Similarly, states are giving increased attention to "economic gardening" initiatives that work with successful companies that have expansion potential.

States play a pivotal role in creating the platform for entrepreneurship and innovation through investments in postsecondary education, providing resources, capital and expertise to entrepreneurs and fostering and coordinating partnerships between businesses, universities and government.

Six measures are used to determine top entrepreneurship and innovation states:

- Science, technology, engineering, and mathematics (STEM) occupation concentration
- STEM job growth
- High-technology businesses as a share of all businesses
- Academic research and development activity
- Birth rate of business establishments
- Kauffman Foundation Index of Entrepreneurial Activity

In 2012, the top 10 states for entrepreneurship and innovation include:

1. Maryland – Maryland is this year's top all-around performer in innovation and entrepreneurship, landing in the top 25 states in all six metrics and in the top three on three metrics. The state places first on the innovation list due to its high concentrations of high-tech activity and research. Maryland is the number-one state for academic research and development; and is the third best state in science, technology, engineering and mathematics (STEM) jobs and in the concentration of high-tech business locations. Maryland is in a prime location to serve growing demand for

high-tech services in the Washington, DC region. Those high concentrations of technology workers and technology companies are a sign the state is excelling at translating its academic research to the private sector.

- 2. Colorado Colorado is the number-two state for high-tech business, number three for business birth rate, number four on the Kauffman Foundation Index of Entrepreneurial Activity and is fifth in concentration of STEM jobs. Important high-tech industries in Colorado include telecommunications, electro-medical devices, software publishers, engineering services and computer-systems design.
- 3. Utah Utah ranked no worse than 23<sup>rd</sup> in any innovation and entrepreneurship measure, highlighted by its second-place ranking in business birth rate, evidence the state is fertile ground for entrepreneurs. Utah is an emerging technology hub as the fourth-fastest-growing state for STEM occupations in the nation. The state has expanded its tech economy by 14% over the past decade and shows twice the national concentration of data processing, software and Internet publishing and web services.
- **4. Texas** Texas is a bastion of start-up business, ranking near the top in both measures of business creation: second in the Kauffman Index and sixth in business birth rate. Not all new jobs generated in the state are due simply to population growth, as the state ranks 13<sup>th</sup> in tech business concentration, 17<sup>th</sup> in STEM job concentration and 12<sup>th</sup> in STEM job growth. The state added 30,000 computer and information technology jobs to its workforce since 2001, with a median hourly pay of \$32.
- 5. Arizona Arizona places fifth this year riding the wave of its entrepreneurial economy. The state is first in the Kauffman Entrepreneurial Index and fifth in business start rate. Arizona's high-tech economy is also above average; it is 12<sup>th</sup> in high-tech business concentration and 20<sup>th</sup> in STEM job concentration. Arizona is home to a high concentration of high-tech manufacturing, notably semiconductors, search and guidance instruments and environmental controls.
- **6. Alaska** Alaska is strong in entrepreneurship and in technical jobs. The state's energy- and

natural resources-driven economy is driving the need for engineers and technicians, propelling to fifth in STEM job growth and ninth in STEM job concentration. The most prominent STEM jobs in Alaska include life scientists, life science technicians, physical scientists and engineers.

- 7. New Mexico New Mexico is one of the nation's strongest academic and federal research centers, ranking fourth in academic research and eighth in STEM job concentration. Home to Sandia and Los Alamos National Labs, state leaders work actively to help transfer research innovations in to private sector business ventures and jobs in the state.
- 8. Virginia At the state level, Virginia is the number one state for high-tech concentration, ranking first in STEM job concentration and first in high-tech business concentration. Impressively, while the state already has the highest STEM job concentration, it's adding STEM jobs at a rate ahead of all but two other states. Virginia has the second-highest concentration of mathematical scientists of any state and has added 23,000 computer specialists and 7,000 engineers to its workforce since 2001.
- 9. North Carolina Known for its Research Triangle Region, North Carolina ranks fifth overall in academic research activity. A strong performer overall, the Tar Heel State lands no worse than 26<sup>th</sup> in any Innovation and Entrepreneurship measure. The fastest-growing STEM job categories in the state are life scientists (43%), social scientists (37%) and mathematical scientists (21%).
- 10. Georgia Georgia has seen significant entrepreneurial activity in recent years, ranking tenth in business starts and 14th in entrepreneurial activity. The state is the ninth-most-concentrated high-tech business environment in the nation, due to its high concentrations in computer facilities management, software, custom programming and systems design.

# **Entrepreneurship and Innovation Policies that Produce**

**Maryland** has received high marks in recent years for its human capital investment, research and development inputs, technology and science workforce, and technology concentration.

The Maryland Technology Development Corporation

(TEDCO), created by the state legislature in 1998, is a national leader in bringing innovations from universities and federal labs into the state's economy. It does so by facilitating the transfer of technology to the private sector and by providing emerging technology companies and university researchers with vital seed funding and specialized technical assistance. In testimony before the state legislature in 2009, TEDCO reported leverage of \$38 of other funding for every \$1 of TEDCO funds invested.

To chart a path for the future, the Maryland Economic Development Commission (MEDC) recently released a five-year strategic economic development plan, Charting Maryland's Economic Path: Discovery, Diversity & Opportunity.

Focused on four core strategies, the plan outlines a framework to position Maryland for growth; to build on the state's leading economic drivers, like life sciences, cyber security and federal and military operations; to embrace regional and economic diversity in tourism, manufacturing and agriculture; and to make it easier to do business in the state.

InvestMaryland is Governor Martin O'Malley's key economic development initiative. It is aimed at investing at least \$70 million in startup and early-stage companies in Maryland to help create thousands of new jobs with the potential to spur billions in follow-on capital. The funding for InvestMaryland will come from the auction of premium tax credits to insurance companies. Revenues will be invested by private venture-capital firms selected by an independent third party and the Maryland Venture Fund, the state's 15-year venture capital fund. Recently, Maryland raised \$84 million – more than what had been expected – in an auction of insurance tax credits to fund startup and early-stage companies.

**Colorado** has established a capable and highly developed research, technology transfer, commercialization and finance ecosystem over the years in energy, bioscience and aerospace.

To build on this strong foundation, Governor John Hickenlooper launched The Colorado Blueprint, a bottom-up approach to economic development that engaged every county in Colorado in finding ways to bolster economic development. The Blueprint provides a framework to build a comprehensive economic development plan that aligns existing efforts and identifies opportunities for growth and focused investments.

To cultivate innovation and technology the Blueprint identifies four key steps, including:

- Improve telecommunications technologies and access across Colorado.
- Establish cluster-focused Information Technology Economic Development Advisory Council.
- Implement the Governor's Innovation Initiative and Innovation Network.
- Export Colorado's innovation-based services and products.

The Colorado Innovation Network (COIN) is a network designed to mobilize stakeholders from business, government, nonprofits and academia to develop and implement strategic action plans that create new jobs to grow the economy through innovation. COIN's objectives are to build a business environment to foster innovation; retain jobs and support growth in key industry clusters; pursue capital for project funding; establish Colorado's reputation as the most innovative state; create a workforce with the right talent and job skills; and develop innovation-oriented performance metrics to demonstrate COIN's economic growth impact.

Colorado is the birthplace of economic gardening, an entrepreneurial approach to economic development that seeks to grow the local economy from within. First pioneered in Littleton, Colorado in 1989, the practice is now gaining traction in many other states. Based upon the premise that local entrepreneurs create the companies that bring new wealth and economic growth to a region, it focuses on growing and nurturing these local businesses rather than hunting for "big game" outside the area. What differentiates economic gardening from other entrepreneurship-development strategies is its focus on providing market research and high-level technical assistance to small growth-oriented companies.

# **Taxes and Regulation**

A reasonable tax code and a sensible, predictable regulatory environment can encourage investment and business expansion by enabling entrepreneurs and managers to look forward with confidence and to plan for the future. The combined burden of excessive delays, uncertainty, regulations, and taxes (DURT) can inhibit new job creation and jeopardize existing

jobs. States do not enact tax or regulatory changes in a vacuum and every change will affect a state's competitive position relative to its neighbors and to locations around the world.

Most states have taken a comprehensive look at their taxes and regulations in recent years by establishing special commissions or legislative committees to identify and implement reforms that will foster rather than thwart business development. In a growing number of states, impact studies are now required whenever a new regulation, a new rule or a new tax is proposed to determine the consequences for business growth and job creation. Overall, governors and legislatures now recognize that being enterprise-friendly is necessary in a global economy that offers businesses and individuals more choices than ever before.

A combination of six metrics determines the top states for taxes and regulation states:

- Closure rate of business establishments
- Tax environment for mature firms (Tax Foundation)
- Tax environment for new firms (Tax Foundation)
- Overall business tax climate index according to the Tax Foundation
- The Small Business Survival Index produced by the Council for Small Business and Entrepreneurship
- Cost of living

The following states are the top 10 performers for 2012:

- 1. South Dakota Long known for its positive business climate, especially for finance firms, South Dakota ranks in the top five in four categories: business closure rate, tax environment for mature firms, overall tax environment for business, and the small business survival index. The state launched a "Better Government" initiative in 2011 to review its regulatory climate and to streamline state interactions with businesses.
- 2. Wyoming Wyoming is a top-10 state in four business-climate metrics, including first in overall state business-tax climate and first in tax environment for mature firms. The state also ranks ninth in tax environment for new firms, making it one of the most advantageous overall for business.

- **3. Ohio** Ohio ranks in the top 15 in five of the six tax-and-regulation measures. The state fares well in the Tax Foundation's study of business-tax environments, ranking fifth for mature firms and third for new firms. The Buckeye State is seventh in the small business survival index, has the 13<sup>th</sup>-lowest rate of business closure, and the 15<sup>th</sup>-lowest cost of living in the nation.
- 4. **Kentucky** The Bluegrass State ranks no worse than 22nd on any business-climate measure and is a top-five state in tax environment for new firms and cost of living. Governor Steve Beshear created a Governor's Blue Ribbon Commission on Tax Reform by executive order in 2012, a special commission to hold public hearings and to make recommendations on improving the state's business climate.
- 5. Oklahoma Efforts to improve the Sooner State's business climate are paying off, as evidenced by the state's elevation into the top 10 of this year's rankings, a climb of eight spots. The state has the lowest cost of living in the nation and is the fifthbest tax environment for startup firms. In 2011, the legislature passed a series of aggressive reforms to improve the state's legal environment for business and reduce frivolous lawsuits.
- **6. Nebraska** Nebraska lands at sixth in this year's Taxes and Regulation rankings by placing 11<sup>th</sup> or better in five of the six metrics. The state has the top tax environment for startup firms, the ninth-best tax environment for mature firms, the third-lowest business closure rate in the nation, and the 11<sup>th</sup> lowest cost of living.
- 7. **Texas** One of the secrets to Texas' success is its low cost of living, the third lowest in the nation. Texas ranked 23<sup>rd</sup> or better on five of six business climate measures, yet it recently passed tort reform legislation including a "loser pays" provision to help discourage frivolous lawsuits.
- 8. Alabama Alabama ranks 22<sup>nd</sup> or better on all six metrics, including sixth on the small-business survival index. Looking to make dealing with taxes a simpler process for businesses in Alabama, the state has been considering the adoption of new streamlined business-tax-filing legislation. The proposed law would create a "ONE SPOT" system allowing businesses to file several different classes of taxes through one system

- 9. Utah Utah lands in this year's top ten by placing tenth or better on five of the six business climate measures, led by a sixth-place ranking in tax environment for mature firms and the sixth-lowest cost of living in the nation. The state is tenth in two tax measures, overall business climate and climate for new firms.
- 10. Louisiana Louisiana finishes tenth on the strength of its job creating tax climate. The state is second in tax climate for new firms and tenth in tax environment for established firms. Louisiana has the seventh-lowest business closure rate in the nation, an indication that the state is fertile ground for business.

# Tax and Regulation Policies That Produce

**South Dakota** has long made positive business climate a critical part of its economic growth strategy, dating back three decades to its attraction of the financial services industry. Today the state ranks first in the Small Business Survival Index, second in overall tax climate for business and second for its tax environment for mature firms, both according to the Tax Foundation. This positive environment translates directly to the fifthlowest rate of business establishment closure in the U.S.

The state has no corporate income tax, no personal income tax, and no tax on business inventories, greatly lowering tax burdens on companies in the state. The state has also eliminated inheritance taxes, cutting down on potential tax challenges for family-run businesses. The state also allows the use of property tax abatements for up to five years on new and expanded business facilities, supporting expansion and job creation by South Dakota companies.

In addition to pledging to hold the line on taxes, Governor Dennis Daugaard had made regulatory reform one of his key initiatives focused on improving South Dakota's business climate. The governor's "Better Government" initiative, launched in 2011, identified over 1100 rules and 400 sections of law for potential elimination by the 2012 legislative session. The initiative is focused on streamlining state regulation, and making sure that input from regulated businesses is considered in the rulemaking process.

**Wyoming** offers a data-center sales-tax exemption. Combined with other benefits including no corporate or personal state-income tax and workforce-development-training funds, Wyoming has a

compelling cost-reduction incentive package that is appealing to the data-center industry. In addition, Wyoming has abundant affordable energy, a naturally cool climate, and a data-center recruitment fund used at the sole discretion of the governor. It is a combination that is just the thing to bring high-paying data-center jobs to the state.

Microsoft recently announced that it is opening a data center near Cheyenne, Wyoming. It joins other data centers in Wyoming including those operated by EchoStar, Ptolemy Data Systems, T3Media (formerly Thought Equity Motion), and Green House Data.

Wyoming ranks first in the Tax Foundation's 2012 State Business Tax Climate Index and is one of only four states that collect no personal income taxes and no corporate income taxes. The ranking is consistent with Governor Matt Mead's fundamental formula to encourage, not discourage, entrepreneurs and businesses, on the belief that when they are doing well, everyone benefits.

# **Talent Pipeline**

Talented human capital is one of the most critical factors related to the growth and success of companies and the prosperity of communities and states. Today, even as unemployment remains high, thousands of jobs throughout America cannot be filled because of a growing skills gap. States play a major role in education and training and are on the frontlines of developing the workforce of today and tomorrow. The most successful state initiatives are those that develop and deliver training programs with input from business.

Almost every state is implementing programs to develop a labor force with more science, technology, engineering and math (STEM) capabilities. An increasing number of states are paying attention to building a workforce to fill middle-skill jobs that require some training beyond high school, but not a four-year degree.

In order to gauge the overall environment for workforce activities in each state, the metrics cover some areas of higher education efficiency and attainment, the rigor of high school coursework, and the performance of the state job assistance system. *Enterprising States* provides a top-line review of the talent within each state based on general measures of secondary and higher education and workforce training systems.

For a more in-depth analysis of the performance of state public postsecondary education systems, the U.S. Chamber's Institute for a Competitive Workforce publishes Leaders and Laggards: A State-by-State Report Card on Public Postsecondary Education. Leaders and Laggards provides more detailed state-by-state analysis of specific policy, practices and funding decisions directly related to postsecondary education.

Top talent pipeline states are determined using six measures:

- Higher education degree production
- State spending per degree awarded
- Total student cost at a four-year research institution as a share of state disposable income
- Share of residents age 25 to 44 with at least a twoyear degree
- Share of high school seniors taking Advanced Placement Courses
- Attainment of goals for placing adults in open jobs by the state workforce development system

In 2012, the top-10 performing talent pipeline states are:

- 1. Florida Florida ranks in the top eight in four of the six workforce and training measures. It ranks first in higher education efficiency and share of high school seniors taking advanced placement exams. The state ranks fourth for the efficiency of its workforce placement system and eighth in college affordability.
- 2. Massachusetts Massachusetts ranks in the top seven in four workforce metrics. The state has the nation's most educated young workforce, the third-highest output of college degrees, and the third-best ranking for its state workforce system efficiency.
- 3. New York New York places in the top 20 in five of six workforce measures. The Empire State receives high marks for its college-educated population, advanced-student achievement, and its output of college degrees, ranking seventh or higher in all three metrics.
- **4. Utah** Utah holds a top-10 position or better in three rankings, including higher education

spending per credential granted (3<sup>rd</sup>), undergrad tuition as a share of disposable income (6<sup>th</sup>), and degrees awarded per resident aged 18 to 24 (10<sup>th</sup>). Utah's highly educated talent pool is a strong attraction for a growing number of technology companies and for the financial services sector.

- 5. South Dakota South Dakota is a leader in investment in higher education efficiency, tuition affordability, and job placement performance. The South Dakota Workforce Initiatives (SD WINS) program is a 20-point plan launched to expand workforce training opportunities and attract skilled workers to the state, supporting business expansion.
- **6. Virginia** Ranked ninth for its high percentage of citizens with college degrees, the state is working to increase the number of high school graduates attending college with its Top Jobs Act. The program aims to help 100,000 more Virginians get college degrees over 15 years. Virginia ranks better than 22<sup>nd</sup> in four workforce metrics and no worse than 33<sup>rd</sup> in any measure.
- 7. Maryland Maryland is home to the nation's 10<sup>th</sup> most educated young workforce and it ranks second for sending high school students to advanced-placement exams. The state is positioned well to increase its already high level of educational attainment with the nation's 11<sup>th</sup> most affordable higher education system.
- 8. Colorado Colorado holds the number-eight rank in two key talent pipeline measures including the percent of 25- to 44-year-olds with an associates' degree or higher and the share of high school seniors taking advanced-placement exams. The Colorado Blueprint aims to capitalize on this highly educated populace to achieve its aims of making Colorado an epicenter of innovation and technology in the 21st century.
- 9. North Dakota North Dakota is highly rated for its tuition rates and percentage of individuals with an associate's degree or higher, ranking second. The state produces the 17<sup>th</sup>-most college graduates for its size, and its job-placement system is the 16<sup>th</sup> most efficient. To support the overwhelming demand for oil and gas workers, the state has launched a Petroleum Safety and Technology Center to provide workforce training to meet the industry's massive demand for workers.

10. Connecticut – A strong all-around workforce performer, Connecticut ranks in the top 24 in five and the top 19 in three workforce measures. The state has the seventh-most educated young workforce and the sixth-most efficient workforce placement system.

# **Talent Pipeline Policies that Produce**

**Florida's** Workforce Florida, Inc. program serves as a catalyst for creating world-class talent at every skill level. It is focused on getting Floridians back to work while emphasizing the state's most promising future opportunities.

Employ Florida Banner Centers are a statewide, industry-driven initiative focused on building partnerships among stakeholders in workforce, education, industry and economic development. The state's 11 current and planned Banner Centers focus on developing and coordinating educational and training resources to boost the competitiveness of targeted industries that diversify Florida's economy. Each of Florida's 11 Banner Centers aims to:

- Become the statewide nexus for industry knowledge related to workforce needs of a targeted industry.
- Support the pipeline development needs of key Florida industries from entry-level to advanced workers.
- Deliver workforce development products, services, training and access to certifications valued by industry.

The Employ Florida Marketplace, online at EmployFlorida.com, offers job seekers access to thousands of employment listings, and businesses access to thousands of job seekers looking for entry-level to executive positions.

EmployFlorida.com microportals include Employ Florida Silver Edition, a career resource for the 50+ demographic and Employ Florida Vets, Florida's online source for veterans' employment and employerrecruitment information.

In **Massachusetts**, Office of Labor and Workforce Development operates 34 One-Stop Career Centers in every major city of the state, with branch offices in additional communities. The One-Stop Career Centers are administered locally by Workforce Investment Boards – comprised of leaders from business,

government, education, labor and communities – to ensure that the centers are effectively linking training with business.

An Ambassadors Program supports the goal of increasing the system's capacity to meet the needs of employers by engaging Massachusetts Workforce Investment Board (MWIB) members and others, in a campaign to connect private-sector employers with the One-Stop Career Centers, increase awareness of the many services the one-stops offer, and encourage employers to utilize these services in their recruitment and hiring plans.

Since 2003, the Massachusetts Department of Higher Education has administered the STEM Pipeline Fund to 1) increase the number of Massachusetts students who participate in programs that support careers in STEM fields; 2) increase the number of qualified STEM teachers; and 3) improve the STEM educational offerings available in public and private schools.

The Commonwealth Marketing Office, a Massachusetts state agency, launched a website designed to advance the state's effort to keep college students in Massachusetts after graduation from local colleges. The Mass Stay Here Internship Site is a statewide internship resource highlighting internship opportunities. A complementary WOW Campaign raises awareness about the exciting career opportunities that exist in Massachusetts for students who pursue STEM college majors and skills certificates. The campaign is aimed at students, parents, and teachers.

# Infrastructure

Infrastructure is the basic foundation upon which economic development and growth is created and sustained. States and cities must continually upgrade their highways, airports, harbors, utility distribution systems, railways, water and sewer systems, and communications networks to keep pace with the requirements of an ever-changing business environment. In our increasingly network-centric, globalized economy, high-quality air service for passengers and freight and high-speed broadband are becoming an essential part of the infrastructure requirements for a 21st century economy.

As state governments seek ways to trim costs and leverage other resources they are taking a hard look at public-private partnerships (PPP) to build, operate and

maintain everything from roads to airport terminals. In many states, specific types of infrastructure are being prioritized and incentivized to build or attract highly desirable economic opportunities such as data centers.

The top infrastructure states are determined by a combination of four metrics:

- Broadband capacity: share of households with 10-megabit download speed available
- Broadband availability: share of households with three or more providers available
- Road quality
- Share of bridges determined to be deficient or obsolete

The following states are ranked as the top-10-performing infrastructure states for 2012:

- 1. Florida Florida is a clear standout as determined by all of the infrastructure measures used in the rankings. The state ranks no worse than seventh in any infrastructure measure, led by the second-best road quality and the fourth-best availability of highspeed broadband.
- 2. Nevada Nevada's bridge infrastructure is among the best in the nation. The highly urbanized state ranks very highly in broadband accessibility, with 97% of its residents having access. The Nevada Broadband Task Force and Connect Nevada are taking steps to increase access for rural populations and Hispanics.
- 3. Utah Utah's influx of technology companies and workers has created increasing demand for bandwidth and storage. The state ranks ninth in households with access to at least three broadband providers and fifth in bridge quality.
- **4. Illinois** Faced with difficult budget conditions, the state of Illinois has embraced public-private partnerships as a way to maintain a strong system of infrastructure. Illinois ranks sixth in bridge quality and is in the top 15 in both broadband metrics.
- **5. Arizona** Arizona ranks third in bridge quality, and no worse than 22<sup>nd</sup> in any infrastructure metric. The state's increasing population could put increasing demands on transportation infrastructure and water resources. The Water Infrastructure Finance

authority is a bond bank that issues water quality bonds on behalf of communities for basic water infrastructure, an essential ingredient to accommodate growing residential, commercial, and industrial uses.

- 6. Delaware Delaware lands in the top 12 in both broadband telecommunications metrics, and the state has increased funding to its transportation trust fund as part of the new "Building Delaware's Future Fund." Port infrastructure upgrades at the state's Port of Wilmington have also received state support.
- 7. Minnesota Following the I-35 bridge collapse disaster of 2007, the State of Minnesota committed itself to a \$2.1 billion, 10–year, bridge-improvement program. The initiative provides funding to replace or repair more than 120 bridges throughout the state, with around 60 complete by the end of 2011. Bridge investments are paying off, as the state places first in bridge quality in this year's study.
- 8. Texas Texas is a strong performer in all infrastructure measures, landing at no worse than 21st in any metric. The Texas Mobility Fund provides a revolving fund of financing for transportation infrastructure upgrades around the state. In 2012, the fund committed an additional \$2 billion in funding to local governments as part of a wider, \$4 billion set of infrastructure investments.
- 9. Georgia Georgia ranks first in road quality and 12<sup>th</sup> in bridge quality. Seeking to prepare its port infrastructure for the new classes of ships that will soon be passing through an expanded Panama Canal, Georgia has made port upgrades a priority. The state has invested in excess of \$130 million dollars in improvements to the Port of Savannah over the past three years, with an additional \$47 million allocated in 2012.
- 10. Ohio Ohio ranks at least 24<sup>th</sup> in each infrastructure metric, led by the nation's 12<sup>th</sup>-best access to 10-megabit broadband. In order to improve access to rural areas, the state has launched the Connect Appalachia Broadband initiative, which works with public- and private-sector partners to identify regions of need and coordinate state and private-sector resources to provide service.

#### Infrastructure Policies that Produce

**Florida's** State Infrastructure Bank (SIB) is a revolvingloan and credit-enhancement program consisting of two separate accounts, and is used to leverage funds to improve project feasibility. The SIB provides loans and other assistance to public or private entities carrying out or proposing to carry out projects eligible for assistance under federal and state law.

Florida SIB projects must be on the State Highway System or provide increased mobility on the state's transportation system, or provide intermodal connectivity with airports, seaports, rail facilities, and other transportation terminals. As of September 2010, Florida's State Infrastructure Bank has approved loans totaling \$1.1 billion, leveraging \$8.3 billion in total project costs. The bulk of the funding has gone to roads projects and transportation-related facilities. Florida stands out from other state infrastructure banks in that 11% of funds have gone to transit projects.

Recently \$15 million was included in the Florida Department of Transportation's (FDOT) strategic intermodal system to support spaceport infrastructure. These investments include launch-support facilities that are located at launch sites, or launch ranges that are required to support launch activities, including launch-vehicle assembly, launch-vehicle operations and control, communications, and flight safety functions, as well as payload operations, control, and processing.

Governor Rick Scott is prioritizing transportation projects that are vital to facilitating economic development opportunities in Florida. Specifically, the governor is promoting:

Investments in improving Florida's 14 deepwater seaports to prepare for the expansion of the Panama Canal, ratified free trade agreements, and the growing economies of Central and South America. In addition, he is proposing to improve transportation to and from Florida's ports, including support for innovative concepts like inland ports.

Building an interconnected, efficient transportation system, guided by the Florida Department of Transportation's vision plan. Goals include employing creative financing alternatives, offering transportation choices, reducing bureaucracy, and streamlining decision making to plan and develop future corridors.

**Nevada** is a geographically large state that is very urban in the Las Vegas and Reno areas, but very rural

elsewhere. As a worldwide tourism destination, the state has an annual tourist population of 40 million. The Greater Las Vegas area alone gets about 3 million visitors per month, with airport boards totaling just under 19 million in 2010. Consequently, the provision of infrastructure and related services presents a unique challenge in Nevada as the wide-ranging needs of residents and temporary populations come into play.

Nevada ranks very highly in terms of access to high-speed broadband for about 97% of its residents, particularly in the two major metro areas. The Nevada Broadband Task Force and Connect Nevada have been working to facilitate access to affordable and reliable broadband services for all Nevadans, with a focus on rural areas. As part of its 2011 Residential Technology Assessment, Connect Nevada assessed the unique technology needs and trends related to Hispanic residents across the state, which now comprise 26% of the state's population and are projected to grow significantly in the coming decade.

The Nevada Department of Transportation is implementing a long-range planning effort — Connecting Nevada — that is looking at a wide range of issues related to the future of the state. Economic diversification and sustainability are emerging as central issues as the state seeks ways to diversify beyond tourism and capitalize on opportunities in renewable energy development, mineral expansion and distribution sectors.

A New Energy Industry Task Force has been tasked by Governor Brian Sandoval to examine energy transmission issues and assess the regional market for Nevada's renewable energy resources. The Nevada State Office of Energy is coordinating the efforts of the task force with other state, regional, and federal organizations to achieve several goals including: identifying and establishing corridors for the transmission of electricity; promoting the development of transmission facilities and renewable energy resources in Nevada and neighboring states that is reasonable, considers the impacts to Nevada citizens, and creates an environment that invites development; and developing a business case to develop Nevada's renewable resources and related industries with the lowest possible risk to ratepayers.

# **Growth Measures: Rating the States**

Enterprising States compares states using 33 measures of overall economic performance and

performance in five important policy areas for job growth. Data for each measure was collected for each state and states were ranked according to performance.

The heat map matrix on page 28 displays each state's performance for each of the 33 metrics. Dark red squares indicate a top-10 ranking in that metric and light red squares indicate an 11-25 ranking in a particular metric. To gauge a state's performance read across the page for each state or region. Groupings of red highlights indicate better performance in that policy area.

States are grouped by region and metrics by policy area for easy visual comparison to other neighboring states. For instance, the Mideast Region proves to be a poorer performer in tax and regulation, as shown by large blocks of white, while the Rocky Mountain Region scores well in the innovation and entrepreneurship measures.

#### **Metric Definitions**

#### **Economic Performance**

**Long-Term Job Growth, 2002-2012.** Percent job growth between the November 2001-January 2002 average figure and November 2011-January 2012 average figure. U.S. Bureau of Labor Statistics Current Employment Survey.

**Short-Term Job Growth, 2010-2012.** Percent job growth between November 2009-January 2010 figure and November 2011-January 2012 figure. U.S. Bureau of Labor Statistics Current Employment Survey. Measures recent job shifts.

**Real Gross State Product Growth, 2000-2010.** 2005 Chained Dollars. U.S. Bureau of Economic Analysis.

**Economic Productivity: Gross state product output per job, 2010.** Total economic output per job, a measure of a state economy's productivity and the presence of high-value industries. U.S. Bureau of Economic Analysis.

Productivity Growth: Growth in gross state product output per job, 2000-2010. Percent change in total economic output per job between 2000 and 2010. An indication of a state's shift toward higher value jobs and industries. U.S. Bureau of Economic Analysis.

Per capita Personal Income Growth, 2001-2011. Change in real income per person, 2001-2011. U.S. Bureau of Economic Analysis.

Median Income for a Family of Four Adjusted for Cost of Living, 2010. U.S. Census 2008-2010 American Community Survey, Missouri Economic Research and Information Center using data from Council of Community and Economic Research.

#### **Exports**

Export Intensity: Dollar value of manufactured exports per dollar of gross state product, 2010.

Value of exports equalized for the relative size of state economies. Measures the importance of exports to a state's economy. Covers manufactured exports, not including bulk commodities that tend to be credited to the state where the exporting port is located. U.S. Census Foreign Trade Division, U.S. Bureau of Economic Analysis.

Export Intensity Growth: Change in dollar value of manufactured exports per dollar of gross state product, 2002-2010. Measures increasing or decreasing role of exports in a state's economy. Manufactured exports. U.S. Census Foreign Trade Division, U.S. Bureau of Economic Analysis.

Percentage point change in state share of total national exports, 2002-2011. Measures a state's export performance relative to other states and accounts for overall national export growth or decline. Manufactured exports. U.S. Census Foreign Trade Division.

**Growth in gross manufactured exports, 2002-2011.** Manufactured exports. U.S. Census Foreign Trade Division.

# **Innovation and Entrepreneurship**

STEM Job Growth: Growth in science, technology, engineering, and mathematics jobs, 2001-2011. Growth in computer specialists; mathematical science; engineers; engineering technicians; life scientists; physical scientists; social scientists; and life, physical, and social science technicians. EMSI Complete Employment, First Quarter 2012.

STEM Concentration: Science, technology, engineering, and mathematics jobs, 2001-2011.

Measures concentration of STEM jobs in a state versus the nation. Location Quotient is the share of STEM jobs in state divided by share of STEM jobs in nation. EMSI Complete Employment, First Quarter 2012.

High-Tech Business: High technology share of all establishments, 2011. The share of business establishments (locations) that are in high-technology industries. High-technology industry definition includes 45 six-digit NAICS industry sectors within the state including technology manufacturing sectors, adapted from the industry definition created by TechAmerica. EMSI Complete Employment, First Quarter 2012.

Business Creation: Business establishment birth rate, 2008-2009. U.S. Census Bureau, 1989-2009 Business Information Tracking Series.

Academic Research and Development as a share of Gross State Product, 2009. Measures the extent to which academic R&D plays a role in the state economy. Funding could come from industry, state or federal government, or other agency. National Science Foundation State Science and Technology Indicators 2012.

Kauffman index of Entrepreneurial Activity, 2011. Measure of monthly new business starts derived from the Current Population Survey. Kauffman Foundation.

## **Taxes and Regulation**

**Business Closure: Establishment death rate, 2008-2009.** U.S. Census Bureau, 1989-2009 Business Information Tracking Series.

**Tax Environment for Mature Firms, 2011.** Measure of tax environment for established businesses in a state. Tax Foundation.

**Tax Environment for New Firms, 2011.** Measure of tax environment for new and start-up businesses in a state. Tax Foundation.

**State business tax climate index, 2012.** Index of taxes affecting business. Tax Foundation.

**Small Business Survival Index, 2011.** An index combining 44 measures of government-imposed or related business cost measures affecting a wide variety of industries and business types. Small Business & Entrepreneurship Council.

**State Cost of Living Index, 2011.** Missouri Economic Research and Information Center, using data from Council of Community and Economic Research.

### **Talent Pipeline**

Higher Education Output: Bachelor's degrees conferred per 1,000 18- to 24-year-olds, 2010. Measures degree output of the state higher education system. National Center for Education Statistics, U.S. Census Population Estimates.

Higher Education System Efficiency: State higher education spending per degree awarded at four-year public research institutions, 2010. Delta Cost Project on Postsecondary Education Costs, Productivity, and Accountability.

College Affordability: Average undergraduate charge at public four-year institutions as a share of disposable personal income, 2011. Measure of degree affordability adjusted for state income levels. National Center for Education Statistics, U.S. Bureau of Economic Analysis.

Educational Attainment: Associates' and above degree holders among 25- to 44-year-old population, 2010. U.S. Census American Community Survey, 2010.

Share of public high school students taking Advanced Placement Exams, 2011. Measures the extent to which rigorous curriculum is available in secondary schools. College Board, Advanced Placement Report to the Nation.

Job Placement System Efficiency: Employment retention rate goal attainment, 2010. Ratio of workforce development system adult customers still employed several months after exit from state job training and placement services compared to the agreed-upon goal rate. Measure of performance of a state's workforce assistance system. U.S. Department of Labor Employment and Training Administration.

### **Infrastructure**

Broadband Capacity: Share of households with at least 10 Mbps downstream broadband availability, 2011. U.S. National Broadband Map.

Broadband availability: Share of households

with at least three broadband service providers available, 2011. U.S. National Broadband Map.

Road Quality: Percent of road miles rated mediocre or poor, 2008. Federal Highway Administration.

Share of bridges rated structurally deficient or functionally obsolete, 2010. Federal Highway Administration, National Bridge Inventory.

**State Performance** Key: Top 10 States Next 15 States Infrastructure Performance Exports **Taxes and Regulation Talent Pipeline** Innovation & Entrepreneurship Growth in Share of National Exports High-tech Share of All Businesses Tax Environment for Mature Firms Tax Environment for New Firms Broadband Provider Availability Small Business Survival Index H.S. Adv. Placement Intensity **Broadband Speed Availability** Gross State Product Growth Per Capita Income Growth Economic Output per Job STEM Job Concentration Higher-ed Degree Output Job Placement Efficiency Academic R&D Intensity Export Intensity Growth Short-term Job Growth Entrepreneurial Activity Business Closure Rate Long-term Job Growth Median Family Income **Business Tax Climate** Productivity Growth Business Birth Rate Higher-ed Efficiency College Affordability STEM Job Growth Export Intensity Export Growth Cost of Living Bridge Quality State AK CA Far West н ΝV OR WA IL **Great Lakes** IN MI ОН WI DE Mideast MD NJ NY PΑ СТ **New England** ME MA NH RI VT IΑ KS MN МО NE ND SD СО Mountain ID MT UT WY ΑL AR FL GΑ ΚY LA MS NC SC ΤN VA W۷

Southwest

ΑZ

NM OK TX

# The Next Boom States

Which states are best positioned to grow, create jobs, and prosper in the coming five to 10 years?

It is widely agreed that a confluence of factors has fundamentally reshaped the economic landscape in which American businesses operate and compete. To Consequently, in the ebb and flow of the global economy, states can no longer rely solely on strategies of keeping costs low and providing incentives to attract footloose, commodity-based branch plants or offices. Instead, states must create the right business climate that allows companies and entrepreneurs to create 21st century jobs.

Dramatic changes in the scope and scale of the global economy have significantly altered the nature of foreign competition. Jobs are the new currency for leaders across the globe, and those who can create good jobs will own the future. With 95% of the world's customers living outside our borders, trade with other countries is an important part of our economy that will continue to be important long into the future.

Businesses need a highly skilled workforce – including many workers with certificate or two-year degrees – that is able to perform the jobs of a 21st century economy. Innovation, now the essential driving force for creating and sustaining economic opportunities, is much more multidisciplinary and global in scope than ever before. Innovation cycle times are much shorter and continue to accelerate. States that are able to get students involved in the STEM fields – science, technology, engineering, and math – and provide the tools, support, and tax and regulatory environment for companies to continuously innovate will be the most competitive.

The job-creation headwinds are strong, as companies across all sectors have made operational changes to improve productivity and optimize employment. Furthermore, because of advances in technology, particularly computers and other information technology, companies are increasingly able to maintain or even expand production without adding workers. Finally, according to Andy Grove, former Intel chief, the cost of creating U.S. jobs in some high-tech industries has grown from a few thousand dollars per position in the early years to a hundred thousand dollars today. <sup>77</sup>

States wishing to do well in this environment face many barriers. These include the high level of debt in

many states, a growing skills mismatch between the workforce and the jobs available within a state, and outdated regulations and taxes that serve as barriers to free enterprise.

# Economic Momentum + Policies that Produce

Of course, predicting and comparing the future of states is difficult at best. But we can identify those states with the best momentum and those best positioned to meet the challenges of the future.

The states most likely to grow in the next decade will be defined by the following broad policy approaches:

- Parlaying their natural resources and historically competitive industry sectors into 21<sup>st</sup> century jobcreating opportunities.
- Paying attention to and addressing their competitive weaknesses.
- Supporting their companies' business development efforts to reach an expanding global marketplace.
- Creating fertile environment and workforce for a technology-based and innovation-driven economy.
- Getting government, academia, and the private sector to collaborate effectively to make sure that more new ideas developed by companies and in research labs scale up into industries.
- Taking steps to make existing firms more productive and innovative, creating an environment in which new firms can emerge and thrive.
- Maintaining an affordable cost of living for middleskilled and middle-class employees.
- Promoting education, workforce development and entrepreneurial mentoring.
- Fostering an enterprise-friendly business environment by cleaning up the DURT (delays, uncertainty, regulations, and taxes), modernizing government, and fixing deficiencies in the market that inhibit private sector investment and entrepreneurial activity.

State policies and programs that most effectively promote job creation are rooted in market reality. This means building on the existing core industries and technological advantages of a state while pursuing opportunities in growing sectors. **Building on and sustaining existing economic momentum** remains a key means of guaranteeing success in the future.

The McKinsey Global Institute identifies six sectors with the most potential for job growth: health care, business services, leisure and hospitality, construction, manufacturing, and retail. Today, according to McKinsey, these sectors span a wide range of job types, skills, and growth dynamics. They account for 66% of employment now and could account for up to 85% of new jobs created through the end of the decade. States with energy and a strong food and agriculture sector will also undoubtedly continue to grow and create jobs.

States with large companies that bring together multiple technologies or complex expertise – such as in advanced manufacturing, investment banking, construction and engineering, and natural resources – also enjoy a competitive advantage. Likewise, states with technology companies that are part of complex virtual networks – like AMD and CISCO – are poised to grow. Industries that don't use a lot of labor in production have abundant opportunities to expand employment in support industries such as software, logistics, and advanced producer services.

The future boom states list is determined using a weighted, normalized index of twelve measures:

### **Primary measures:**

- Long-term job growth, average annual employment growth 2001-2011, two points
- Short-term job growth, 2009-2011 job growth, two points
- Projected job growth, 2011-2016, two points
- Education-level of young workforce, share of 25to 44-year-olds with a two-year degree or higher, three points
- Livability, median income for a household of four adjusted for cost of living, two points

# Secondary measures (one point each):

In-migration rate

- Immigration rate
- Business birth rate
- Cost of living
- Growth in per capita personal income
- Export intensity, dollar value of exports per dollar of gross state product
- Concentration of children under age 18

The top ten future boom states are:

- 1. North Dakota It is not surprising that North Dakota ranks first in short- and long-term job growth and third in projected future job growth. It may be a surprise to notice that the state ranks second only to Massachusetts in the educational attainment level of its young workforce. More than 50% of its young workforce has at least a two-year degree.
- 2. Utah Utah ranks in the top five in all three job growth measures and second in business creation rate. Known recently for its growth in financial services and technology sectors, the state ranks fifth in export intensity and sixth in cost of living, positioning it well for the future with wealth-creating industries in an affordable environment.
- 3. Texas The key to the future in Texas lies in its dynamic economy coupled with an affordable environment. The state ranks in the top five in all three job creation measures, sixth in business creation, and ninth in immigration. Texas is the nation's top exporter by volume as a share of the size of its economy. This is all occurring in a state with the third-lowest cost of living.
- 4. Virginia Virginia is a high-value, high-income economy. It's the top state for adjusted family income, a quality of life that is attracting new migrants to the state at the seventh-fastest rate in the nation. The state ranks ninth for its educated workforce and ninth in projected job growth.
- **5. Wyoming** Fueled in part by growth in energy extraction, Wyoming added jobs at the second-fastest rate over the past decade, and grew its per capita income the third fastest. New businesses are sprouting up to take advantage of that growth; the state is adding new business locations at the 11<sup>th</sup> fastest rate in the nation.

- **6. Washington** Washington makes the top 10 on solid all-around performance. The state ranks no worse than 36<sup>th</sup> in any measure in the index and in the top 20 in seven of 12 metrics. On the strength of its aerospace and software sectors, Washington is the fourth-ranked state in export intensity.
- 7. Maryland Maryland is a center for high-tech business and research and development. The state is a strong all-around performer, ranking in the top 20 in nine of 12 measures. The state is 13<sup>th</sup> in recent job growth, 15<sup>th</sup> in projected job growth, and tenth in immigration rate. Maryland has the tenth most educated young workforce and the fifth-best family income level.
- 8. Colorado Americans are moving to Colorado at the fifth-fastest rate of any state and many may be starting businesses, as the state ranks third in that measure. The state is a prime destination for young families, ranking eighth for the education level of its young workforce, eighth in concentration of children, and seventh in median income for a family of four.
- **9. South Dakota** Known for its friendly business climate, South Dakota ranks eighth in long-term job performance, fifth in projected job growth, and fourth in per capita personal income growth.
- 10. Massachusetts Massachusetts is home to the nation's most educated young workforce, at 53% with at least a two-year degree. Its high incomes place it third for adjusted family income and its job growth has accelerated recently with a 14<sup>th</sup>-place ranking in the past two years.

# North Dakota – Leading the Great Plains Resurgence

North Dakota has added nearly 50,000 new jobs in the last decade, equivalent to seven percent of its total current population. The American Gross Domestic Product grew at a pace of 2.9% last year, but North Dakota's economy increased by 7.1%. The outlook for North Dakota's economy is bright, as the state continues to capitalize on robust opportunities in energy, manufacturing, agriculture, and technology.

The Bakken formation of western North Dakota represents the hottest oil play in North America and is expected to last for at least 20 years. The oil and gas

boom of the Bakken is certainly a big contributor to the state's rising economic fortunes and ambitions. The state's western oil patch has not only created many direct energy jobs but also spurred growth in a wide array of industries from business services to hospitality and retail.

Critically, there's more to North Dakota's economic success than the oil boom. Among the current 16,000-plus job openings in North Dakota, 60% are found outside of oil-producing counties, many in manufacturing, technology, or advanced services sectors. Information technology/services giants Microsoft and Amazon have both recently expanded in the state, as have global machinery manufacturers Caterpillar and Doosan, maker of the Bobcat skid-steer loader.

Agriculture is booming in North Dakota and becoming increasingly knowledge-intensive as tech-savvy farmers adopt precision agriculture practices to work with processors to reach high-value markets in food, fuel, fiber, and pharmaceuticals. A looming world population of 9 billion assures a growing long-term market for commodities, specialty products, and the farm machinery that is produced in the state.

North Dakota has emerged, quite unnoticed by the national media, as an undiscovered hotspot for science- and technology-based development. The state has long boasted better education scores than most states, and now North Dakota ranks second behind only Massachusetts in the percentage of college-educated people under 44. According to the National Science Foundation, North Dakota is ranked number one among the states in the percentage of state and local contributions to total research conducted at universities and colleges.

In 2010, *Inc.* magazine highlighted the Red River Valley Research Corridor's emerging vaccine and infectious diseases industry as one of the nation's top twenty idea-producing regions. But the corridor spanning the eastern border of the state is also on the leading edge in microelectronics, manned/unmanned aviation, remote sensing, farm machinery and equipment, off-road vehicles, energy, agriculture, coatings and surfaces, and advanced manufacturing.

North Dakota's total exports increased by 122% from 2006-2011, compared to a national increase of 44%. Major exports include crude oil, machinery and equipment, agricultural commodities and food

products. The North Dakota Trade Office (NDTO), a private-public, non-profit partnership, serves as catalyst in a collaborative effort with other partners to provide North Dakota companies with the support they need to succeed in the global marketplace.

Governor Jack Dalrymple and the North Dakota Chamber of Commerce have teamed up to lead a statewide visioning initiative titled North Dakota 2020 & Beyond. The initiative intends to capitalize on current momentum by emphasizing job creation and building a positive business climate. It will also focus on enhancing North Dakota's quality of life and the livability of its communities.

# **Utah - The Rise of Silicon Slopes**

Utah's economic rebound from the recession has been highlighted by major employment add-ons in five major sectors including manufacturing, trade, transportation and utilities, professional and business services, education and health services, and leisure and hospitality.

Utah's leaders in business and government trace this diversified growth to a unique, calculated mix of comparatively reasonable operating costs and an affordable and well-educated, and largely multilingual, workforce. This mix is extremely attractive to a burgeoning number of technology companies that view Utah as an attractive location for business and skilled employees looking for a family-friendly, outdooramenity-rich lifestyle. Utah is also poised to continue to grow as a major player in the financial services industry due to its relatively benign regulatory climate.

Utah recently amended or eliminated 368 outdated and unnecessary regulations that were determined to be a drag on the economy. Utah also reduced unemployment insurance's maximum cap from 9.5% to 7.5%, thereby achieving more than \$26 million in tax savings for Utah's businesses.

Utah is a growing epicenter of international trade with exports growing by 37% from 2010-2011, surpassing the national export growth rate of 16%. The growth comes from a solid mix of growing resource exports combined with rising international trade in computer and electronic products, chemicals and transportation equipment.

USTAR (Utah Science Technology and Research) is an initiative created in 2006 to fund strategic investments

at the University of Utah and Utah State University to leverage the success of Utah's research universities in creating and commercializing innovative technologies.

In just five years of operation, USTAR has recruited more than 40 top researchers to the University of Utah and Utah State University; USTAR researchers have created \$137.4 million in total economic impact, producing a 187% leverage of Utah's research investment; USTAR researchers have created four companies, and have a current commercialization pipeline of more than 20 other projects.

# Texas - The Lone Star Dynamo

Texas added more people (421,000) than any other state from 2010 to 2011, according to the U.S. Census Bureau. Texas has only 8% of the nation's population, but the state accounted for almost 19% of the nation's population growth for the year.

In 2011, Texas' real gross domestic product grew by 2.4% compared with 1.6% GDP growth for the nation. By December 2011, Texas employers replaced all 427,600 jobs shed during the recession as the state's economy rebounded more quickly than did the U.S. economy. In contrast, through February 2012, only 39% of the nation's recession-hit jobs have been recovered.

And, critically, the Lone Star State continues to add jobs at a more rapid rate. The state, according to a new Forbes ranking, remarkably accounts for eight of the nation's strong job markets and four of the six best performing among the country's large metropolitan areas. The Lone Star State's combination of low taxes, reasonable regulatory structure, low cost of living, and business-friendly policies has attracted employers seeking to start or expand their businesses. The Texas Legislature's loser-pays tort reform law, passed in 2011, discourages frivolous lawsuits and gives businesses more certainty that their capital investment will be protected in Texas.

Based on current trends, Texas likely will continue to outpace many if not most of its competitors as it continues to capitalize on burgeoning opportunities in energy, advanced manufacturing, finance, and international trade.

Governor Rick Perry and the Texas Legislature have consistently funded two tools to attract and create Texas jobs: the Texas Enterprise Fund (TEF), and the Emerging Technology Fund (ETF). The TEF functions as a "deal closing" fund, enabling Texas to compete directly with incentives offered elsewhere in the country, while the ETF helps early-stage tech companies grow their ideas from the laboratory into the marketplace.

Texas is the nation's largest exporter by volume adjusted for state size, due to its global-oriented businesses and its location as a major national hub for sea, land, and air transportation. Today, Texas accounts for about one-sixth of the country's exports including: petroleum (\$51.3 billion), chemicals (\$46.6 billion), computers and electronic products (\$42 billion), machinery (\$27.6 billion), and transportation equipment (\$21.6 billion).

Texas seaports, airports, and the inland ports on the Mexican border are also among the nation's busiest destinations for imports, which benefit related industries such as transportation and warehousing. Texas' port activity rose nearly twice as fast as the nation's between 1997 and 2009, and is expected to keep growing.

Texas also benefits from rising foreign investment. During the two-year period 2009-2010, more foreign direct investment projects were recorded in Texas than in all four previous years combined.

To ensure that Texas has a workforce with 21st century skills, Texas has invested \$81 million in seven Texas Science, Technology, Engineering, and Mathematics (T-STEM) Centers for STEM education in K-12 schools. T-STEM Centers work with T-STEM Academies in all Texas schools to transform teaching and learning methods, improve achievement, and ensure all students are ready for rewarding careers in the 21st century economy.

# Virginia – The Emerging East Coast Economic Superstar

Virginia's pro-growth policies and favorable business climate have made the commonwealth a leader in economic growth over the last decade. Since 2009, the commonwealth has added over 128,000 jobs, paced by 41,000 new professional, scientific, and technical-services jobs. Virginia has the largest concentration in the nation in these professional and technical services.

Virginia's low tax and regulatory environment, coupled with its proximity to the nation's capital have made the state one of the most attractive locations for both domestic and international firms. Its strength in the rapidly growing professional services sectors, along with its highly educated workforce and potential as a transportation and industrial hub position it well for the future.

Virginia ranks very highly among the states in STEM jobs and the percentage of high-tech firms. To build on and further develop its human capital, the commonwealth recently passed "Preparing for the Top Jobs of the 21st Century: The Virginia Higher Education Opportunity Act of 2011." The legislation is a forward-looking initiative that focuses on three major areas including: greater economic opportunity and impact; reform-based investment; and affordable access for all capable Virginia students.

The "Top Jobs" legislation provides a roadmap for achieving an additional 100,000 undergraduate (associate and bachelor's) degrees for Virginians over the next 15 years. Specifically, it focuses on creating additional degree attainment in high-demand, high-income fields (e.g., STEM, healthcare) key to the 21st century economy. A not-for-profit STEM public-private partnership is being created to fully engage the business and professional communities in the strategic direction and promotion of STEM initiatives. The legislation also incentivizes public-private collaboration on STEM-related and other commercially viable research.

Total exports by Virginia increased by 28% during the five-year period of 2006-2011. Major exports include manufactured goods, coal, tobacco, and agricultural products totaling \$18 billion in 2011. Virginia's service-sector exports of education, tourism, engineering, finance, transportation, and marketing have been growing rapidly and were estimated at \$12 billion in 2010. There are now more than 700 internationally owned companies located in Virginia, making it one of the top states in the country for foreign direct investment.

The Virginia Economic Development Partnership's (VEDP's) Virginia Leaders in Export Trade (VALET) Program is an award-winning, aggressive program that since 2002 has assisted more than 165 companies throughout Virginia to expand their international business. Each year, 25 qualifying companies are selected for this comprehensive, two-year business

acceleration program to bolster their global marketing efforts. VEDP has offices in Belgium, Shanghai, Mexico, Japan, India, and the United Kingdom that help to build meaningful connections with international markets.

Virginia's future potential in the international economy is bolstered by the Port of Virginia, which offers world-class shipping facilities and a schedule of approximately 2,500 sailings annually to 250 ports in 100 foreign countries. Virginia has the only port on the East Coast with channels deep enough to handle the increasingly larger vessels now appearing on the shipping lanes. This trend will increase even more when the Panama Canal opens its third, wider canal lock in 2014.

Virginia recently committed \$4 billion in new funding as part of its six-year plan to support highway and rail projects. The funding, the most new funding for transportation in a generation, has supported hundreds of projects across the state. A proposed Route 460 Corridor -I-85 Connector Project would build a new, four-lane highway linking the Port of Virginia to commercial and population centers to the south and west that could result in an annual economic impact by 2020 estimated at \$7.3 billion, supporting 14,120 jobs in the corridor.

Finally, Governor Bob McDonnell has declared 2012 "The Year of the Entrepreneur." Partnering with Virginia entrepreneurs, Virginia's chief jobs creation officer, and others, the governor plans to highlight the role of entrepreneurs in creating opportunity. Over the course of 2012, Virginia will hold roundtables and meetings with business owners, a business plan competition, a college "elevator pitch" contest, and an innovation summit to inspire others in Virginia and around the world to turn big ideas into reality in the commonwealth.

# Washington – Global Reach in Aerospace, Food, Software and Retailing

Washington state has a strong foothold in several very solid world markets, particularly in the Asia-Pacific market, with considerable long-term growth potential.

Washington's ports are the closest mainland U.S. ports to Asia. Ships can arrive up to two days sooner in key ports such as Tokyo and Busan than from other mainland U.S. ports. Air freight can arrive in Beijing in less than 15 hours. Combined, the ports of Seattle and Tacoma are the 2nd largest handler of container cargo in the U.S. and have excellent rail-road-air links.

Aerospace remains a key pillar of the state economy. With rising fuel prices, world airlines are replacing older aircraft with newer, more energy-efficient models. This demand, combined with rapid growth in air travel throughout the world, has created a favorable environment for airplane manufacturers, such as Boeing. According to the Washington Aerospace Training and Research Center, to meet this demand for new travel, and to replace aging and inefficient aircraft, airlines will purchase new planes at a rate of nearly 1,500 per year.

Boeing has recently signed some very large, long-term contracts. In response, the state is making significant investments in training new aerospace workers at 11 community and technical colleges. It is also starting a research institute focused entirely on aerospace technology.

Washington's aerospace exports are unparalleled, but the state is also the third-largest exporter of food and agriculture products in the U.S. In 2010, Washington exported more than \$6.1 billion worth of food and agricultural products. From October 1, 2010 to March 31, 2011, the value of Washington-origin farm and seafood products set a record pace.

Business, government and labor leaders worked together during a 2012 special legislative session to create a program for high schools to implement specialized STEM courses. This makes sense to meet the state's projected growth of about 29,000 new jobs from 2012 to 2016 in the information industries and professional, scientific, and technical services.<sup>80</sup>

In an era with growing interest in renewable energy, Washington leads the country in the production of clean hydroelectric power. Hydroelectric power accounts for nearly three-fourths of state electricity generation, which could give Washington a competitive advantage in powering a new generation of electric vehicles.

Finally, Washington State is taking steps to simplify life for small business owners. And not to be overlooked, the state is the home of Microsoft, Amazon and Starbucks – proving that companies in Washington can successfully scale up and dominate their markets.

# Alabama

Newly elected in 2010, Governor Robert Bentley took office in Montgomery last year having run on a platform focused on strengthening the state's overall economic development efforts. Seeking to bring more unity to the state's job-creation efforts, Governor Bentley convened the Alabama Economic Development Alliance in 2011. The group of workforce, economic development, and educational sector stakeholders held meetings and gathered information throughout the state during the latter half of 2011 to develop a new strategic plan for economic development efforts in the state.

In January, the Alliance issued its new Accelerate Alabama strategic plan, built around targeting growth in 11 high-potential economic sectors throughout the state. The plan is focused on enhancing "recruitment, retention and renewal efforts" over the next three vears. Many of the sectors identified for added effort are within the advanced manufacturing and technology industries. Accelerate also attempts to streamline the operation of existing economic development assets within the state, eliminating duplication of services.

The Alliance is also tasked with following through on implementing a key set of "accelerators" in each of the plan's areas of focus. The aim is to ensure that state and local leaders are working toward the same goals, with various metrics pre-identified to measure job creation and economic development progress made during the implementation of the plan.

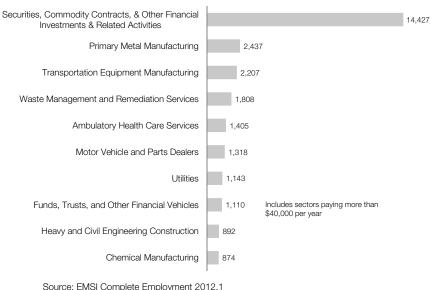
Governor Bentley and the 2011 session of the Alabama legislature enacted several pieces of legislation focused on spurring new job growth. The state's new "Full Employment Act of 2011" offered expanding small businesses in the state the opportunity to receive tax credits of up to \$1000 per new job created, as long as minimum pay standards are reached. The governor has also been promoting a "Job Creation and Retention Act," which would allow expanding businesses to retain a certain amount of the income tax stream created by new jobs. The legislation additionally provides incentives to attract new companies to the state.

Looking to make dealing with taxes a simpler process for businesses in Alabama, the state has been considering the adoption of

#### Alabama's Place in the Rankings Small Business Survival Index #6 #12 **Export Intensity** # 13 Tax Environment for Mature Firms #13 Cost of Living #14 Academic R&D Intensity #14 STEM Job Growth #19 Tax Environment for New Firms #20 **Business Tax Climate** #20 Per Capita Income Growth #20 **Road Quality** #22 **Business Closure Rate** #23 **Bridge Quality** #24 High-tech Share of All Businesses #25 **Productivity Growth**

new streamlined business-tax-filing legislation. The proposed law would create a "One Spot" system allowing businesses to deal with several different classes of taxes through one system, cutting down on the time and red tape faced by businesses.

# **Fastest Growing High-paying Industries in Alabama** Job Growth, 2009-2011



Source: EMSI Complete Employment 2012.1

# **Alaska**

According to the University of Alaska's Institute of Social and Economic Research, oil accounts for one-third of Alaska's economy. Another one-third comes from federal government spending, and the final third is "everything else." Yet, Alaska's oil production, which peaked at just over two million barrels per day in 1988, dropped to less than a third of that in 2011, triggering a dramatic decline in the economic impact of energy production on the state's economy.

Governor Sean Parnell is playing a key role in efforts to boost private-sector jobs and economic development by encouraging continued energy development in Alaska and initiatives to diversify the state's economy. The Alaska State Chamber of Commerce and others are supporting the governor's efforts to reach at least a million barrels per day of oil production by 2022, up from 563,000 per day in 2011.

The Make Alaska Competitive Coalition is working to establish competitive investment opportunities and regulatory taxation policies to reinvigorate new oil exploration and production. Specifically, the coalition is working to fix the high level of taxation and what some residents see as the progressive nature of the state's current tax policy, known as ACES (Alaska's Clear & Equitable Share). This has led producers to direct most capital spending at routine production drilling and maintenance, instead of getting new oil into the pipeline.

Governor Parnell is also vigorously supporting the construction of a gas pipeline to open up the huge reserves of gas now stranded on Alaska's North Slope. This development, estimated to cost up to \$40 billion, will encourage robust exploration of Alaska's natural-gas resources, generate long-term jobs for Alaskans, increase state revenues, and provide affordable in-state gas opportunities for consumers and businesses interested in value-added processing.

Concurrent with energy development initiatives, Governor Parnell spearheaded a \$400 million investment to create the Alaska Performance Scholarship program for performance-based scholarships. This merit-based scholarship will provide incentive for students to take a more rigorous curriculum to better prepare for college

#### Alaska's Place in the Rankings

- #2 Economic Output per Job
- #4 Long-term Job Growth
- #4 Business Birth Rate
- #4 Business Tax Climate
- #5 College Affordability
- #5 Entrepreneurial Activity
- #5 STEM Job Growth
- #8 STEM Job Concentration
- #8 Gross State Product Growth
- #9 Productivity Growth
- #13 Per Capita Income Growth
- #17 Short-term Job Growth
- #17 Tax Environment for New Firms
- #21 Small Business Survival Index
- #23 Tax Environment for Mature Firms

or job training and success, including four years each of mathematics, language arts, science, and social studies. The program is intended to improve graduation rates and make higher education more affordable for Alaska's families.

#### Oil's Economic Impact in Alaska

Since statehood, two-thirds of job creation has been due to petroleum

Half of today's jobs in Alaska can be traced to petroleum

- 127,000 jobs from oil production and state oil revenues
- 60,000 spinoff jobs from oil wealth

A family of four benefits by:

- Permanent Fund Dividend \$5,000
- No taxes \$5,000
- Extra spending \$10,000

Lighter tax burden every year

- \$2,500 per capita for households
- Timber, seafood, mining and tourism industries save \$700 million

Enhanced public spending for education, public health and safety, community services and facilities

Source: University of Alaska Institute of Social and Economic Research, 2012.

Arizona's recent job growth and tax revenues point toward an improving state economy and fiscal outlook. In the first quarter of 2012, Arizona had a net job gain of 47,000 jobs across all sectors of the economy, according to Arizona's Office of Employment and Population Statistics.

The state's budgetary situation is also showing signs of improvement. In the first quarter of 2012, Moody's Investors upgraded Arizona's credit outlook to "stable" following Standard & Poor's upgrade in late 2011. The upgrades followed actions to balance the budget including \$9 billion in temporary solutions, one-time fixes and deferrals of spending. These steps stabilized the state's budget position, including projected budget surpluses for 2012 and 2013.

Governor Janice Brewer's Four Cornerstones of Reform: The Centennial Edition called on Arizonans to prepare for a second century of opportunity and prosperity. It proposed an expanded set of goals and plans in four key areas including economic competitiveness, education, state government, and new federalism.

The hallmarks of Governor Brewer's economic competitiveness agenda are competitive taxes, a ready workforce, and lean regulation. An Economic Competitiveness Package, enacted in 2011, created the Arizona Commerce Authority and business incentives to put the state on par with other peer states. The Authority is responsible for business attraction, retention, and expansion with a focus on key base industries, including aerospace, defense, renewable energy, and science-technology.

The state has also implemented a variety of programs and tax cuts designed to attract businesses and incentivize hiring. The Arizona Competes Fund – a deal-closing fund – invests in business projects that stimulate and promote industries that provide stable, high-wage jobs. The Quality Jobs Tax Credit makes \$3,000 available per job per year for three years and is limited to 400 jobs per employer per year. The state's Corporate Income Tax rate will be cut from 6.7% to below 4.9% between 2014 and 2017.

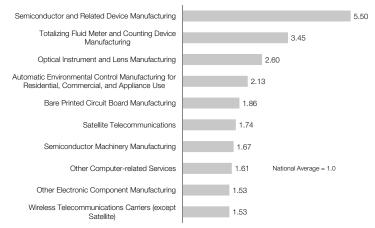
Innovation-driven jobs are also a focus for the state. The Angel Tax Credit and Capital Gains program increases the eligibility for the investment tax credit from \$2 million to \$10 million in assets, eliminates

## Arizona's Place in the Rankings

- #1 Entrepreneurial Activity
- #1 Higher-ed Degree Output
- #3 Bridge Quality
- #5 Business Birth Rate
- #8 Job Placement Efficiency
- #9 Higher-ed Efficiency
- #11 Long-term Job Growth
- #12 High-tech Share of All Business
- #12 Gross State Product Growth
- #14 Tax Environment for Mature Firms
- #15 Small Business Survival Index
- #17 Broadband Provider Availability
- #19 Broadband Speed Availability
- #20 Economic Output per Job
- #20 STEM Job Concentration
- #22 Road Quality
- #23 STEM Job Growth

the capital gains tax on income from investments in qualified small businesses, and decreases long-term capital gains for investments held longer than one year. The existing R&D Tax Credit is enhanced by 10% if increased R&D is conducted in cooperation with an Arizona University.

# Most Concentrated High Tech Industries in Arizona, 2011



## **Arkansas**

Unburdened by budget-deficit challenges during 2011 and 2012, Governor Mike Beebe and Arkansas legislators were able to commit some focus to identifying new policies and tax changes to spur business growth and job creation. The approved changes included cuts to utility taxes for manufacturers and tax incentives for the state's tourism industry. In addition to these cuts, the state has also pursued private-public workforce training solutions, such as the Truck Driver Training Pilot Initiative, and continues to seek ways to build and diversify its economy.

Governor Beebe's 2009 Strategic Plan for Economic Development identified the lack of access to needed funding as one of the major challenges facing the development of "knowledge economy" jobs in Arkansas. In order to deal with this challenge, the state has now created a new Arkansas Acceleration Fund. The new fund will be led by a committee including STEM professionals and entrepreneurs and is tasked with the identification of funding needs, policy priorities, and potential funding sources. While still in its initial stages of development, the fund is designed to make use of private and public capital grants.

Recognizing the potential to align local economic development efforts around regional goals, Arkansas now permits the creation of regional economic development partnerships. The new law, adopted in 2011, allows groups of counties and municipalities to form regional development coalitions and gives them access to state matching funds to pursue their efforts. By allowing the expansion of economic improvement efforts beyond one county or city, the state hopes to encourage the creation of innovative strategies and make more efficient use of resources. The state also now allows local governments to make use of sales tax dollars for economic development activities and infrastructure improvement projects, upon voter approval, in order to give local job-creation projects access to another development tool.

Arkansas policy leaders and voters have also identified and backed investments in transportation infrastructure as a means to build up the state's economy. A 2011 special election called by Governor Beebe saw voters in the state overwhelmingly approve issuing \$575 million in bonds as part of a nearly \$1 billion project to upgrade large stretches of the state's interstate highway system.

# #5 Cost of Living #5 High School Advanced Placement Intensity #5 Higher-ed Efficiency #8 Per Capita Income Growth #8 Tax Environment for New Firms #11 Productivity Growth #15 Entrepreneurial Activity

Arkansas' Place in the Rankings

#18 Small Business Survival Index

Job Placement Efficiency

#18 STEM Job Growth

#17

#20 Business Closure Rate

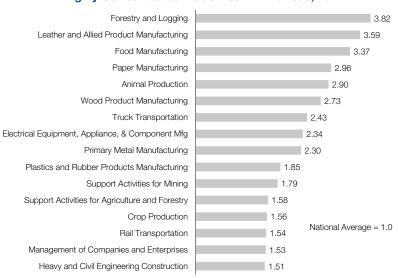
#21 Bridge Quality

#21 Business Birth Rate

#24 College Affordability

Transportation infrastructure improvements are especially critical in maintaining affordable shipping options for the state's product-centric industries, increasing economic competitiveness and long-term job creation. Arkansas is dominated by resource-intensive industries that depend upon these links, particularly forest and wood products, agriculture and animal industries and, increasingly, energy and mining.

Highly Concentrated Industries in Arkansas, 2011



# **California**

California Governor Edmund "Jerry" Brown Jr. is aggressively positioning the state as a national and global leader in zero-emission vehicles by setting benchmarks for deployment of zero-emissions vehicles and for significantly expanding California's electric vehicle infrastructure. An executive order by Governor Brown sets a series of targets aimed at achieving these goals:

- By 2015, all major cities in California will have adequate infrastructure and be "zero-emission vehicle ready";
- By 2020, the state will have established adequate infrastructure to support 1 million zero-emission vehicles in California:
- By 2025, there will be 1.5 million zero-emission vehicles on the road in California; and
- By 2050, virtually all personal transportation in the state will be based on zero-emission vehicles, and greenhouse gas emissions from the transportation sector will be reduced by 80% below 1990 levels.

The executive order comes on the heels of previous legislative and regulatory initiatives that aim to reduce greenhouse emissions while making the state an epicenter for investment and technology development in "green" technologies.

The 2006 Global Warming Solutions Act calls for a 30% reduction of greenhouse gas emissions by 2020. The goal of 80% below 1990 levels by 2050 was set by an executive order signed by former Governor Arnold Schwarzenegger.

In 2011, Governor Brown signed SB X1-2, which directed the California Air Resources Board to adopt regulations setting a 33% renewable energy target. In early 2012 the California Air Resources Board (CARB) voted to require the largest automakers to derive 15%, or about \$1.4 million, of their annual California sales from electric vehicles and other zero- or near-zero-emissions vehicles by 2025.

Supporters of the aggressive zero-emission vehicle goals see the next 10 to 15 years as critical to the success of electric-drive vehicles and view California's leadership and large market as helping to ensure that automakers continue to innovate and successfully move to mass-market success. The accrued benefits

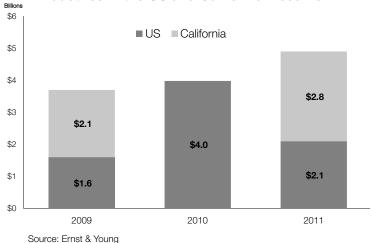
## California's Place in the Rankings

- #3 Entrepreneurial Activity
- #4 Broadband Provider Availability
- #7 Economic Output per Job
- #7 STEM Job Concentration
- #8 Business Birth Rate
- #8 Productivity Growth
- #9 High School Advanced Placement Intensity
- #10 Broadband Speed Availability
- #22 Academic R&D Intensity
- #23 Short-term Job Growth
- #24 Gross State Product Growth

for California, proponents argue, include expansion of manufacturing related to vehicles, attraction of capital investment to the state, and new opportunities for academic and research institutions in zero-emission vehicle research, innovation and education.

California leads the nation in venture capital investments in clean-tech industries. Clean technology encompasses a diverse range of innovative products and services that optimize the use of natural resources or reduce the negative environmental impact of their use while creating value by lowering costs, improving efficiency, or providing superior performance.

# Venture Capital Investment in Clean-tech Industries in the US and California: 2009-2011



# Colorado

Under John Hickenlooper's leadership, Colorado has taken an innovative approach to statewide economic development planning: creating a plan based upon local brainstorming. The project began with teams at the county level and produced 14 regional statements that became the basis for the state blueprint. Twelve state agencies and organizations collaborated to pool the input of 5,000 citizens at 50 public meetings and 8,600 survey responses.

The Colorado Blueprint outlined 24 action items in six general policy areas, assigning detailed tactics to each item. The second part of the plan outlines focus areas for each region of the state. State leaders refer to the plan as "a first set of achievable objectives to undertake together," underscoring the project's themes of quick action and involvement from across the state.

In the current phase of the blueprint plan, leaders in each of the state's 14 regions are working together to create regional councils and partnership groups to ensure the networks and the cooperative structure are in place to address economic and workforce development in each region. The regional plans will be pooled with 15 statewide plans, each addressing a key industry for the state. According to the plan, this focus creates horizontal alignment at the state level of agencies ready to serve each region, and vertical alignment at the local level based on the new local partnership groups.

Colorado has a reputation as a center for technology industries, and the state is hoping to build upon its innovation capacity with the Colorado Innovation Network (COIN). COIN is a privately funded, independent, nonprofit network designed to mobilize stakeholders from business, government, nonprofits, and academia to develop and implement strategic action plans that create new jobs to grow the economy through innovation. Lawmakers also recently allocated \$5.5 million in gaming revenues to extend the state's bioscience proof-of-concept and commercialization program through 2018.

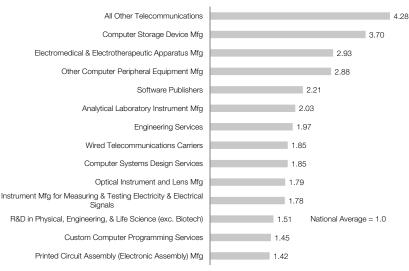
Colorado is second only to Virginia in its share of total business locations that are high-tech. The state has nearly a 60% higher-than-average concentration of high-tech jobs than the rest of the nation, averaging more than \$115,000 in earnings per job. Highly concentrated industries include

#### Colorado's Place in the Rankings

- #2 High-tech Share of All Businesses
- #3 Business Birth Rate
- #4 Entrepreneurial Activity
- #5 STEM Job Concentration
- #7 Median Family Income
- #8 Bridge Quality
- #8 Educational Attainment
- #8 High School Advanced Placement Intensity
- #9 Short-term Job Growth
- #9 Small Business Survival Index
- #15 Broadband Provider Availability
- #15 Road Quality
- #16 Business Tax Climate
- #16 Higher-ed Degree Output
- #16 Long-term Job Growth
- #18 Economic Output per Job
- #19 Academic R&D Intensity
- #24 Productivity Growth

manufacturing of electronics and computer equipment, software products and programming services, engineering services, systems design, and scientific research and development.

Most Concentrated High-tech Industries in Colorado, 2011



# Connecticut

At the time Governor Dannel Malloy first took office in January of 2011, Connecticut's unemployment level was peaking around 9.3%. From February 2011 to February 2012, Connecticut slashed unemployment to 7.8% (national unemployment in February was 8.3%), ranking the state sixth in unemployment change. In mid-2011, Governor Malloy, along with the help of the legislature, successfully introduced the "First Five" job-creation initiative to award tax credits and incentives to the first five companies to create a minimum 200 jobs within two years (or five years if they also invest up to \$25 million). The objective is to retain and expand existing companies and attract new. large-scale operations to the state. Since its inception, four companies have already taken advantage of this initiative.

Connecticut is making small-business growth a priority with the Small Business Express (EXP) program created by jobs-bill legislation in October 2011. The EXP program, administered by Connecticut's Department of Economic and Community Development (DECD), allocates \$50 million in the form of loans and grants to support small businesses that employ fewer than 50 employees. It gives preference to firms conducting business in precision manufacturing, green and clean technology, biosciences, and advanced technology.

Connecticut has taken particular aim at the bioscience industry with the introduction of the Bioscience Connecticut initiative. The first phase of the project includes the augmentation and renovation of University of Connecticut Health Center and John Dempsey Hospital. According to Connecticut Center of Economic Analysis, the construction and subsequent operation of these facilities will result in 3.100 direct and indirect jobs immediately and 18,000 jobs through 2018.

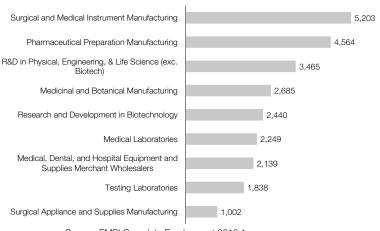
Long-term goals for this ambitious initiative include increased commercialization of intellectual property. establishment and attraction of new biotech and bioscience firms, creation of high-paying jobs, increased enrollment of medical students, development of a bioscience industry cluster, and growth of state income tax base. Based upon state impact analysis, the initiative hopes to generate 16,400 permanent jobs and \$142 million in new taxes as a result of construction and initial staffing.

#### **Connecticut's Place in the Rankings** #3 Broadband Speed Availability

- #3 Economic Output per Job
- #5 Broadband Provider Availability
- #6 Job Placement Efficiency
- #7 **Educational Attainment**
- #10 High School Advanced Placement Intensity
- #14 STEM Job Concentration
- #16 Entrepreneurial Activity
- #16 High-tech Share of All Businesses
- #17 **Business Closure Rate**
- #19 Median Family Income
- #21 Tax Environment for Mature Firms
- #22 College Affordability

Connecticut Innovations (CI), a partnership with the State of Connecticut, was authorized under the Governor's 2011 jobs bill to receive \$125 million from the state over five years to recruit high-growth, early-stage companies from other states. As part of the program, CI is required to match the state's contribution dollar for dollar with \$25 million per year over the same five-year period. CI targets outof-state technology firms through incentives that include financial support, loan programs, recruitment, technology accelerator hubs, and incentive packages.

#### **Connecticut Employment in Bioscience** Industries, 2011



## **Delaware**

As the legal home to over half the nation's publicly traded companies and possessing one of the nation's most productive economies as measured by output per job, Delaware traditionally has been seen as one of the nation's more business-friendly states. While the state has seen signs of recovery, and maintained an unemployment rate below national average during the past recession, Delaware's leaders have continued to implement new policies aimed at protecting and enhancing the state's job-creation efforts moving forward.

Under Governor Jack Markell, Delaware has put focus on policies supporting both small and large businesses. The state's Delaware Strategic Fund continues to offer low-interest loans and grants to support business relocation and expansion within Delaware, and has been targeted for increased funding by the Markell administration. To assure that the infrastructure needs of new and expanding businesses are met. the 2011 General Assembly created a \$55 million New Jobs Infrastructure Fund. The new program allows the state to make grants to build or renovate infrastructure, including roads and utilities that will support business and job creation in the state. Export infrastructure upgrades have also been a target for job-creation efforts, with approval of state-funded improvements to the Port of Wilmington. For manufacturing jobs, the state has also expanded a "New Job Creation Credit" for each job created by qualified companies.

Delaware's Blue Collar Training Grants program provides businesses in qualified industries matching grants to support skills training. Delaware has also attempted to make targeted tax reductions a part of the state's overall job-creation strategy. The state's 2012 budget included reductions in personal income tax rates and a cut to public utility taxes focused on making the state more attractive to

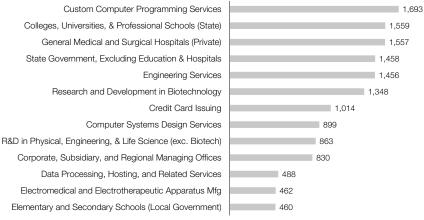
Seeking to strengthen Delaware's ability to create and attract high-tech jobs to the state, Governor Markell created the Delaware STEM Council in 2011. In addition to a central focus on improving STEM education, the council is also considering innovative ways to improve business collaboration and

#### **Delaware's Place in the Rankings**

- #1 Economic Output per Job
- #5 High Tech Share of All Businesses
- #6 Export Intensity Growth
- #6 Median Family Income
- #8 Export Growth
- #9 Broadband Speed Availability
- #9 STEM Job Concentration
- #12 Broadband Provider Availability
- #12 Business Tax Climate
- #13 Bridge Quality
- #13 Productivity Growth
- #16 Business Birth Rate
- #16 Export Intensity
- #16 Growth in Share of National Exports
- #16 Tax Environment for New Firms
- #19 High School Advanced Placement Intensity
- #19 Gross State Product Growth
- #21 Higher-ed Degree Output
- #24 Tax Environment for Mature Firms

communication with the state's educators. By driving public-private interaction, the state hopes to assure that students are receiving the education needed to prepare for careers in STEM industries.

# Top Industries for STEM Occupations in Delaware, 2011



In the face of a brightening economic picture, incoming Governor Rick Scott and state legislators have pursued several new and expanded policies aimed at building on the state's newfound momentum over the past two years. Upon taking office, Scott pressed for adoption of a new overarching job-creation policy, focused on creating 700,000 jobs over the next seven years.

A key piece of the governor's agenda was streamlining and consolidating the state's economic development efforts into a unified Department of Economic Opportunity. The new department, approved by the 2011 legislative session, better coordinates job creation, community development, and workforce training initiatives at the state level by combining and reorganizing several existing departments. The state is also using its specialized aerospace economic development agency, Space Florida, to help spur private-sector aerospace growth in the Florida Space Coast region in the wake of the cancellation of NASA's space shuttle program in 2011.

The past two legislative sessions have seen passage of increased corporate income tax exemptions, effectively eliminating the tax bill of more than 12,000 businesses throughout the state. In 2011 and 2012, lawmakers passed a series of tax cuts and credits for job creation and business expansion, including tax incentives for the manufacturing, film, aerospace, and agriculture industries, and cuts to property taxes as part of a "job creation and growth agenda" supported by the governor.

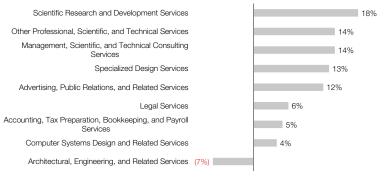
Florida has increased funding to investments in port infrastructure. The state hopes that upgrades to ports will drive new trade opportunities by meeting the needs of larger ships that will begin passing through an upgraded Panama Canal in the next several years. In addition to the state's new \$35 million port initiative, Florida has also passed legislation to expedite permitting for proposed upgrades to, and made increased revenues available for bonding port improvement projects at, the state's 14 ports.

Over the past two years, Florida added nearly 49,000 jobs in professional, scientific, and technical services sectors, for seven-percent growth. On average, jobs in these sectors pay 36% more than the state average. Within the sector, scientific research and development grew the fastest, followed by other services, consulting, specialized design, and advertising.

#### Florida's Place in the Rankings

- #1 Higher-ed Efficiency
- #1 High School Advanced Placement Intensity
- #2 Road Quality
- #4 Broadband Speed Availability
- #4 Job Placement Efficiency
- #5 Business Tax Climate
- #6 Broadband Provider Availability
- #7 Bridge Quality
- #7 Business Birth Rate
- #8 College Affordability
- #8 Small Business Survival Index
- #10 Entrepreneurial Activity
- #10 Growth in Share of National Exports
- #19 Tax Environment for Mature Firms
- #20 Export Growth
- #20 Higher-ed Degree Output
- #21 Long-term Job Growth
- #21 Short-term Job Growth
- #21 STEM Job Growth
- #23 High-tech Share of All Businesses
- #23 Gross State Product Growth
- #25 Cost of Living
- #25 Export Intensity Growth

# Florida Growth in Professional, Scientific, and Technical Sectors, 2009-2011



# Georgia

Since his election in 2010, Governor Nathan Deal has focused on improving education, expanding investment in infrastructure, and strategic tax reform to drive job creation in Georgia. To ensure that the state's economic improvement agenda included input from key stakeholders throughout the state, Governor Deal launched the Georgia Competitiveness Initiative in 2011. The initiative, which gathered input via surveys and meetings from over 4,000 individuals, identified strategies and delivered policy recommendations to improve the state's business climate, expand exports, enhance the workforce, and improve infrastructure and innovation.

The 2012 General Assembly saw the creation of a new Georgia Tax Tribunal. This independent authority will be able to expedite the review of certain tax cases brought by businesses, providing more transparency and reducing red tape. The state has also adopted legislation allowing local governments to eliminate inventory taxes on business, potentially cutting down the tax burden faced by the state's manufacturers and wholesalers.

The state also embraced more broad-based tax reform in adopting 2012's Georgia Jobs and Family Tax Reform Plan. The initiative, which included input gathered during the Georgia Competitiveness Initiative, is a broad array of tax cuts aimed at promoting a positive business climate. These included elimination of taxes on energy for manufacturing, implementation of sales tax holidays to support state retailers, and reformation of tax incentives for agriculture in the state. Reform and expansion of tax credits targeted at job creation also received support during this year's general assembly.

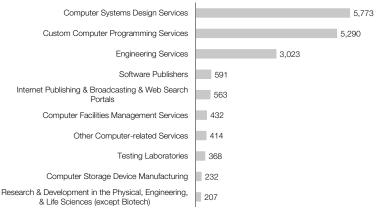
The state has put around \$135 million into the Port of Savannah over the past three years, and committed to another \$47 million in upgrades during the 2012 general assembly. The state has identified ready access to water as a challenge for future industry growth, and Governor Deal has made implementation of a four-year upgrade plan a key part of his agenda.

The Peach State's high-tech economy has performed well since 2009, adding nearly 11,000 jobs at six percent growth. Most of the growth has occurred in computer-related services, particularly the systems design and custom programming sectors.

#### Georgia's Place in the Rankings

- #1 Road Quality
- #3 Tax Environment for Mature Firms
- #5 Growth in Share of National Exports
- #6 Tax Environment for New Firms
- #6 High School Advanced Placement Intensity
- #7 Higher-ed Efficiency
- #9 High-tech Share of All Businesses
- #10 Business Birth Rate
- #11 Export Intensity Growth
- #12 Bridge Quality
- #13 Export Growth
- #14 Entrepreneurial Activity
- #16 Cost of Living
- #16 Small Business Survival Index
- #18 Broadband Speed Availability
- #18 Job Placement Efficiency
- #20 Export Intensity
- #20 Short-term Job Growth
- #23 Academic R&D Intensity
- #25 Economic Output per Job
- #25 Median Family Income

# Georgia's Fastest Growing High-tech Sectors 2009-2011



One year after Governor Neil Abercrombie launched "A New Day in Hawaii," the state is showing modest but steady signs of recovery and job growth. A combination of cost savings on public-employee health plans, improved management of state bond issues to reduce interest costs, and a reconfiguration of state departments resulted in the state entering the recent fiscal year with a positive general-fund balance for the first time in three years.

"A New Day" focuses on investments in education, rebuilding the economy, and creating a more sustainable Hawaii for future generations. Among the key education goals for 2014 is that public schools, libraries, and university campuses statewide – even in the state's most isolated and underserved communities - will have high-speed, broadband connections, thereby enabling more distance learning and research collaboration. In addition, about 1,000 new elementary and secondary school teacher positions were created in Hawaii from 2010 to 2011, pointing to Hawaii's priority on improving education. In 2011, Hawaii demonstrated the best evidence of educational improvement in the nation; Hawaii was the only state with gains in every grade and every subject on the National Assessment of Educational Progress.

Because of its isolated location and the cost of transporting energy supplies, Hawaii has the most expensive energy in the country. Hawaii spends approximately \$4 billion on imported oil per year, so there is tremendous interest in achieving energy self-sufficiency on the islands.

Hawaii is continuing to make progress toward its goal of reducing the dependence on imported fossil fuel by 70% by 2030. Renewable energy investments in solar, wind, and geothermal have grown from \$362.6 million in 2009 to an estimated \$1.3 billion in 2011. The governor recently signed a letter of intent with China to work on renewable energy projects and an MOU with Japan to solidify ongoing energy efforts like the first-of-its-kind smart grid demonstration project on Maui.

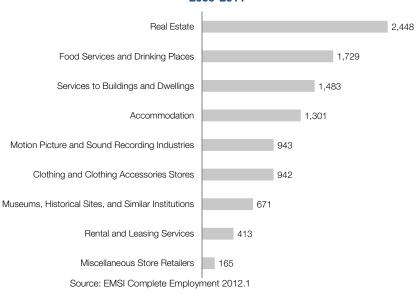
The Aloha State's tourism-reliant economy depends significantly on conditions in the mainland U.S. and key international economies, especially Japan. Fortunately,

## Hawaii's Place in the Rankings

- #1 Job Placement Efficiency
- #5 Broadband Speed Availability
- #5 Per Capita Income Growth
- #7 Long-term Job Growth
- #7 STEM Job Growth
- #8 Broadband Provider Availability
- #12 Business Closure Rate
- #13 Academic R&D Intensity
- #14 Gross State Product Growth
- #15 College Affordability
- #21 Economic Output per Job
- #21 Educational Attainment
- #22 High-tech Share of All Businesses

Hawaii's visitor days in 2011 increased by four percent from 2010 and visitor expenditures rose by about 15% during the same period. Since 2009, the real estate sector added nearly 2,500 jobs and another 1,500 in professional services to buildings and dwellings. Food services and accommodation together added another 3,000 jobs while the state's filmmaking industry added another 950.

# Hawaii Growth in Tourism-related Employment 2009-2011



# Idaho

Governor C.L. "Butch" Otter's Project 60 is a comprehensive, three-point initiative to grow Idaho's Gross Domestic Product to \$60 billion. Designed to strengthen both rural and urban communities, the plan intends to grow the existing base of Idaho businesses and industry, attract new business ventures to Idaho from other states, and increase exports and attract international investment capital.

Idaho's exports in 2011 totaled \$5.9 billion, up from \$5.2 billion in 2010. Computers and electronic products accounted for the largest share of exports at \$2.9 billion, followed by food products of \$564 million, primary metal manufactures of \$482 million, chemicals at \$391 million, and agricultural products totaling \$252 million.

Export-supported jobs linked to manufacturing account for an estimated 3.9% of Idaho's total private-sector employment. Nearly one-sixth of all manufacturing workers in Idaho depend on exports for their jobs, according to the U.S. International Trade Administration. In 2009, foreign-controlled companies employed 14,400 workers.

The Idaho Department of Commerce launched a new program in 2012 for qualifying Idaho companies to assist with export market development and promotion activities. The State Trade and Export Program (STEP) is available to businesses that are looking to increase exports, find new markets, or get involved in exporting for the first time. Grants will be awarded in amounts up to \$10,000, with a dollar-for-dollar cost-match requirement.

The Idaho Technology Council's (ITC) initiative, called IGem, seeks to foster the new Idaho business "gems" with the potential to have a major impact

on the state's economy. The organization is working with the Department of Commerce and the Idaho Innovation Council in pursuing common Project 60 goals, particularly increasing university reasearch and commercializatoin and launching more companies in the state.

The ITC is a private group creating public-private links. Its research-and-development committee

#### Idaho's Place in the Rankings

- #4 Gross State Product Growth
- #5 Road Quality
- #8 Cost of Living
- #9 Entrepreneurial Activity
- #9 Long-term Job Growth
- #12 College Affordability
- #12 Productivity Growth
- #14 Bridge Quality
- #14 Business Birth Rate
- #14 Export Growth
- #15 Job Placement Efficiency
- #17 STEM Job Concentration
- #18 Export Intensity Growth
- #20 Higher-ed Efficiency
- #20 Growth in Share of National Exports
- #21 Business Tax Climate
- #25 Export Intensity

consists of vice presidents of research from all three public universities as well as top executives from the Center for Advanced Energy Studies, the Idaho National Laboratory and private companies.

The current high-tech "gems" that differentiate the state from others are in the computers and electronic products sectors, as confirmed by the state's export figures. As reported in the table, these high-concentration industries have shown modest but steady growth from 2010 to 2011.

Idaho High-tech Sector Growth, 2001-2011

Technology Subsector	2011 Jobs	Percent Growth	2011 Concentration
Semiconductor and Related Device Manufacturing	7,749	11%	7.98
R&D in Physical, Engineering, & Life Science (exc. Biotech)	7,402	(6%)	3.09
Wired Telecommunications Carriers	3,554	(4%)	1.05
Computer Storage Device Manufacturing	2,351	3%	20.56
Other Computer Related Services	833	(5%)	1.08
Other Computer Peripheral Equipment Manufacturing	513	11%	2.53
Other Electronic Component Manufacturing	400	10%	1.25
Fiber Optic Cable Manufacturing	55	8%	1.33

Even though the scope of the economic problems has reduced measurably from those seen during the depths of the Great Recession, Illinois policymakers continue to face deficit and unemployment challenges entering 2012. The scope of challenges facing the state, however, including continued budget deficits, higher borrowing costs, and pension liabilities, remain of central importance in shaping the agenda set by Governor Pat Quinn and the state's General Assembly.

Recognizing the state's need to improve its job-creation performance, Governor Quinn created the Illinois Economic Recovery Commission. This initiative, conducted in 2010, studied the state's economic development priorities, conducting public hearings to help identify new solutions for job creation. The committee made multiple recommendations to help build the state's economy, including new focus on infrastructure improvement, increasing exports, and supporting the innovation sector. Governor Quinn has also made investment in sustainable energy development a key part of his jobs agenda, supporting a series of related policy proposals as part of his comprehensive energy strategy during 2011.

In late 2011 Illinois adopted a series of bipartisan, corporate tax reforms aimed at supporting business growth and job creation. Signed into law by Governor Quinn in December, the changes include a five-year extension to the state's research-and-development tax credit, increased inheritance tax exemptions, expanded loss carry forwards, and increasing tax flexibility for businesses. The changes also extended a variety of existing business tax exemptions, providing a more predictable tax environment for the state's entrepreneurs. The extended programs include the state's Economic Development for a Growing Economy (EDGE) initiative, which incentivizes job creation by providing new and growing businesses with tax credits equal to the state income taxes withheld from the wages of added workers.

Difficult budget conditions have also led Illinois to explore new means of infrastructure investment. The state's new Public-Private Partnerships for Transportation Act allows the Illinois DOT to explore various forms of public-private partnerships to build, finance, and operate needed infrastructure upgrades throughout the state. This new set of financing options helps to ensure that economic growth will not be stifled

#### Illinois' Place in the Rankings #2 Median Family Income #4 Growth in Share of National Exports **Bridge Quality** #6 #10 Economic Output per Job Broadband Speed Availability #11 #11 High-tech Share of All Businesses #12 Higher-ed Degree Output #14 **Educational Attainment**

#18 Cost of Living

#19 Export Growth
#19 Export Intensity

#15

#21 Export Intensity Growth

#21 High School Advanced Placement Intensity

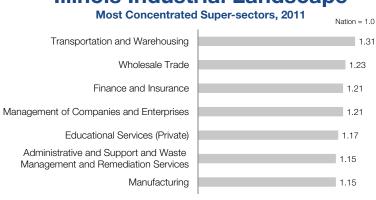
Broadband Provider Availability

#24 Tax Environment for New Firms

by a lack of infrastructure investment.

The importance of high-quality, transportation-infrastructure links in Illinois is evident considering the most concentrated super sectors of its economy. The state has more than 30% more transportation and warehousing jobs than the national average, and 23% more in wholesale trade. While manufacturing has suffered a decline, it is still a critical part of the state's economic base at 15% higher job concentration than the national norm.

# Illinois Industrial Landscape



# Indiana

With a balanced budget, dropping unemployment rates, and strong bond rating, Indiana is gaining momentum in its recovery from the recent economic downturn. As part of the state's plan for recovery, Governor Mitch Daniels and the state's legislators have enacted a series of tax cuts, workforce reforms, and job creation programs over the past two sessions aimed at building on the state's newfound momentum.

Entering 2012, Governor Daniels made adoption and implementation of "right-to-work" legislation one of his chief economic policy goals, arguing that it would prove valuable in attracting new business to the state. While the proposal led to contentious debate, it was eventually passed by the General Assembly, making Indiana the 23rd state in the nation to adopt such policy. The state has also adopted reforms to its unemployment insurance system, offering businesses in the state tax relief projected at up to \$2 billion over the next ten years.

Most notable of Indiana's tax reforms was the adoption of a significant cut in corporate income taxes, from 8.5% to 6.5%, in 2011. Supporters argued that the cuts will make businesses in the state more competitive with those in neighboring states. Another bill enables local governments to make use of 10-year property tax exemptions on machinery and equipment investments by qualified businesses, potentially providing another incentive for business expansion. The General Assembly also recently adopted a nine-year phase out and elimination of inheritance taxes.

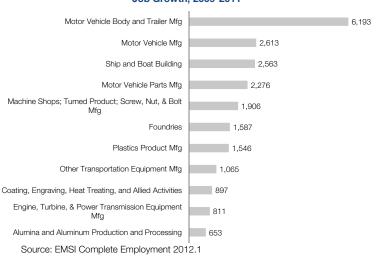
The state is also working to build interagency coordination in delivery of its entrepreneurship programs, easing potential complications for new business owners. The state has also launched an innovative Young Entrepreneurs Program, offering a new approach to supporting promising startups in Indiana. The initiative identifies promising new entrepreneurial ventures through a business plan competition. The winning competitors will receive support from the state in being matched with communities that can offer the entrepreneurs competitive incentive packages.

Manufacturing has remained a key area of competitive advantage for the state's economy the past two years. Indiana added more than 10,000 manufacturing jobs over the past two years, during a time of national

#### **Indiana's Place in the Rankings** #7 Cost of Living #8 Export Intensity #8 **Road Quality** #10 Short-term Job Growth **Business Tax Climate** #11 Growth in Share of National Exports #13 #14 **Export Intensity Growth** #14 High School Advanced Placement Intensity #14 **Productivity Growth** #15 **Business Closure Rate** Tax Environment for New Firms #15 #19 **Bridge Quality** Higher-ed Degree Output #19 #20 Median Family Income #20 Small Business Survival Index **Export Growth** #21 #23 Broadband Speed Availability #24 Academic R&D Intensity #24 Economic Output per Job

decline. At the same time, the state increased its manufacturing concentration, another indication of strength compared to other states.

Indiana's Fastest Growing Manufacturing Sectors
Job Growth, 2009-2011



After nearly a decade out of office, long-serving Governor Terry Branstad returned to office in 2011, pledging to help the state create 200,000 new jobs over five years.

One of the major changes enacted by the Branstad administration is the creation of the lowa Economic Development Authority. Passed into law in 2011, the authority replaces the state's previously existing Department of Economic Development. The goal of the reform is to structure economic development policy in the state around a public-private partnership model. As part of the new approach, the governor established the lowa Partnership for Economic Progress, an advisory body tasked with identifying and recommending new state job-creation strategies in partnership with the private sector.

At the same time, the state created the lowa Innovation Council. This new nonprofit is tasked with directing funding sourced from the private and public sectors toward efforts focused on spurring entrepreneurship and innovation-driven job creation. The council will receive no direct state funding, and is intended to work in concert with private-sector and local-government efforts to support job-creation activity in lowa.

Governor Branstad issued an executive order requiring the issuance of jobs-impact statements in conjunction with any proposed administrative rule. By adding this jobs-impact provision, the state hopes to avoid issuance of rules that will have an unduly negative effect on its job-creation goals.

lowa-based advanced manufacturing, bioscience, and information technology companies that are in the process of developing high-potential technologies for commercialization can receive state support through lowa's Demonstration Fund. Focused on supporting innovation at small- and medium-sized companies, the fund offers competitive grants and loans of up to \$150,000 to successful applicants. Iowa also makes use of tax incentives to drive job growth in the state, through its High Quality Jobs Program. Targeted for expanded funding by the Branstad administration, this program offers a set of tax exemptions to job-creating companies that relocate, expand, or modernize operations in the state. Recipients are required

#### #2 **Business Closure Rate** #2 Higher-ed Degree Output #5 **Productivity Growth** #6 Per Capita Income Growth #9 **Export Growth** Gross State Product Growth #11 #12 **Educational Attainment** #12 Growth in Share of National Exports Median Family Income #14 #15 **Export Intensity Growth** #17 **Export Intensity**

**lowa's Place in the Rankings** 

to meet certain wage thresholds.

Cost of Living

Academic R&D Intensity

College Affordability

Higher-ed Efficiency

Broadband Provider Availability

#19

#20

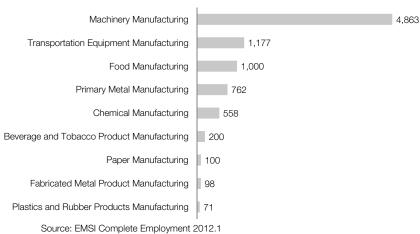
#22

#23

#24

While there have been recent declines in furniture and wood-product manufacturing, lowa's manufacturing sector has performed well over the past two years. Since 2009, growth has been strongest in the machinery, vehicle, and food manufacturing sectors.

# Growth in Key Iowa Manufacturing Industries 2009-2011



# Kansas

Under new Governor Sam Brownback's "Road Map for Kansas," the state set several economic improvement goals including increasing net personal income in the state and increasing private-sector employment.

Seeking enhanced flexibility for its job-creation efforts, Kansas has created a new Job Creation Program Fund. The new "deal closing" fund allows the state, led by the office of the governor, to make investments and extend incentives needed to attract, retain, and support job-creating businesses. The state also approved a unique new tax incentive to support capital investment and business expansion. Under the new law, businesses that make qualified capital upgrades, such as purchasing new equipment to modernize or expand their facilities, may receive an expense deduction against their income taxes equal to 100% of the investment. The entire deduction can be taken in the first year, instead of being spread out over multiple vears.

Governor Brownback launched a new Office of the Repealer in 2011. The new office held open meetings throughout the state and created a website soliciting suggestions for potential repeals and reforms from business leaders and the public. The process led to the identification of 51 laws, regulations, and executive orders as suggested targets for elimination. The state plans to continue to accept new suggestions from the public, making streamlining government regulation a continued goal.

The Promoting Employment Across Kansas (PEAK) program offers tax incentives to companies that establish or expand operations in Kansas. Under the

newly expanded program, businesses are allowed to retain up to 95% of the payroll taxes for qualified jobs they create. The benefit can last up to ten vears, supporting the creation of new, high-paying jobs in the state.

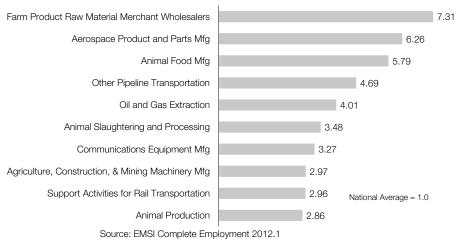
The state's industry concentrations are largely grouped around its traditional strength in production agriculture and in manufacturing, including the state's large aerospace-industry cluster. While the oil sector is smaller than that found in neighboring states, it is an area of relative economic concentration, at four times the national average. Spurred by higher

## Kansas' Place in the Rankings

- #8 **Business Closure Rate**
- #9 College Affordability
- #10 Cost of Living
- #14 **Road Quality**
- #15 **Bridge Quality**
- #15 Higher-ed Degree Output
- #15 Median Family Income
- #16 **Educational Attainment**
- #17 **Productivity Growth**
- #18 **Export Intensity**
- #18 Higher-ed Efficiency
- #20 High-tech Share of All Businesses
- #22 **Export Intensity Growth**
- #22 Per Capita Income Growth
- #23 Broadband Provider Availability
- #23 Growth in Share of National Exports
- #23 Small Business Survival Index
- #24 STEM Job Concentration
- #25 **Business Tax Climate**
- #25 **Export Growth**

prices and new drilling technologies, oil production in Kansas is on the rise, up 24% since 2009.

#### Most Concentrated Industries in Kansas, 2011



A leader in tax and regulatory policy, Kentucky continues to make tax reform and streamlining government a central focus of its job-creation policies. Seeking to find new ways to improve its overall tax environment, Governor Steve Beshear created a Governor's Blue Ribbon Commission on Tax Reform by executive order in 2012. The new commission has been tasked with conducting a comprehensive review of the commonwealth's tax system, and with making tax policy recommendations. The commission plans to hold hearings, conduct public meetings throughout the state, and work with experts to craft business-friendly tax policy proposals.

In 2011, the state launched efforts to build a one-stop business portal for business, easing access to information needed by entrepreneurs. Building on this concept, a new law adopted in 2012 will shift all local business taxes to a standard form, and make them available to businesses in one spot online, cutting down on the tangle of forms provided by over 200 jurisdictions. To assure that regulatory processes for business are transparent, the commonwealth recently adopted legislation requiring that all state regulatory processes follow a uniform procedure and will make information on proposed regulations available online for ease of access.

Also in 2012, Kentucky approved a \$2.4 billion transportation infrastructure plan during a legislative special session. This new commitment includes funding to continue pursuit of the Ohio River Bridges Project, a proposed multi-billion-dollar bridge improvement project linking nationally important trade corridors between Kentucky and southern Indiana.

The state's newly adopted career and technical-education-accessibility fund will provide grant funding to develop innovative occupational training programs in Kentucky's middle schools, high schools, and community and technical colleges. The grants will also be available for creation of career academies focused on preparing high school students for careers in high-demand fields throughout the commonwealth. Schools receiving grants will be required to build local advisory councils including business and

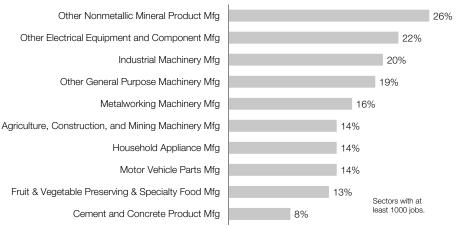
## Kentucky's Place in the Rankings

- #4 Cost of Living
- #4 Road Quality
- #7 Export Intensity
- #7 Tax Environment for New Firms
- #11 Business Closure Rate
- #12 Entrepreneurial Activity
- #12 Short-term Job Growth
- #18 Tax Environment for Mature Firms
- #19 Job Placement Efficiency
- #20 STEM Job Growth
- #22 Business Tax Climate
- #22 Small Business Survival Index
- #24 High School Advanced Placement Intensity

educational leaders to ensure that workforce training efforts in the state are tailored to industry needs.

Kentucky's manufacturing sector, with over 220,000 jobs, is one of the state's more concentrated industry areas. While the sector has seen some decline in employment over the last decade as part of the overall national retrenchment in manufacturing jobs, the sector has held its own over the past two years. Several industries in Kentucky have created jobs as the nation has exited the recession, including the state's growing automotive parts manufacturing industry.

# Fastest Growing Manufacturing Sectors in Kentucky 2009-2011



# Louisiana

Louisiana continues to rebound from the economic impact of the recession, driven by its national leadership in exports and strong energy sector. While challenges remain, including the continued recovery of New Orleans and ongoing budget deficit issues, the state and its leaders have continued to make investments in building a more solid, diversified economic base for the state.

Louisiana's strength in exports is supported by its large network of ports and shipping facilities. The state is home to more than 25 inland, coastal, and deep-draft port facilities, with several more under development. State leaders have continued to invest in upgrades and expansions to the system. The state's Port Priority Program has been in operation for 20 years, investing in construction, rehab, and expansion of ports. The state invested another \$20 million in the program in 2011, and additional commitments are under consideration for 2012. Louisiana has also created and recently extended a Port Infrastructure Tax Credit program in support of private-sector investment in port facilities. Qualified projects are eligible for tax credit of up to 100% of the capital committed to the investment.

A key goal of Governor Bobby Jindal's administration has been building up the state's workforce development system. Upon taking office, the governor championed reforms built around a "comprehensive plan" for restructuring the system. The changes adopted included creation of FastStart, which provides employee recruitment and customized training services free of charge to qualified businesses.

The state's Quality Jobs Tax Credit program, extended for six years in 2011, continues to be an important tool in Louisiana's job-creation efforts. Businesses in targeted growth industries are eligible for rebates on qualified payroll expenses, sales tax rebates on capital investments, and other investment tax credits. A recently created and expanded research-and-development tax credit program provides up to 40% credit. Also extended in 2011, the Technology Commercialization Tax Credit program also provides payroll rebates for the creation of new technology-sector jobs, supporting the expansion of Louisiana-based businesses, and research commercialization.

Louisiana's total foreign exports have rebounded sharply following a downturn during the global

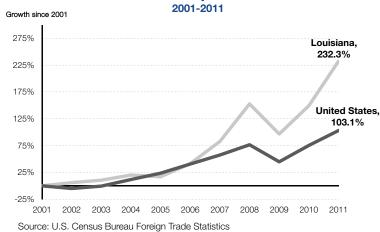
#### Louisiana's Place in the Rankings Growth in Share of National Exports #2 #2 Per Capita Income Growth #2 Tax Environment for New Firms #3 **Export Intensity** #3 **Export Intensity Growth** #4 College Affordability #4 **Export Growth** #7 **Business Closure Rate** #7 Short-term Job Growth #9 Job Placement Efficiency #10 Tax Environment for Mature Firms #14 Economic Output per Job #16 Higher-ed Efficiency #17 Cost of Living #17 Entrepreneurial Activity #20 **Business Birth Rate** #22 STEM Job Growth

economic slowdown of 2008-09. The state has outperformed national export trends over the past five years, building upon strong growth handling the export of agricultural commodities, petroleum-related products, natural gas, and other petrochemicals.

Long-term Job Growth

#24

# Louisiana Export Growth



Maine passed significant tax reforms in 2011, leading to \$150 million in tax reductions. Considered the largest tax cut in Maine's history, the new reforms to the tax code include a reduction of the top tax rate from 8.5% to 7.95% and an increased exemption for estate taxes, potentially offering tax relief to some small businesses.

State economic development professionals are continuing with an innovative deployment structure built upon collaboration and regional assets. Working from the bottom up, Mobilize Maine leverages existing assets and programs and builds new networks between organizations and job creators. This critical shift away from recruitment-based economic development tactics benefits Maine's networks of smaller cities and towns.

The state has also taken steps to reform and increase efficiency in regulatory processes. Upon taking office in 2011, Governor Paul LePage held a series of "red tape workshops" around the state, seeking input from business leaders and the public. These meetings, along with input from state policymakers, led to the introduction and adoption of bipartisan regulatory reform legislation. Reforms include a new business liaison program designed to help guide new and existing businesses through their interaction with state agencies.

In Late 2011, Governor LePage unveiled a new State Workforce Investment Board to focus on funding job training activities and policy creation.

The governor's workforce plan expands the state's four workforce areas into eight and focuses on making more effective use of jobtraining funds.

Recently passed legislation aims to reform environmental oversight and streamline the permitting process associated with Maine's mineral mining industry. Supporters believe the new policy will ease adoption of new mining technologies that have been developed in the metallic mineral extraction industry in northern Maine while maintaining environmental protections. The

#### Maine's Place in the Rankings

#11 Broadband Provider Availability

#13 **Entrepreneurial Activity** 

#13 High School Advanced Placement Intensity

Tax Environment for New Firms #20

#24 **Educational Attainment** 

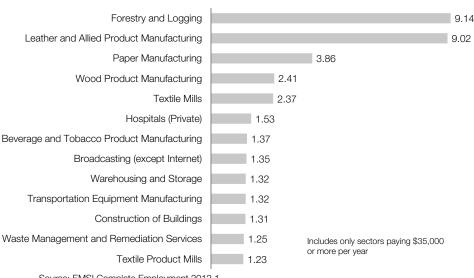
#25 High-tech Share of All Businesses

#25 Per Capita Income Growth

modernized regulations and permitting processes may, according to projections, enable the creation of hundreds of new jobs in the state's mining sector.

The Maine Department of Transportation is undertaking a feasibility study to explore the realities of building a proposed 220-mile east-west highway spanning northern Maine. This piece of infrastructure would create an important economic connection to the people and businesses of rural central Maine and enable increased commercial activity between Maine and Canada. While actual construction would be several years in the future, the project, as proposed, would be privately financed through tolls and is expected to cost approximately \$2 billion.

## Maine's Most Concentrated Industries, 2011



# **Maryland**

Maryland continues to focus on developing technology jobs, building on its national leadership in innovation and entrepreneurship. The state's new InvestMaryland initiative raised \$84 million of venture capital in 2012 by the online auction of tax credits to insurance companies, exceeding its goal of \$70 million-75 million. The new funds will be split between private investment firms and the state's Maryland Venture Fund to make investments in promising tech-based startups. State profits on investments will be directed into the venture fund to support future investments or be placed into the state's general fund.

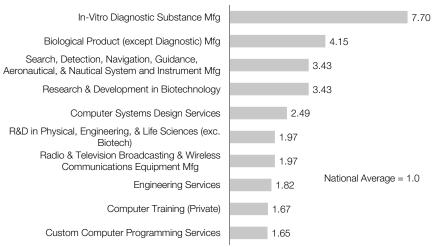
The state's new Innovate Maryland initiative, adopted by the 2012 General Assembly, is designed to build a technology transfer partnership between state agencies, federal labs, and several of the state's universities. Led by the state's successful Maryland Technology Development Corporation (TEDCO), the new initiative will provide grants to university-based researchers developing technologies with commercial potential, supporting the creation of Biol new innovation-based companies and Search,

potential, supporting the creation of new innovation-based companies and jobs in the state. The state also offers a biotechnology tax credit of up to 50% for qualified investments in Marylandbased companies and a research and development tax credit.

Governor Martin O'Malley has also emphasized government reform as part of his job-creation strategy. In 2011, he launched a "Job Creation Through Regulatory Reform" initiative, focused on conducting an intensive, two-month review of state rules and regulations. Each agency in government was directed to find ways to streamline regulation and better interact with the private sector. The process led to the identification of 131 regulations for repeal or revision. The state launched the Maryland Made Easy initiative to ease business interaction with government agencies. The project includes creation of a one-stop website to access licensing and permitting resources, expedited state review of development proposals, and reforms of permitting processes to increase efficiency and reduce barriers for business.

Maryland is among the nation's leading states for STEM job concentration. The state is home to a strong concentration of technology-based industries, which have helped Maryland become a center for academic and private-sector research and development.

# Most Concentrated Technology Industries in Maryland 2011



Maryland's Place in the Rankings								
#1	Academic R&D Intensity	#10	Educational Attainment	#18	Gross State Product Growth			
#2	High School Advanced Placement Intensity	#10	Productivity Growth	#19	Business Birth Rate			
#2		#11	College Affordability	#19	Long-term Job Growth			
	High-tech Share of All Businesses	#12	Economic Output per Job	#21	Entrepreneurial Activity			
#3	STEM Job Concentration	#12	STEM Job Growth	#22	Growth in Share of National			
#5	Median Family Income	#14	Short-term Job Growth	#00	Exports			
#8	Tax Environment for Mature	#15	Broadband Speed Availability	#23	Export Intensity Growth			
	Firms	#16	Per Capita Income Growth	#24	Export Growth			
#10	Broadband Provider Availability			#25	Higher-ed Degree Output			

# **Massachusetts**

Massachusetts continues to be a national leader in innovation. The state's strong IT, life sciences, medical devices, and pharmaceuticals clusters have made Massachusetts a leader in attracting federal and private research dollars, driving technology transfer and creating jobs.

In July 2011, Governor Deval Patrick unveiled the MassBroadband 123 project to create a 1,300 mile fiber-optic network covering the underserved regions of western and north-central Massachusetts. The project is expected to be completed in mid-2013 using state funding and nearly \$80 million in federal grants. The construction of MassBroadband 123 will employ hundreds of people and, upon completion, will deliver service to 333,500 households and 44,000 businesses.

The commonwealth's Green Jobs Act was designed to support and grow a clean energy industry cluster, support clean-energy companies, and provide job training for workers in green-energy fields. Massachusetts also continues to implement the Green Communities Act, which promotes major energy efficiency measures from utilities, mandates 15% of electricity be generated from renewable sources, encourages green building design, and is aimed at driving job growth in green-associated industries. The state is now home to more than 4,900 green companies, supporting 64,000 jobs.

The Mass Challenge initiative promotes early-stage entrepreneurship through a business competition that awards \$1 million in funding, mentorship, training, office space, and legal advice to successfully competitive companies. The Massachusetts Advanced Manufacturing Collaborative (AMC), launched by the governor in November 2008, is designed to revitalize the commonwealth's manufacturing industry and create jobs by promoting manufacturing, addressing workforce and education gaps, providing technical assistance and innovation, focusing on reducing business costs, and providing access to capital.

The Governor's STEM Advisory Council works to facilitate public-private university partnerships to raise awareness about STEM education and to plan and develop STEM initiatives and programs. In 2011, the Patrick administration endorsed six

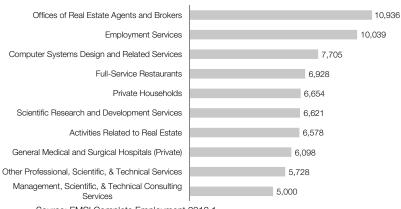
#### Massachusetts' Place in the Rankings

#1 **Educational Attainment** #2 Academic R&D Intensity #2 Broadband Speed Availability #3 Broadband Provider Availability #3 Higher-ed Degree Output #3 Job Placement Efficiency #3 Median Family Income #4 STEM Job Concentration #6 High-tech Share of All Businesses High School Advanced Placement Intensity #8 Economic Output per Job **Business Closure Rate** #14 #23 **Export Intensity** #24 **Business Tax Climate** #24 Per Capita Income Growth

STEM initiatives at universities, colleges, and schools across the state and awarded grants to 15 innovation schools in support of STEM curriculum development activities

Massachusetts remains a leader in STEM job concentration, and several research-, technology-, and science-related industries ranked among the state's leaders in job growth over the past two years. The state's real estate sector also began to show signs of job creation as the state exited the recession.

#### **Leading Massachusetts Job-growth Sectors** 2009-2011



# Michigan

The past year has been one of upheaval for Michigan's job-creation efforts. Spurred to action by the state's high unemployment rate and the policy agenda of incoming Governor Rick Snyder, the state has embraced a set of new policy solutions designed to increase the state's attractiveness to business and drive economic recovery.

Among Governor Snyder's central goals was a reform of the state's business taxation system. Adopted by the legislature, the tax reforms eliminated the existing Michigan Business Tax, replacing it with a flat six percent corporate income tax. This reform provided an estimated \$1.6 billion in tax relief to the state's businesses. The new tax laws also eliminated double taxation of some small businesses, which could be caught paying income and business tax liabilities on the same sum.

The state's new Michigan Business Development Program replaces a set of existing tax incentive programs, and is designed to provide loans, grants, and other support funding to businesses that meet thresholds for new job creation. The new Michigan Community Revitalization Program provides loans and grants for urban redevelopment projects involving blighted and obsolete properties. The new programs are backed by a \$100 million state investment in the Michigan Strategic Fund. The new programs also require projects receiving funds to meet preset benchmarks to continue receiving funding, and to have repayment clauses for projects that fail to make progress toward promised goals, enhancing accountability to the public.

While the state has reorganized some existing business incentive programs, it has approved others focused on supporting job creation in targeted industries. Seeking to support the expansion of the state's major automotive industry as it adopts the production of hybrid and electric vehicles, the state created a new tax incentive for the construction and development of advanced battery manufacturing plants.

Pure Michigan Business Connect is an \$8 billion public-private partnership focused on creating jobs and business growth through "economic gardening." The philosophy is

#### Michigan's Place in the Rankings #5 Short-term Job Growth #6 **Export Intensity** #9 STEM Job Concentration #12 Academic R&D Intensity #12 Cost of Living #12 Job Placement Efficiency #12 Median Family Income #18 **Business Tax Climate** Higher-ed Degree Output #18 #24 **Road Quality** #25 Broadband Speed Availability #25 Higher-ed Efficiency #25 Tax Environment for Mature Firms

focused on supporting and nurturing homegrown companies instead of seeking outside companies as targets for relocation. The program connects such companies with the investment capital, information, and talent they need to move beyond the initial stages of development.

Tax Environment for new Firms

Michigan's manufacturing sector, hit hard by the recession of 2008, is showing signs of growth. Between 2009 and 2011, the sector added over 30,000 jobs throughout the state, led by the rebound of segments of the state's vital automotive cluster.

#### **Fastest Growing Michigan Manufacturing Industries** Job Growth, 2009-2011



#25

# **Minnesota**

Division over closing Minnesota's 2011 budget shortfall led to a three-week government shutdown in July, creating a challenging environment for adoption of new job-creation policy ideas and reform proposals. While the state's political climate was less than positive at times, Minnesota continued to make some economic progress. The state's relatively low unemployment rate continued to drop, and exports hit record quarterly levels by the end of the year, giving hope that the state may be gaining economic momentum entering 2012.

Entering his second year in office, Governor Mark Dayton has made job creation one of his four key initiatives. The governor has proposed creating tax credits for new job creation, increased investments in infrastructure, expanded workforce training, and increased commitments to existing business finance programs. The Minnesota Investment Fund, which received increased funding in 2011, is among his targets for further expansion. The program makes grants to local governments, allowing them to make loans to growing companies in need of financing for real estate and equipment purchases. The fund is aimed at creating jobs in industrial-, manufacturing-, and technology-focused sectors, and requires a private funding match for investments.

Dayton has also proposed expanded funding for the state's FastTRAC workforce skills enhancement program. Focused on helping adults gain access to career-specific job training, FastTRAC works with local employers to tailor training to the needs of growing businesses, helping support their expansion and increasing the likelihood of job placement for program graduates. The initiative funds training programs through a competitive application process, giving it the flexibility to shift, based on market demand and regional needs.

Minnesota also offers a set of business-friendly tax-incentive programs. The state's Job Opportunity Building Zone (JOBZ) program provides a variety of tax exemptions to businesses that locate or expand in one of the state's ten identified zones. In order to be eligible, created jobs must meet certain wage standards. The goal of the program is to create jobs in targeted industries including manufacturing and value-added agriculture in regions identified as being "poised for business growth." Minnesota also allows local

## Minnesota's Place in the Rankings

#1 **Bridge Quality** #3 **Educational Attainment** #4 Higher-ed Degree Output Median Family Income #4 #12 STEM Job Concentration #13 **Road Quality** #14 High-tech Share of All Businesses #19 Broadband Provider Availability #21 **Business Closure Rate** #21 **Export Intensity** #21 Job Placement Efficiency #22 Economic Output per Job

governments to make use of property tax abatements to ease the cost of startup for businesses in selected industries, including manufacturing, research and development, and technology.

**Productivity Growth** 

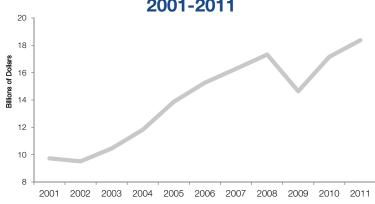
High School Advanced Placement Intensity

#22

#23

Minnesota has seen steady growth in demand for its manufactured, agricultural, and mining products since the beginning of 2010. Manufacturing, in particular, has been a bright spot recently, posting eight consecutive quarters of year-over-year growth in exports during 2010 and 2011.

# Minnesota Manufactured Exports, 2001-2011



Source: U.S. Census Bureau Foreign Trade Statistics

# **Mississippi**

Upon taking office in 2012, Mississippi Governor Phil Bryant stated that his first priority is "to make sure every Mississippian has a job." Subsequently, he unveiled the Mississippi Works initiative designed to create a new strategy for economic growth, workforce development, and attracting investments from out of state. Mississippi Works is privately funded and overseen by a committee of over 100 business leaders from throughout the state. As a part of the program, the governor signed legislation that allows students at risk of dropping out of high school to participate in community college workforce training programs, receiving jobs-skills certification while still completing high school.

Recognizing the need to protect businesses with less than 100 employees, Mississippi enacted a Small Business Regulatory Flexibility Act in 2012. The act authorizes a regulatory review committee of twelve current and former small-business owners to review proposed and existing regulations and laws, and determine the impact to small businesses in the state and provide recommendations for mitigating impact. State agencies enacting new rules are also required to determine what impact their implementation will have on small businesses and are directed to identify ways to minimize the impact of regulation.

The state's new Self-Employment Assistance Program, approved in 2012, will offer support services to unemployed individuals interested in starting new businesses. Participants receiving unemployment benefits will be eligible for free mentoring and training, offering out-of-work individuals an opportunity to explore potential self-employment, and potentially fostering the creation of new job-creating businesses.

Mississippi has identified healthcare as a target for job creation. The state's new health care industry zone program is designed to attract pharmaceutical, biotechnology, and medical services firms near major medical facilities in the state. Firms who locate within designated zones would qualify for tax incentives and infrastructure support, provided they invest at least \$10 million and create at least 25 jobs. By enhancing medical facilities and attracting new health care-related manufacturing, research, and distribution facilities, the state hopes to stimulate other regional businesses, including hotels,

#### Mississippi's Place in the Rankings #5 **Export Growth Export Intensity Growth** #8 Cost of Living #9 Growth in Share of National Exports #11 Higher-ed Efficiency Small Business Survival Index #12 #14 Per Capita Income Growth #15 **Export Intensity** #15 **Productivity Growth** #16 **Business Closure Rate** STEM Job Growth #16 #17 Academic R&D Intensity #17 **Business Tax Climate** #20 College Affordability #21 Tax Environment for New Firms

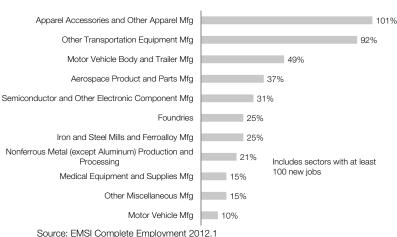
retailers, and service industries.

**Bridge Quality** 

#25

While Mississippi has seen some manufacturing decline over the past two years in ship building, plastics, forest and wood products, other industries have added jobs. Notable growth occurred in the aerospace sector, some metals industries, and some motor vehicle sectors.

# Manufacturing Job Growth in Mississippi



# **Missouri**

Taking office in the midst of the economic downturn, Governor Jay Nixon launched the Strategic Initiative for Economic Growth. After holding meetings with business and public-sector leaders throughout the state, the initiative outlined a series of strategic objectives and key growth industries as part of a five-year economic growth plan for the state. As part of the plan, the state has identified tax reforms, workforce development and infrastructure investment as key pillars of building a stronger economic future for Missouri.

In 2011, Governor Nixon called a special session of the state's General Assembly specifically focused on job-creation policies. While the session failed to reach passage on many of the policy proposals debated, it did build some consensus on extending more support to programs supporting businesses in the state's science and technology-based industries. This year has seen continued discussions over new policy initiatives, with the governor pushing for increased support for workforce training, a renewed focus on increasing exports and creating new funding sources for high-tech startups. The governor and state legislators have also expressed interest in providing enhanced incentives to the automotive manufacturing industry as a way to build jobs and exports.

In order to meet the needs of job-creating industries, Missouri's workforce training system attempts to bring together local governments, businesses, and educational institutions to deliver training through market-driven partnerships. The state's community college system is a strong part of this training system, through programs including the Missouri Community

College New Jobs Training Program. The initiative allows a portion of a company's payroll tax withholdings to be used for development and implementation of a training project.

Businesses in need of expanded support to get training programs off the ground can also take part in the state's Customized Training Program, which provides funding to companies interested in working with local educational institutions. Missouri's Innovation Campus program provides another source of funding for local governments

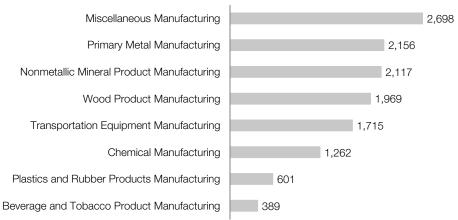
#### Missouri's Place in the Rankings

- #6 Entrepreneurial Activity
- #8 Higher-ed Degree Output
- #14 Cost of Living
- #15 Business Tax Climate
- #15 Higher-ed Efficiency
- #17 Business Birth Rate
- #17 Small Business Survival Index
- #18 Academic R&D Intensity
- #22 Median Family Income
- #24 Broadband Provider Availability
- #24 Export Intensity Growth
- #25 Educational Attainment

and nonprofits interested in building job training partnerships with companies in high-growth industries. Grants of up to \$1 million are available for projects to help individuals gain access to the education needed to gain employment in such industries.

Efforts to grow Missouri's manufacturing and exporting industries appear to be paying off as the state's manufacturing sector was very competitive over the past year, adding 11,500 jobs. Growth was spurred by metal, mineral, and wood-product manufacturing, along with 1,700 new jobs in transportation equipment, including motor vehicles.

# Fastest Growing Missouri Manufacturing Sectors 2010-2011



## **Montana**

Tourism is the second largest industry in the state of Montana, surpassed only by agriculture. People come from all over the world to enjoy the Treasure State's big skies, wide-open spaces, and outdoor recreational activities. In 2011, 10.3 million non-resident visitors to the state spent almost \$2 billion in Montana. According to the University of Montana's Institute for Tourism and Recreation Research, 49% of business owners in the tourism sector reported an increase of visitors in 2011 and 48% expect an increase in 2012.

The activity generated by tourism helped Montana's economy experience a mild rebound in 2011. Tourismrelated industries accounted for the greatest source of job creation in the state, making up for losses in several other sectors. An estimated 25,000 people in Montana are now engaged as tourism owner/operators or employees. Governor Brian Schweitzer has also taken a direct role in promoting the state as a destination for work and travel, making a promotional trip to New York City to raise Montana's national and international profile as a leisure and adventure destination and to highlight its benefits to entrepreneurs looking for an outdoor-rich lifestyle.

The Montana Technology Innovation Partnership (MTIP) promotes technology commercialization in the state. MTIP's mission is to translate the short-term benefits of technology research and development into the long-term rewards of economic development through commercialization of products. MTIP recently launched TechEd, a training program for business advisors at the state's small-business development centers to help them better serve STEM-oriented companies with research-and-development needs.

Montana's Registered Apprenticeship and Training Program produces highly skilled workers in partnership with private-sector employers. The strategy ensures quality training by combining on-the-job learning with related technical and practical instruction. Montana is home to 500 independent program sponsors and 35 joint labor-management training committees that represent over 400 employers, industries and companies that provide registered apprenticeship training to approximately 1,600 apprentices. The program covers 50 different occupations but approximately 85% of registered apprentices are in construction and utility occupations. In 2010, for every dollar the state invested in registered apprenticeships,

#### Montana's Place in the Rankings #2 **Export Intensity Growth** #3 **Export Growth** #3 **Road Quality** #6 Academic R&D Intensity #6 Higher-ed Efficiency #7 Per Capita Income Growth #8 **Business Tax Climate** #8 Long-term Job Growth #10 **Bridge Quality** #10 STEM Job Growth #16 College Affordability #16 Gross State Product Growth #18 Entrepreneurial Activity #20 Tax Environment for Mature Firms #21 Growth in Share of National Exports #22 **Educational Attainment** #23 Tax Environment for New Firms

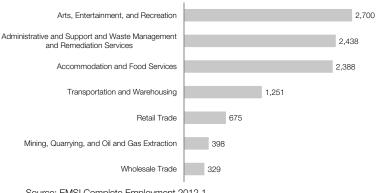
employers paid \$101.06 in wages.

**Business Birth Rate** 

#24

Tourism and recreation-related industries, including retail trade and food services, were several of Montana's fastest growing industries over the past two years. The state's recreation sector increased employment by 15%, adding around 2,700 jobs.

#### Job Growth in Montana by Sector 2010-2011



# **Nebraska**

With unemployment rates less than half the national average, farm incomes at historical highs, and surging exports, Governor Dave Heineman and the Nebraska Legislature entered 2012 facing economic conditions that put them in an enviable position nationally. However, state policymakers have continued to enact growth-oriented policies, tax reforms, and business incentives to build on their strong economic performance.

The 2012 session of the state's unicameral legislature did see the implementation of individual income tax relief, although attempts to eliminate inheritance taxes fell short of success. The session also saw the implementation of several new targeted tax reforms designed to support business development in the state, including new sales tax incentives for biotech firms, reductions in income tax rates on Nebraskabased companies conducting interstate business, and provision of new tax incentives through the Nebraska Advantage program for data center development.

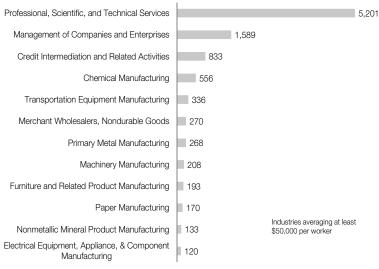
Nebraska has identified advanced research-anddevelopment and innovation as key sectors for future growth in the state. The new Business Innovation Act will increase technology transfer from state universities and create a fertile environment for the creation and growth of technology startups. The initiative includes a variety of innovation support programs, including state matching of federal SBIR grants, commercialization support funds, and grants for establishment of publicprivate research partnerships. The state also launched a new angel investment tax credit in 2011, providing a 35% income tax credit for qualified investments. The state hopes that such incentives will help to improve the flow of capital to the state's entrepreneurs, an area that has been identified as being in need of improvement.

Last year also saw adoption of the Build Nebraska Act, a major new infrastructure funding plan. The new plan allocates a small portion of the state's sales tax to transportation infrastructure construction investments, supplementing existing excise taxes. It is projected to direct between \$60 million and \$70 million annually for 20 years into capital improvements throughout the state, improving and expanding economically vital transportation connections.

#### **Nebraska's Place in the Rankings**

- #1 Tax Environment for New Firms
- #3 Business Closure Rate
- #6 Productivity Growth
- #8 Growth in Share of National Exports
- #9 Tax Environment for Mature Firms
- #10 Export Growth
- #10 College Affordability
- #11 Cost of Living
- #11 Educational Attainment
- #13 Gross State Product Growth
- #14 Higher-ed Degree Output
- #14 Higher-ed Efficiency
- #15 Growth in Share of National Exports
- #15 Academic R&D Intensity
- #16 Median Family Income
- #16 Road Quality
- #17 Export Intensity Growth
- #18 Per Capita Income Growth
- #18 Long-term Job Growth
- #25 Entrepreneurial Activity

# High-Paying Nebraska Growth Industries 2009-2011



## Nevada

Nevada's export growth has outpaced all other states due to growing demand for metals for electronics and advanced machinery, including lithium for batteries; ore for electronics; and primary metals like copper, gold, and silver. The state has also experienced growth in electrical machinery, optical and medical equipment, and aviation equipment.

Nevada's exports of merchandise totaled \$8 billion in 2011. The largest merchandise categories included primary metal manufactures (\$3.7 billion), computers and electronic products (\$1.2 billion), miscellaneous manufactured products (\$863 million), minerals and ores (\$861 million) and machinery (\$255 million). Nevada also exported \$61 million of agricultural products, mostly vegetables and seed.

Foreign firms, now numbering more than 200, have made significant investments in commercial properties and manufacturing in Nevada. To capitalize on these international opportunities, Governor Brian Sandoval's Office of Economic Development has recently launched *Moving Nevada Forward: A Plan for Excellence in Economic Development, 2012-2014.* The plan calls for a statewide effort to transform Nevada's economy, including a core strategy of expanding global engagement.

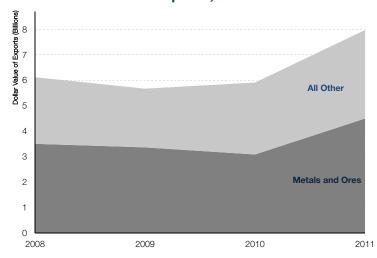
As a worldwide tourism and convention destination, Nevada has an annual tourist population of 40 million. The Greater Las Vegas area alone hosts about 3 million visitors per month, with airport boards totaling just fewer than 19 million in 2010. About 14% of visitors to Las Vegas are of international origin, so international visitation is key to the largest sector of the state's economy.

Hard hit during the peak of the recession, tourism is improving. Part of the upswing is due to visitation from countries whose economies have fared comparatively well in recent years. The Nevada Commission on Tourism (NCOT) has representatives in the United Kingdom, Canada, Mexico, Continental Europe, and China. The NCOT operates the first U.S. tourism office licensed to do business in China, a large and growing market for Nevada. In 2008, 47 million Chinese traveled abroad; more than 600,000 came to the U.S. More than 90% of these Chinese travelers spent part of their U.S. travel in Nevada.

### Nevada's Place in the Rankings

- #1 Export Intensity Growth
- #1 Export Growth
- #1 Business Birth Rate
- #2 Small Business Survival Index
- #2 Job Placement Efficiency
- #2 Bridge Quality
- #3 Business Tax Climate
- #4 Tax Environment for Mature Firms
- #6 Long-term Job Growth
- #6 Gross State Product Growth
- #6 STEM Job Growth
- #7 Entrepreneurial Activity
- Froadband Provider Availability
- #8 Growth in Share of National Exports
- #13 Broadband Speed Availability
- #15 High-tech Share of All Businesses
- #17 Economic Output per Job
- #18 High School Advanced Placement Intensity
- #19 Road Quality
- #22 Cost of Living

#### Nevada Exports, 2008-2011



Source: U.S. Census Bureau, Foreign Trade Statistics

# **New Hampshire**

Entering 2012 with one of the nation's lowest unemployment rates and buoyed by increasing exports, New Hampshire has made strides toward economic recovery following the recent recession. The state continues to have one of the northeast's most business-friendly tax structures, and has developed a solid base of high-technology industries, providing a foundation for the state's job-creation efforts under four-term Governor John Lynch.

WorkReadyNH is an offshoot of the New Hampshire Working program that helps get unemployed workers back to work. Workers undergo a skills assessment through one of New Hampshire's four community colleges, after which they are provided with remedial workforce skills training. WorkReadyNH is a partnership between the state's community colleges, the Department of Resources and Economic Development, and the Department of Employment Security. New Hampshire Working has helped the state avoid 1,200 layoffs and allows on-the-job-training for up to six weeks for those on unemployment. The state also supports industry-driven workforce development through its Job Training Fund. The fund provides grant support to private companies on a matching basis to address industry needs for workforce training and skills development. Since 2007, \$4.3 million in grants have helped to train over 12,500 workers in New Hampshire.

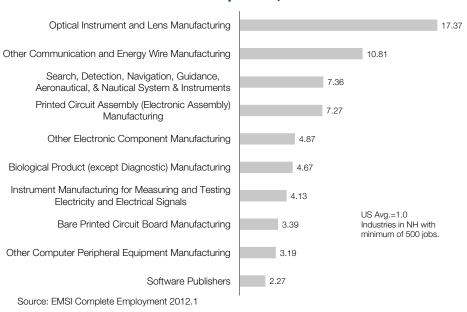
Looking to support innovative activity by the state's private sector, New Hampshire lawmakers authorized a five-year, \$1 million-per-year Research and Development Tax Credit program in 2007. Governor Lynch, responding to input from industry leaders, has proposed doubling funding for the tax credit program to \$2 million and making it permanent. The state also supports innovative new green technology companies through its Green Launching Pad program. The initiative is a public-private partnership between industry, the state, and the University of New Hampshire designed to commercialize green energy technologies and support business and job creation in the

# New Hampshire's Place in the Rankings

High-tech Share of All Businesses #6 **Business Tax Climate Educational Attainment** #6 #7 **Export Intensity Growth** #9 Academic R&D Intensity #9 Higher-ed Degree Output #12 STEM Job Concentration Higher-ed Efficiency #12 #18 Median Family Income Tax Environment for New Firms #22 #23 **Export Growth** #24 **Business Closure Rate** #24 Job Placement Efficiency #24 **Export Intensity** #25 Broadband Provider Availability

green manufacturing field. The program connects entrepreneurs with technical experts and mentors from the university and angel investors from the private sector.

# Most Concentrated High-tech Industries in New Hampshire, 2011



# **New Jersey**

Under Governor Chris Christie's leadership, New Jersey has radically redesigned its economic-development program structure. The "Partnership for Action" initiative created a structure with three parts: the Business Action Center (BAC), the Economic Development Authority (EDA), and the nonprofit Choose New Jersey. These three organizations create a clear delineation for the state's economic development activities. As part of the transition process, Lieutenant Governor Kim Guadagno personally visited 100 businesses in the state.

The BAC is a "one-stop" program designed to streamline interactions between state government and businesses. The BAC is designed to remove administrative hurdles that slow down business and to focus on assisting New Jersey businesses with easy-to-locate information about business processes and incentives.

The EDA houses the more traditional financing and incentive programs. The EDA offers specialized financing for clean energy, operates real estate development programs, and recently started TechLaunch, a mentoring and financing program for new technology companies.

Choose New Jersey is a standalone nonprofit agency designed to serve as an ambassador for the state,

leading the discussion and outreach about the state's business climate. Choose New Jersey serves as the marketing and communications element of the economic development program structure. The organization is privately funded, with 15 businesses committing \$150,000 each for three years to seed the effort.

#### **Professional Services Center**

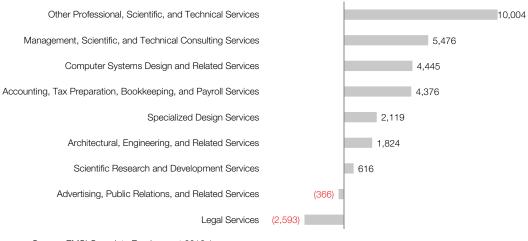
New Jersey has added 6.1% to its employment in professional, technical, and scientific services over the past year, compared to the

#### **New Jersey's Place in the Rankings**

- #2 Broadband Provider Availability
- #4 Educational Attainment
- #6 Economic Output per Job
- #6 STEM Job Concentration
- #7 High-tech Share of All Businesses
- #7 Broadband Speed Availability
- #10 Median Family Income
- #10 Job Placement Efficiency
- #14 Growth in Share of National Exports
- #15 Business Birth Rate
- #22 Export Growth
- #25 High School Advanced Placement Intensity

national growth rate of 3.7%. That growth rate equates to more than 25,000 jobs in this high-paying sector, led by miscellaneous services, consulting, computer systems design, and accounting. The Garden State has an above-national-average concentration in each of the nine subcategories of professional services.

## New Jersey Job Growth in Professional, Technical, and Scientific Services 2010-2011



New Mexico's workforce has the eighth-highest concentration of STEM jobs and ranked 11th among the states for STEM job growth from 2001-2010. STEM jobs are relatively high in New Mexico because of the presence of two national laboratories – Sandia and Los Alamos – and significant employment in semiconductor manufacturing and engineering services. In 2010, New Mexico's high-tech firms employed 83 of every 1,000 private-sector workers, ranked fifth nationwide, according to the TechAmerica Foundation. As reported in the table, New Mexico's workforce is populated with several STEM occupations that exceed the national average in concentration.

The New Mexico Technology Council (NMTC) works to promote the growth and success of New Mexico's technology business sectors. It has established a new group, STEM Outreach NM, to help identify needs of employers and make appropriate connections to existing programs such as FIRST Lego League.

The state's Angel Investment Tax Credit was extended through 2016, which provides a personal tax credit of up to \$25,000 to accredited investors that invest in high-technology research and development or a manufacturing business in New Mexico. Angel investors have reported that they invest significantly more money to small New Mexico business due to the tax credit.

The incentive allows accredited investors to receive up to a \$25,000 state income tax break for each \$100,000 investment they make, for a maximum of two investments annually. During fiscal years 2008-2011, investors made 140 claims for credit, according to the

#### **New Mexico's Place in the Rankings** #4 Academic R&D Intensity #9 STEM Job Concentration #9 **Bridge Quality** #11 STEM Job Growth #13 Long-term Job Growth #13 Higher-ed Efficiency #14 Tax Environment for New Firms #17 Gross State Product Growth #17 Per Capita Income Growth #18 High-tech Share of All Businesses #18 College Affordability #22 **Productivity Growth** #22 Tax Environment for Mature Firms

Legislative Finance Committee's fiscal impact report. Tax credits totaled about \$860,000, leveraging more than \$7 million in total investments in those four years.

**Business Birth Rate** 

An investment tax credit for manufacturers enables businesses to take a credit against gross receipts, compensating or withholding taxes equal to five percent of the value of qualified equipment imported and put into use in a manufacturing plant in New Mexico. The manufacturer must meet the criteria of hiring additional workers to earn the credit.

#### **New Mexico STEM Occupations: Total Employment & Concentration**

Occupation	2011 Jobs	2011 National Location Quotient
Computer Specialists	15,592	0.69
Engineers	12,221	1.27
Drafters, Engineering, and Mapping Technicians	8,667	1.80
Social Scientists and Related Workers	7,094	1.31
Physical Scientists	3,661	1.89
Life, Physical, and Social Science Technicians	3,563	1.63
Life Scientists	2,934	1.65
Mathematical Science Occupations	591	0.82
Total	54,323	1.1

# **New York**

While not placed highly in overall tax climate, New York did adopt a notable reform of its tax system in 2011, approving a cap on property tax increases. A key part of Governor Andrew Cuomo's agenda on taking office, the cap protects businesses and other property owners from major tax fluctuations by capping increases at the lesser of two percent or the rate of inflation. Local governments can override the cap, but such action requires a 60% vote from the public. By holding tax increases to inflation or lower, the state hopes to give property tax certainty to businesses interested in making investments in the state.

New York has also launched a reorganization of its economic-development and job-creation programs. Governor Cuomo, arguing in favor of a more bottomup approach to economic growth, has realigned the state's initiatives around ten new regional economic development councils. Each region will develop its own strategic economic plan, tailoring state-funded job-creation efforts to local needs. The newly adopted Power NY Act, backed by the governor, creates a one-stop, multi-agency power-plant-permitting agency, designed to streamline the process of approving major energy-generation investments. The act encourages investment in energy-efficiency upgrades by businesses, increasing their competitiveness and encouraging job creation in industries involved in installation of upgrades.

To fight blight and redevelop communities while creating jobs, New York's new Land Bank Act empowers cities and towns to create organizations to identify, possess, and manage vacant and abandoned properties for redevelopment. Properties held in the land banks can be directed to other uses, helping support land values of surrounding properties, bringing unutilized land back onto tax rolls, and providing locations for new business development and expansion.

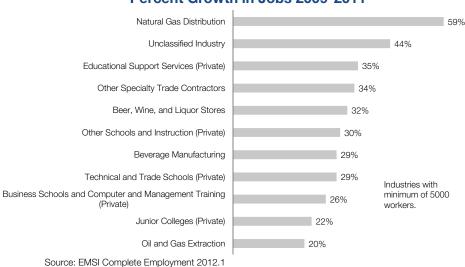
#### **Growing Industries**

New York has not been immune to the shale gas boom unfolding around the nation. Natural gas distribution, which includes transport and marketing of gas from wells, and oil and gas extraction, were two of the

#### **New York's Place in the Rankings** High School Advanced Placement Intensity #3 #4 Economic Output per Job **Educational Attainment** Broadband Speed Availability #6 #7 Higher-ed Degree Output #9 Per Capita Income Growth **Business Birth Rate** #9 #11 **Entrepreneurial Activity** #13 Short-term Job Growth #14 College Affordability #20 Long-term Job Growth #20 Job Placement Efficiency #20 Broadband Provider Availability #21 Gross State Product Growth #21 **Productivity Growth** STEM Job Concentration #24 Academic R&D Intensity

state's fastest growing job-creation industries over the past two years. The state has also seen marked growth in several sectors related to private education and training.

#### Fastest Growing Industries in New York Percent Growth in Jobs 2009-2011



# **North Carolina**

Since taking office in 2009, Governor Bev Perdue has supported a variety of job-creation policies as part of her JobsNOW platform. Proposed and adopted initiatives have included corporate tax cuts, new funding for established business incentive programs, streamlined government operations, and increased access to capital in order to spur economic growth in North Carolina. Other key parts of the governor's plan include expansion of export enhancement programs and continued support for manufacturing tax incentives.

Perdue, along with the General Assembly, has also supported elimination of regulations and red tape that might prove burdensome to job creation. During the 2011 session of the General Assembly, Perdue called on legislators to eliminate unnecessary regulations, and issued an executive order restructuring state government in order to increase efficiency of services and cut down on barriers to access. The state has also implemented legislation requiring state agencies to calculate the cost of new regulations. The law prohibits the adoption of most rules found to impose a substantial cost (over \$500,000) on those subject to the new regulation, potentially eliminating regulatory burden on businesses. Laws opening regulation up to more transparency have also been adopted.

The 2011 legislature allowed several classes of tax surcharge to sunset, providing over \$1 billion in tax relief. The assembly also enacted targeted tax cuts for small businesses in the state, giving eligible businesses an exemption on their first \$50,000 of income. Governor Perdue has also proposed new tax refunds on certain classes of materials and equipment purchased by businesses.

Created in 2010 and expanded in 2011, the North Carolina Mobility Fund is tasked with identifying and supporting transportation infrastructure upgrades of regional or statewide significance. By removing congestion and improving intrastate transportation linkages, the state hopes to cut down on potential barriers to commerce and transport. Hoping to build a stronger export infrastructure and prepare for new shipping demands driven by the Panama Canal, North Carolina is also conducting development of a new maritime strategy to identify areas of need and prioritize potential new investments in port and associated rail infrastructure.

#### #5 Academic R&D Intensity #7 Tax Environment for Mature Firms #10 **Road Quality** #13 Tax Environment for New Firms #14 Broadband Speed Availability #15 STEM Job Growth #15 High School Advanced Placement Intensity #17 High-tech Share of All Businesses #17 College Affordability

North Carolina's Place in the Rankings

#20 Productivity Growth

#20 Gross State Product Growth

#21 Cost of Living

#22 Long-term Job Growth

#24 Short-term Job Growth

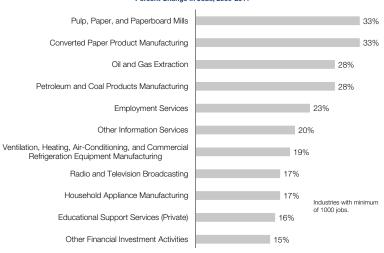
#24 STEM Job Concentration

Economic Output per Job

#19

North Carolina's long-established paper and pulp industry has led the way in job growth in the post-recession rebound. Energy production and other manufacturing-related sectors have also made notable gains over the past two years, stepping up production and creating jobs in the face of increased post-recessionary demand.

## North Carolina's Fastest Growing Industries Percent Change in Jobs. 2009-2011



# **North Dakota**

Driven by booming oil production, strong agricultural markets, and growing metro areas, North Dakota continued its economic renaissance entering 2012. With the boom showing no signs of slowing, Governor Jack Dalrymple and the state's leaders have taken steps to provide tax relief to the state's businesses and to identify ways to build on the state's recent economic success. In 2012, the governor and North Dakota State Chamber of Commerce are partnering on the ND2020 and Beyond public-visioning effort to ensure the correct investments are made to sustain the state's economic future.

Possessing a large oil-boom-driven budget surplus, state policymakers were able to enact a series of tax cuts totaling nearly half a billion dollars in 2011. These included cuts to business income taxes and property tax relief, dropping the tax burden on business in the state.

As the pace of oil development has accelerated, the state has faced demands for improved and expanded infrastructure to meet the needs of industry and support job growth. Water is of key focus, with high demand from the oil industry placing a squeeze on business and communities throughout western North Dakota. In 2011, the state committed to a \$110 million water-supply initiative, designed to meet growing needs for such infrastructure. The state has also approved around \$1 billion in additional infrastructure upgrades in the state's oil-producing counties during the current biennium in order to support the ongoing economic growth.

The state continues to fund 18 Centers of Research Excellence, designed to partner industry and the state's university researchers in efforts to develop and commercialize new technologies and create jobs for the state's graduates. The state's new Small Business Technology Investment program and angelfund tax credits are also focused on access to capital, providing state matching investments to technology companies in partnership with private investors.

#### **Broad-based Growth**

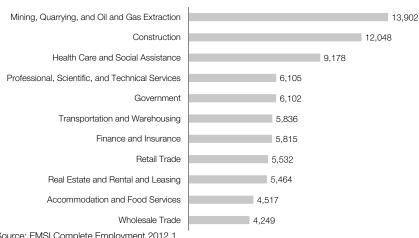
North Dakota's energy economy led the way in job growth over the past decade, but its construction sector saw no job losses during

## North Dakota's Place in the Rankings

- #1 Long-term Job Growth
- #1 Short-term Job Growth
- #1 Gross State Product Growth
- #1 Per Capita Income Growth
- #1 STEM Job Growth
- **Business Closure Rate** #1
- #2 **Productivity Growth**
- #2 College Affordability
- #2 **Educational Attainment**
- #3 Academic R&D Intensity
- #6 **Export Growth**
- #7 **Road Quality**
- #9 Median Family Income
- **Export Intensity Growth** #9
- Small Business Survival Index #13
- #15 Tax Environment for Mature Firms
- #16 Job Placement Efficiency
- #17 Higher-ed Degree Output
- #18 Tax Environment for New Firms

the national housing bust, and it added 6,000 jobs in professional services and another 6,000 in finance over the same period.

#### **Leading North Dakota Job-growth Sectors** 2001-2011



Ohio's Third Frontier, a \$2.3 billion technology-based development initiative that began in 2002, is making the Buckeye State a very good place for entrepreneurs and helping to revitalize the economy. Third Frontier is funded by bonds paid for by a voter-approved sales tax.

Industry experts believe that economy-boosting venture investments in Ohio are likely to continue to increase because the state has implemented programs – Third Frontier's Entrepreneurial Signature Program – that attract and retain early-stage companies and help them get off the ground. This assistance helps companies reach the point at which they can attract venture capitalists.

Venture capital investments, after plummeting in 2009, have steadily risen. There were 71 venture capital deals worth \$205.2 million in 2011, up from 59 deals worth \$178.3 million in 2010, according to PricewaterhouseCoopers. The pace of investment is accelerating in 2012; companies in Ohio have already consummated 14 venture-capital deals in the first quarter of 2012 worth \$122.7 million.

In 2011, Governor John Kasich created JobsOhio as a private, nonprofit corporation to lead the state's job-creation efforts by focusing on attracting and retaining jobs, with an emphasis on strategic industry sectors. In its first year, JobsOhio worked with businesses across the state to secure 245 new investments, expansions, and relocations, creating more than 21,000 new jobs and keeping nearly 62,000 existing ones.

An integral part of JobsOhio is the JobsOhio Network, a regional economic-development partnership of six organizations whose shared vision is to leverage statewide and regional strengths for job creation and economic development. These organizations (referred to as Regional Economic Development Organizations, or "REDOs") include the Cincinnati USA Partnership, Team NEO, Columbus 2020, Dayton Development Coalition, Appalachian Partnership for Economic Growth, and the Regional Growth Partnership.

To "open the faucet" for innovation and discovery across Ohio's innovation corridors, Governor Kasich announced in early 2012 that the state would boost its broadband-network backbone speeds ten-fold. This technology upgrade and expansion is increasing the speed of the Ohio Academic Resources Network

#### Ohio's Place in the Rankings Tax Environment for New Firms #5 Tax Environment for Mature Firms #7 Small Business Survival Index **Export Intensity** #10 #12 **Broadband Speed Availability** Business Closure Rate #13 #15 Cost of Living #17 Median Family Income #17 **Road Quality** #17 Median Family Income **Broadband Provider Availability** #18 #22 STEM Job Concentration #22 Higher-ed Efficiency #22 Job Placement Efficiency

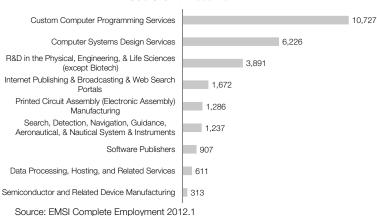
(OARnet) from 10 gigabytes per second to 100 gigabytes per second.

Short-term Job Growth

#25

Creating an ultra-fast broadband network for the state is expected to give research hospitals and universities a competitive edge for research grants that create breakthroughs. In the multimedia space, it means that companies in the entertainment, design, and graphics industry that depend on delivering "big data" to customers and collaborators can be located in Ohio now and into the future.

# Ohio's Fastest Growing High-tech Sectors Job Growth 2009-2011



## **Oklahoma**

Immediately upon taking office in early 2011, Governor Mary Fallin established the Governor's Task Force on Economic Development and Job Creation, a 45-member, volunteer panel composed of industry CEOs, and private- and public-sector workers. In September of 2011, the task force produced 13 "bold ideas" for economic growth in the state. Even if not all are enacted, its recommendations are a critical foundation for public discourse and policy development to improve the state's innovation and entrepreneurial infrastructure, business access to capital, efficient and effective government practices, tax and business climate, infrastructure, and workforce training.

In late 2011, Governor Fallin and the state's Department of Commerce partnered with nearly 50 state and local organizations on a comprehensive survey of the Sooner State's business community. State-level leadership helped promote the survey to business leaders and allowed local development organizations access to detailed information unobtainable by smaller development groups. The survey results comprising responses from nearly 5,400 state businesses were released in April 2012.

Seventy-eight percent of businesses in the state indicated they felt positive about the economic future of Oklahoma, and another 78% indicated confidence their business would grow in Oklahoma. In general, the state's business community feels positive about the prospects of the state, feeling the most strongly about the state's college education system, access to suppliers, career training system affordable housing, and recreational opportunities.

The survey identified skills training and raising the education level of workers as areas of concern. To help match Oklahoma employers with workers, state leaders unveiled OKJobMatch.com, an innovative website designed to pool resumes of job seekers and to match them with job openings based upon responses to a questionnaire. Over 5,000 job seekers have submitted resumes to the site.

Growth in Oklahoma's energy and aerospace sectors has helped spur some of the fastest manufacturing job growth in the nation coming out of the Great Recession.

#### #1 Cost of Living Short-term Job Growth #4 #5 Tax Environment for New Firms College Affordability #8 Higher-ed Efficiency #10 Per Capita Income Growth **Business Closure Rate** #10 #15 Long-term Job Growth **Productivity Growth** #16 #16 **Export Intensity Growth**

Tax Environment for Mature Firms

Oklahoma's Place in the Rankings

#17 Export Growth

#18 Growth in Share of National Exports

#18 Business Birth Rate

#19 Small Business Survival Index

#22 Gross State Product Growth

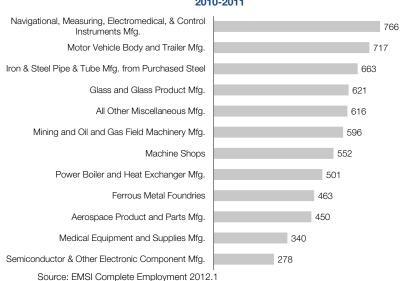
#25 Job Placement Efficiency

According to the Bureau of Labor Statistics,

#16

According to the Bureau of Labor Statistics, Oklahoma has the third-fastest manufacturing job growth since January 2010, at 13%. Much of this growth is in heavy metal industries, machinery and equipment, and aerospace industries.

# Fastest Growing Oklahoma Manufacturing Sectors 2010-2011



Oregon's economy is improving gradually. In 2011, Oregon created thousands of new jobs, passed a balanced budget, improved Oregon's credit rating to AA+, and began streamlining state services. Five Regional Solutions Centers were established to work at the local level to identify priorities, solve problems, and complete projects that might languish without local liaison with state programs.

Governor John Kitzhaber signed the Oregon Investment Act into law in early 2012, which will allow private investors to partner with the state when investing in new start-up businesses. The act also consolidates and simplifies existing, now-fragmented economic development resources under a unified strategic framework. The new structure means businesses no longer have to navigate a maze of state agencies and make multiple contacts to find resources. The act's Oregon Growth Board will catalog Oregon's economic development programs and then draft a plan to both consolidate resources and leverage additional investment while requiring no new tax dollars.

Oregon lawmakers allocated \$16 million for the Oregon Innovation Council (Oregon InC), whose funding is divided among six signature centers and programs dedicated to growing the state's innovation economy. These include the Oregon Nanoscience and Microtechnologies Institute (ONAMI), the Built Environment and Sustainable Technologies Center (BEST), the Oregon Translational Research and Drug Development Institute (OTRADI), the Oregon Wave

Energy Trust (OWET), the electric vehiclefocused Drive Oregon, and the Northwest Food Processors Innovation Productivity Center.

Oregon joined the ranks of over 30 other states in adopting the National Career Readiness Certificate (NCRC), a portable certificate that verifies three foundational skills: applied mathematics, reading for information, and locating information. The NCRC is used by employers, employees, and job applicants as a uniform measure of key workplace skills.

To speed the permitting of large industrial

## Oregon's Place in the Rankings

- #1 Productivity Growth
- #2 Higher-ed Efficiency
- #3 Gross State Product Growth
- #22 Bridge Quality
- #13 Export Intensity
- #13 Business Tax Climate
- #15 Gross State Product Growth
- #15 STEM Job Concentration
- #17 Broadband Speed Availability
- #21 Broadband Provider Availability
- #23 Road Quality
- #23 Long-term Job Growth
- #25 Business Birth Rate

projects, the Economic Recovery Review Council (ERRC) may expedite the permitting of up to 10 industrial development projects of state significance per biennium. The ERRC reviews the proposed project to determine if the project meets the criteria for applicable discretionary local and state permits. All permit approvals are on the same timeline, considered at one hearing and decided upon together.

## Manufacturing in Oregon

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Manufacturing Gross State Product (2010)	\$24.0 billion
Manufacturing Percent of Gross State Product (2010)	15%
Value of Exports (2010)	\$38.5 billion
Total Manufacturing Jobs (2011)	182,888
Average Earnings per Job (2011) in Manufacturing	\$71,026
Percent of Oregon's Overall Average Earnings	151%
Oregon's National Location Quotient for Manufacturing	1.17
Five Largest Industries (2011)	
Semiconductor and Related Device Manufacturing	23,074 jobs
Sawmills	5,800
Frozen fruit, juice and vegetable manufacturing	5,231
Softwood veneer and plywood manufacturing	3,765
Machine shops	3,488

Sources: U.S. Bureau of Economic Analysis, U.S. Census Foreign Trade Data, EMSI Complete Employment 2012.1

# **Pennsylvania**

Since taking office in 2011, Governor Tom Corbett has supported a job-creation agenda centered on tax stability, balanced spending, increased energy development, and legal reforms. Seeking to hold the line on property tax burdens faced by the state's employers, Corbett signed 2011 legislation expanding requirements for local voter referendums when raising school property taxes. The administration has also made expanded drilling activity in the state's Marcellus Shale natural gas fields a major part of its economic agenda. The governor and 2012 assembly enacted changes to state laws focused on drilling, in an attempt to balance regulatory certainty for developers with impact mitigation for communities throughout the field.

In an effort to realign job-creation efforts around a cluster strategy, Pennsylvania passed legislation in 2011 encouraging the development of new industry partnerships. The new program works to bring together state government, industry associations, business leaders, educators, and regional economic development organizations to identify industries in need of support, including workforce and development grants. The state plans to work with the industry groups to identify high-priority occupations on a yearly basis.

The commonwealth's First Industries Funds, renewed through 2015, provides grants, loans, and loan guarantees to growing companies in the agricultural, agriculture processing, and tourism industries for acquisition of real estate, equipment upgrades, or working capital. The 2012 General Assembly also extended expiring regions in the commonwealth's Keystone Opportunity Zone initiative. The program includes nearly 46,000 acres of land with exemptions and waivers from certain state and local taxes. In some situations and zones, tax burdens are completely eliminated, providing a major incentive for redevelopment.

Governor Corbett also supported and signed a "Fair Share Act" reform of civil lawsuits. The enacted legal changes state that if a party to a suit is found to hold less than 60% liability, they cannot be held responsible for more than their share of the damage settlement, protecting

#6	Business Closure Rate
#7	Growth in Share of National Exports
#8	Broadband Speed Availability
#11	Academic R&D Intensity
#12	Export Intensity Growth
#13	Median Family Income
#13	Higher-ed Degree Output
#18	Export Growth
#18	Short-term Job Growth

Pennsylvania's Place in the Rankings

businesses from punishment for actions that were beyond their control.

Per Capita Income Growth

**Business Tax Climate** 

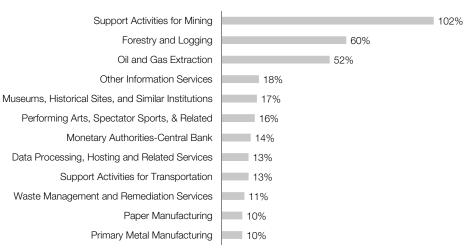
**Educational Attainment** 

STEM Job Concentration

Economic Output per Job

Pennsylvania's oil, gas, and mining sectors have grown by leaps and bounds as extraction of the state's shale gas reserves has come online using new drilling technologies. Employment in the mining-support activities industry, which includes drilling operations, has more than doubled in two years, and other gas-related industries have experienced major growth.

# Fastest Growing Industries in Pennsylvania Percent Job Growth, 2009-2011



Source: EMSI Complete Employment 2012.1

#19

#19

#19

#21

#23

## **Rhode Island**

Rhode Island has the second-highest unemployment rate in the nation at 11% and is one of only three states with double-digit unemployment as of February 2012. Rising public pension costs have created a climate in which tax increases and cuts to government services and education are a strong possibility. Governor Lincoln Chafee took office in 2011 facing a \$295 million budget deficit.

Hit particularly hard by the global recession and losses in the manufacturing industry, Governor Chafee and the Rhode Island General Assembly have proposed and are implementing plans to reverse this trajectory and to set a new course for the Ocean State.

Mounting pressure from public pension obligations in 2011 caused Rhode Island to take over finances of two cities, one of which was seeking bankruptcy protection. In November, the legislature passed a comprehensive pension-reform bill, titled "Rhode Island Retirement Security Act," in an effort to address rising pension costs for public employees and to reduce deficit levels.

The Rhode Island Economic Development Corporation (RIEDC) and Governor Chafee have embraced an effort known as the "Knowledge District," which represents the augmentation of Rhode Island's medical community and universities to attract high-paying, high-tech jobs in knowledge-related fields. Early successes include the establishment of Brown University's \$45 million medical school, the move of toy maker Hasbro into the Knowledge District, and the targeting of 19 new acres in downtown Providence for

redevelopment as a result of the relocation of I-195. Governor Chafee has issued a \$250,000 grant through the RIEDC to the 195 Redevelopment Commission to support engineering and planning efforts associated with this land redevelopment. The grant will be repaid through a bond sale of the reclaimed highway land, costing taxpayers nothing. It has been estimated that some 1,000 jobs have been created in the Knowledge District.

Rhode Island's Slater Technology

# Rhode Island's Place in the Rankings

#1 Broadband Speed Availability

#1 Broadband Provider Availability

#5 Higher-ed Degree Output

#6 Academic R&D Intensity

#10 High-tech Share of All Businesses

#15 Per Capita Income Growth

#15 Educational Attainment

#16 Economic Output per Job

#19 Productivity Growth

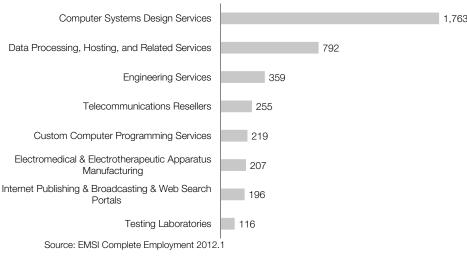
#23 STEM Job Concentration

#23 Higher-ed Efficiency

#25 STEM Job Growth

Fund is a state sponsored venture capital fund designed to make targeted investments in Rhode Island based technology startups. The program also provides a variety of entrepreneurial training and mentoring to startups and science and science and technology students at Rhode Island universities, seeking to help future innovators build the skills needed to launch successful businesses and create jobs. To address workforce training, The Governor's Workforce Board is making \$1.2 million in matching grants available. Awards are based on size of the company applying, and range from \$10,000 to \$40,000.

# Rhode Island's Fastest Growing High-tech Sectors 2009-2011



# **South Carolina**

With dropping unemployment rates, rising exports, increased state revenues, and a greatly improved budget situation, South Carolina continued to show positive signs of economic recovery entering 2012. Buoyed by this newfound momentum, Governor Nikki Haley and state leaders are focusing on implementing new tax policies, infrastructure improvements, and legal reforms designed to support continued job creation, bolster the state's strong export sector, and diversify the state's economy.

Looking to maintain its position as one of the nation's leading export states and support easy access to global markets for business in the state, South Carolina has begun efforts to upgrade its port facilities at Charleston. The state is currently conducting preparatory work and studies in partnership with the federal government, and state legislators are laying the groundwork for a state investment of up to \$180 million dollars as part of the proposed \$300 million port-deepening project.

The 2011 General Assembly adopted reforms to the state's unemployment insurance system, paying down debts owed to the federal government and providing the state's employers with tax relief. In the face of recent budget deficits, the state was able to hold the line on taxes, and continues to assess no sales taxes on machinery, power, and materials used in manufacturing.

The 2011 General Assembly and Governor Haley implemented caps on punitive damages in many civil suits. The law also implemented additional checks on civil suits and changes to bond and building-code regulations designed to cut down on the volume of civil litigation in the state. South Carolina has also adopted legislation allowing certain state agencies, if forced by federal mandate to adopt a stronger regulatory standard than that of the state, to expedite a return to the previous state standard if the federal regulation is repealed or blocked by legal action.

Facilitating better private-public sector interactions has also been on Governor Haley's agenda for job creation. The South Carolina Business Network, launched in 2012, offers small businesses in the state an easy and more efficient way to access government services.

## South Carolina's Place in the Rankings

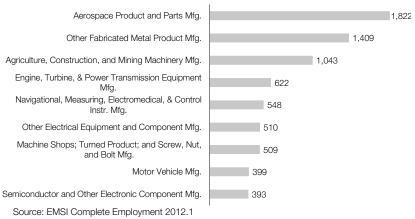
- #2 Export Intensity
- #5 Small Business Survival Index
- #6 Growth in Share of National Exports
- #8 Export Intensity Growth
- #9 STEM Job Growth
- #11 Short-term Job Growth
- #11 Export Growth
- #14 Job Placement Efficiency
- #18 Bridge Quality
- #20 High School Advanced Placement Intensity
- #22 Business Birth Rate
- #22 Entrepreneurial Activity
- #24 Broadband Speed Availability
- #25 Long-term Job Growth
- #25 Road Quality

The new online service brings together information on state programming and incentives in one location, streamlining access for busy entrepreneurs.

The state's manufacturing sector is its largest exporter and one of its most concentrated industries. Manufacturing growth since 2009 has been led by job growth in aerospace products and other heavy machinery and equipment sectors.

## South Carolina: Fastest Growing Manufacturing Sectors

Job Growth, 2009-2011



## **South Dakota**

Launched in 2011, Governor Dennis Daugaard's "Better Government" initiative is focused on finding ways to streamline regulation, increase transparency, eliminate unnecessary regulations, and make state government interactions with the private sector more efficient. The initiative has identified hundreds of regulations to be eliminated or restructured, opened up various economic development records to the public, and is conducting reviews of online permitting and licensing with an eye toward making such processes more business friendly.

The administration also pressed for a reworking of South Dakota's workforce development efforts, creating the South Dakota Workforce Initiatives (SD WINS) strategy. This 20-point plan includes action items focused on improving education in the state, increasing available workforce training options, expanding health-care jobs and opportunities in rural areas and attracting new residents with valuable job skills to the state. The state's Dakota Roots outreach program is designed to connect South Dakota expats back to the state by connecting them to employment opportunities, business incentives, and relocation information. Since being launched in 2006, the program has connected over 2000 individuals with jobs in the state, helping growing South Dakota businesses tap into the talents of the state's former residents.

South Dakota's policymakers authorized funding in 2011 to expand research capabilities throughout the state's university system. The funds were allocated through a competitive process, with state funds being used to leverage other resources to fund equipment and research-facility upgrades.

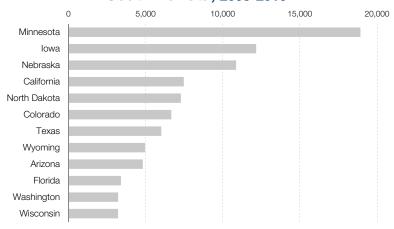
The 2011 legislative session also saw the creation of a new, large-project development fund. Championed by Governor Daugaard, the new fund sets aside a portion of excise taxes collected to be used to issue grants to attract companies to the state. Supporters argue that the new program will give the state's economic development programs added flexibility to attract new jobs to the state. Even so, the program's fate is currently unclear, with a 2012 recall effort underway. While this new development program has come under some scrutiny, the state continues to offer incentives and support to small businesses through its MicroLOAN program. The program works with banks

## South Dakota's Place in the Rankings

Small Business Survival Index #2 Tax Environment for Mature Firms **Business Tax Climate** #2 #3 College Affordability #4 **Productivity Growth** #4 Per Capita Income Growth #5 **Business Closure Rate** #7 Gross State Product Growth **Export Growth** Job Placement Efficiency #10 Short-term Job Growth #10 **Export Intensity Growth** #10 Higher-ed Efficiency #11 Tax Environment for New Firms #17 STEM Job Growth #17 **Educational Attainment** #19 **Entrepreneurial Activity** 

and credit unions throughout the state to ensure that growing small businesses can access the capital they need to invest in equipment, real estate, and projects that will help them create new jobs.

### Top Sources of Migrant In-flows to South Dakota, 2005-2010



Source: Internal Revenue Service Tax Return Data. Measures in-flows of exemptions listed on tax returns (excludes out-flows)

## **Tennessee**

During his first year in office, Governor Bill Haslem launched the Jobs4TN initiative, which held roundtable meetings and gathered input from private-sector leaders to refocus the state's economic-development efforts. As part of the initiative, the administration conducted a "top-to-bottom review" of all state government departments, looking for ways to increase efficiency and better deliver services to businesses and the public.

Part of this process included a review and restructuring of the state's economic development efforts. The state has now decentralized and downsized its Economic and Community Development programs, identified key industry sectors worthy of expanded focus, increased business-recruitment efforts, and moved to strengthen entrepreneurial development and business-expansion programs. During the 2012 session of the Tennessee General Assembly, the Haslem administration called for focused tax cuts and state government reform as part of the governor's TNForward proposal.

As part of a focus on innovation and entrepreneurship, Governor Haslem introduced the INCITE Initiative. This \$50 million program is designed to coordinate and expand efforts to support innovation, commercialization, investment in innovative Tennessee businesses, development of technology clusters, and entrepreneurship.

The TNInvestco program, launched in 2009, works with venture-capital firms throughout the state to provide financing to innovative new Tennessee companies. The program supports the creation of "innovation clusters" to create an environment conducive to new ventures and job creation. The state also makes use of its Pathway Lending program to provide needed capital to promising new and expanding businesses throughout the state, lending more support to entrepreneurs.

Hoping to capitalize on past success in attracting major industrial developments to the state, Tennessee is pursuing continued development of the West Tennessee Megasite project. While still in the early stages, the state has set aside nearly \$35 million for needed infrastructure developments, and Governor Haslem has

#### #2 Cost of Living #6 Short-term Job Growth #9 **Road Quality** #11 **Export Intensity** #11 Growth in Share of National Exports #13 **Export Intensity Growth** #14 **Business Tax Climate Export Growth** #16

Tennessee's Place in the Rankings

#16 Bridge Quality#18 Growth Economic Output per Job

#19 STEM Job Growth#20 Entrepreneurial Activity

#22 Broadband Speed Availability

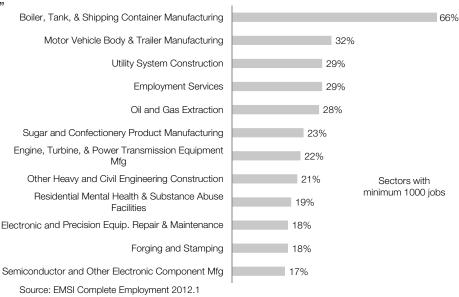
#25 Business Closure Rate#25 College Affordability

#25 Small Business Survival Index

called for more solid commitments moving forward. As part of the broader regional TVA megasites program, the West Tennessee Megasite will provide a development-ready site open for future large-scale, advanced-manufacturing developments.

## **Fastest Growing Sectors in Tennessee**

Percent Job Growth, 2009-2011



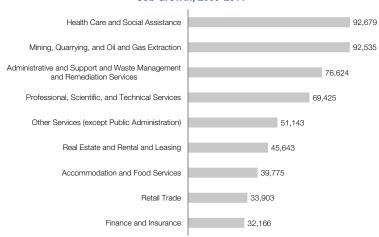
Texas enters 2012 as one of the better-performing states in the nation, yet unemployment rates remain above pre-recession levels. Governor Rick Perry and the state legislature have shown a continued commitment to embrace programs and policies designed to support business and create jobs.

Two of Texas' key tools for job creation, the Texas Enterprise Fund (TEF) and Texas Emerging Technology Fund (ETF), received nearly \$300 million in state commitments during the current biennium. The Enterprise Fund acts as a "deal-closing fund" for the state, giving state leadership a flexible tool to support business location and expansion in Texas. Funds can be used for infrastructure upgrades, workforce training, and other business incentives.

As part of a round of new legal system reforms, Texas adopted a "loser pays" standard, discouraging the potential for frivolous suits. The reforms also included changes to expedite cases through the courts, encourage settlements, and allow for early dismissal of certain suits, cutting down on litigation costs to businesses and the state.

State policymakers and voters made major commitments to infrastructure in the past year. The 2011 session saw the state commit to \$3 billion in bonding authority for new transportation projects throughout the state, and establish new rules to expedite the review and approval of needed projects. Voters also approved a proposition backing \$6 billion in bonding for water-infrastructure investments

# Fastest Growing Texas Sectors Job Growth, 2009-2011



Source: EMSI Complete Employment 2012.1

throughout the state, another urgent need to assure continued growth in a sometimes drought-prone region.

One of the state's more flexible workforce-training programs, the Skills Development Fund, also received continued support from state leaders during the current two-year cycle. The initiative works to build job-training partnerships between businesses and community colleges throughout the state.

Coming out of the recession, Texas has more than doubled the nation's job growth rate. Texas has enjoyed broad-based growth since 2009, with more than 90,000 new jobs in both the health care and energy sectors to go along with strong growth in professional services, real estate, and finance.

Texas' Place in the Rankings										
#1	Export Intensity	#9	Business Tax Climate	#13	High-tech Share of All Businesses					
#1	Growth in Share of National Exports	#11	High School Advanced Placement Intensity	#17	STEM Job Concentration					
#2	Short-term Job Growth	#11	Job Placement Efficiency	#18	Road Quality					
#2	Entrepreneurial Activity	#11	Bridge Quality	#19	Export Intensity Growth					
#3	Cost of Living	#12	Export Growth	#21	College Affordability					
#3	Small Business Survival Index	#12	Tax Environment for Mature	#21	Broadband Speed Availability					
#4	Higher-ed Efficiency #13 Long-term Job Growth	Firms		#23	Per Capita Income Growth					
#5			Economic Output per Job STEM Job Growth	#23 #24	Business Closure Rate					
#6	Business Birth Rate	#13			Median Family Income					
#9	Gross State Product Growth	#13	Broadband Provider Availability							

## Utah

Governor Gary R. Herbert's vision for Utah is that it "will lead the nation as the best performing economy and be recognized as a premier global business destination." As Utah emerged from the recession, it created more than 25,000 new jobs during 2010 and 2011. Some 4,600 of these new jobs were in the manufacturing sector, including food processing, fabricated metal products, computer and electronic products and medical equipment and supplies. Another 6,000 jobs were created in professional, scientific and technical services, and the administrative and support services sector added an additional 4,000 jobs during this time period.

The governor's cabinet reviewed every single business regulation on the books in Utah and then amended or eliminated 368 outdated and unnecessary regulations that were determined to be a drag on the economy. Utah also reduced unemployment insurance's maximum cap from 9.5% to 7.5%, thereby achieving more than \$26 million in tax savings for Utah's businesses.

Technology companies have taken notice of Utah as an affordable alternative to neighboring West Coast states with overall business costs in Utah 10% below the national average. Utah has attracted several companies that produce advanced materials for applications in aerospace, software and programming, and other high-tech industries. At the same time, Utah has become a major player in the financial

services industry. According to the Governor's Office of Planning and Budget, financial activities accounted for 21.7% of the gross state product in 2010 and 5.8% of total employment in early 2012. Utah is heralded as an attractive location for the financial services industry because of its highly educated, multilingual and productive workforce.

Utah also enjoys a regulatory advantage in the financial services sector, now boasting the highest number of industrial banks in the nation, including eight of the top ten industrial banks in the country in terms of asset size. Industrial banks are authorized to make consumer and commercial loans and to accept federally insured deposits. Industrial bank charters are unique in that the owners of these banks are not required to be regulated by the Federal Reserve as bank holding companies. Instead, the Utah Department of Financial Institutions supervises IB owners, which are chartered under Utah law and the FDIC under a special program developed principally for the IB industry.

### **Utah Finance Sector Growth, 2001-2011**

Finance Subsector	2011 Jobs	2001- 2011 Growth
Other Financial Investment Activities	34,704	92%
Agencies, Brokerages, and Other Insurance Related Activities	17,357	53%
Other Investment Pools and Funds	9,571	96%
Depository Credit Intermediation	17,062	36%
Activities Related to Credit Intermediation	9,258	58%
Securities & Commodity Contracts Intermediation & Brokerage	5,565	23%

Source: EMSI Complete Employment 2012.1

Utah's Place in the Rankings									
#2	Export Growth	#5	Bridge Quality	#11	Road Quality				
#2	Business Birth Rate	#6	Tax Environment for Mature	#14	Small Business Survival Index				
#3	Long-term Job Growth	щС	Firms	#16	STEM Job Concentration				
#3	Short-term Job Growth	#6	Cost of Living College Affordability	#16	Academic R&D Intensity				
#3	Gross State Product Growth	#6		#17	High School Advanced				
#3	Growth in Share of National	#8	#8 High-tech Share of All Businesses		Placement Intensity				
	Exports	#9	Broadband Provider Availability	#20 #23	Broadband Speed Availability				
#3	Higher-ed Efficiency	#10	#10 Tax Environment for New Firms		Median Family Income				
#4	Export Intensity Growth			#23	Entrepreneurial Activity				
#4	STEM Job Growth #10 Export Intensity			#23	Educational Attainment				
#5			Higher-ed Degree Output						

In August 2011, Vermont was hit by Tropical Storm Irene and a series of spring storms that resulted in the loss of lives; significant damage to public infrastructure, roads and bridges; and impacts upon small businesses and communities throughout the state. In the wake of the devastation, Governor Peter Shumlin responded by committing to rebuild damaged facilities and improve existing and aging infrastructure.

Recognizing that transportation infrastructure and small business are critical to the state's economy, disaster recovery has become a critical theme to the state's economic growth plans. The governor has proposed \$45 million to fund road and bridge improvement projects in the biggest transportation program in state history. This proposal includes a \$1.5 million increase in local highway aid to municipalities around Vermont. The Vermont Economic Development Authority created an emergency low-interest loan program to lend up to \$100,000 to small businesses affected by natural disasters, which resulted in over \$15.3 million in loans to more than 340 businesses.

According to Karen Marshall, Chief of ConnectVT, 95% of Vermont currently is connected to broadband access and close to meeting the governor's goal of 100% connectivity by 2013. Vermont has spent more than \$150 million (using considerable federal stimulus dollars) resulting in 1,546 miles of new fiber-optic cable to support the state's broadband expansion efforts.

Broadband connectivity is only one element in an overall strategy that also involves increasing the presence and access to wireless technologies. Cellular service lags behind broadband with 88% of Vermont residents having some access to cellular infrastructure. Much of this can be attributed to Vermont's forests, rural locations, and somewhat rugged terrain.

#### **Export Success**

Vermont ranks number one in per capita exports and has seen increases in overall exports each year since 2008, increasing from \$3.7 billion in 2008 to \$4.3 billion in 2011. A

### **Vermont's Place in the Rankings**

#6 Higher-ed Degree Output

#8 Academic R&D Intensity

#8 Entrepreneurial Activity

#9 Export Intensity

#12 Per Capita Income Growth

#12 Tax Environment for New Firms

#12 High School Advanced Placement Intensity

#13 Educational Attainment

#18 Business Closure Rate

#19 Short-term Job Growth

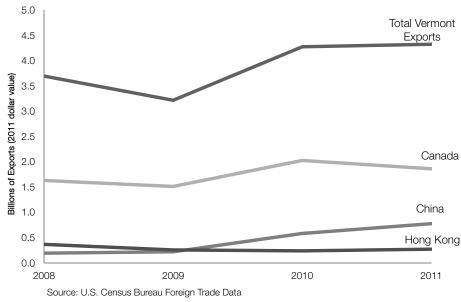
#19 STEM Job Concentration

#19 High-tech Share of All Businesses

#24 STEM Job Growth

majority of this export figure is due to increased export activity to Canada, which made up 43.1% of Vermont's trade portfolio in 2011. Vermont is one of a few states that enjoy a trade surplus with China and expects to continue the upward trend. Top exports include processors, electronic circuits, and aircraft engines and parts.

## **Vermont Exports by Dollar Value**



# Virginia

Upon taking office in 2010, Governor Bob McDonnell's first executive order was to name his lieutenant governor to the post of chief jobs creation officer, while pledging to reinvest in the state's job-creation infrastructure. Northern Virginia has certainly benefitted from the jobs boom in the Washington, DC region, and state leaders are pledging support for and investment in the entire state.

In 2011 the state unveiled an aggressive highway and rail infrastructure investment plan, planning to invest \$4 billion over six years. Part of the plan includes important ground transportation improvements in preparation for the Panama Canal expansion in 2014 or 2015. The Port of Virginia is currently the only deep water port on the East Coast capable of handling the larger container ships using the expanded Panama Canal. State leaders are expanding highway transportation - most notably the Route 460 Corridor-Interstate 85 Connector project – to improve access to the port at Hampton Roads. The state is enacting incentives for development zones near the port and expanded roadways, and communities inland are creating new industrial parks and development sites adjacent to major highways and railways.

Already a leader in the science and technology economy, Virginia is building on that strength with a set of new initiatives focusing on STEM jobs and education. State legislators in 2011 allocated \$5 million to a new research-and-development tax-credit program and another \$10 million for commercialization, and seed—and-equity financing for technology and science companies.

Under the Top Jobs Act, the state is embarking on a plan for 100,000 more Virginians to get degrees in the next 15 years. The initiative reforms the state's higher education funding formula, creates incentives for economic development and innovation, and creates a new STEM public-private partnership. State universities immediately created six-year strategic plans as part of the initiative. Following the launch of the Top Jobs Act, 6,000 new students enrolled in universities in the fall of 2011.

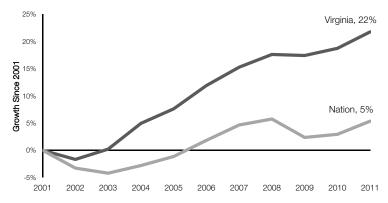
Over the past decade, Virginia has been one of the fastest-growing states in the nation for STEM jobs; this feat is even more remarkable considering the state already had a STEM job concentration that

#### Virginia's Place in the Rankings #1 Median Family Income #1 STEM Job Concentration #1 High-tech Share of All Businesses #3 STEM Job Growth #4 High School Advanced Placement Intensity #6 **Road Quality** #7 Growth Economic Output per Job #9 **Educational Attainment** Gross State Product Growth #10 #10 Small Business Survival Index #11 Economic Output per Job Tax Environment for Mature Firms #11 #13 **Business Birth Rate** Long-term Job Growth #14 #16 Short-term Job Growth #17 Higher-ed Efficiency #20 Cost of Living #21 Per Capita Income Growth

was 35% above the nation in 2001. Virginia's STEM job concentration is now nearly 50% higher than the national norm, and its 22% growth in these occupations is more than four times the national rate.

Higher-ed Degree Output

## **Virginia STEM Job Growth**



Source: EMSI Complete Employment 2012.1

#22

# Washington

Washington is widely acknowledged as the center of the commercial aircraft industry in the United States. Prior to 2012, all commercial aircraft over 100 seats built in the United States were assembled and delivered in Washington State.

According to the Washington Aerospace Partnership, The Boeing Company's production is supported by approximately 650 aerospace-related companies located in 28 counties in Washington. Employment in the aerospace industry stood at 84,000 employees in early 2011. Each job in the industry generates nearly three additional jobs throughout the economy, making aerospace responsible for about 250,000 jobs in Washington.

Washington faces a looming shortage of machinists and other aerospace workers as the industry prepares to raise its production rates at the same time many of its employees approach retirement age. To address these challenges, eleven community and technical colleges in Washington will soon offer a two-quarter certificate in computer-controlled machining, designed specifically to meet the needs of the aerospace industry. The initiative is part of a new national program, Right Skills Now, designed to respond to the talent crisis facing manufacturing industries.

Governor Chris Gregoire is leading state initiatives to address any shortcomings, with a special focus on enhancing the education system to continue the state's excellence as a highly skilled workforce. Business, government, and labor leaders worked together during a 2012 special legislative session to create new programs to foster a high school-to-postsecondary education and training pipeline for good-paying jobs in high-demand fields. Aerospace manufacturing training will be coordinated through the State Board for Community and Technical Colleges and an industry-led advisory board.

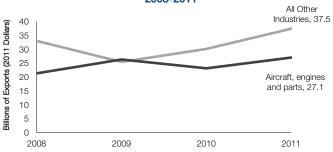
A new grant program for high schools will help prepare students for employment as entry-level aerospace assemblers; a second program is for skill centers to implement enhanced manufacturing-skills programs; and a third program is for high schools to implement specialized STEM courses. The special session also created the Center for Aerospace Technology and Innovation, to support university research relevant to aerospace industry innovation.

## Washington's Place in the Rankings

- #2 STEM Job Concentration
- #4 Export Intensity
- #7 Business Tax Climate
- #8 STEM Job Growth
- #9 Economic Output per Job
- #11 Median Family Income
- #11 Small Business Survival Index
- #12 Long-term Job Growth
- #12 Business Birth Rate
- #13 Job Placement Efficiency
- #14 Broadband Provider Availability
- #15 Short-term Job Growth
- #15 Gross State Product Growth
- #16 High School Advanced Placement Intensity
- #16 High School Advanced Placement Intensity
- #18 Educational Attainment
- #17 Tax Environment for Mature Firms
- #19 College Affordability
- #21 Road Quality

Governor Gregoire extended an executive order that suspended non-critical rulemaking by state agencies until the end of 2012. Agencies must consult with small businesses and/or governments on how impacts of new rules can be mitigated. Governor Gregoire also established a business liaison team that works with all state agencies having significant regulations affecting small businesses.

# Washington Exports by Dollar Value 2008-2011



Source: U.S. Census Bureau Foreign Trade Data

# **West Virginia**

While West Virginia is known for its substantial coaldriven energy sector, the state has been making concerted efforts to build momentum in other areas of potential economic strength, including manufacturing, technology, and petrochemicals. Governor Earl Ray Tomblin, newly elected in 2011, has committed to working with state policymakers to pursue expanded tax reforms, infrastructure investments, and industry-focused incentives as a means to attract private-sector job growth.

The state has committed to elimination of its business franchise tax and a phased-in rollback of corporate net income tax rates over the next several years. West Virginia has also embraced the use of targeted tax incentives to support job creation. The state's Economic Opportunity Tax Credit offers employers who create a minimum of 20 jobs in eligible industries credits that can be used to offset obligations in several tax classes.

The state's Industrial Access Road Fund offers infrastructure-support funding to new or expanding businesses in several industries, including manufacturing. Local governments can use the funds to build out public-access infrastructure in support of eligible private-sector developments. The state's Five for Ten Program offers property tax relief to largescale manufacturing facilities. Qualified investments in equipment and facility upgrades are valued at five percent of their actual value for 10 years for property tax purposes, encouraging job-creating expansions. The state also offers special income tax credits to manufacturers for property taxes paid on manufacturing inventory, cutting down on the cost of warehousing finished products in the state prior to sale.

West Virginia has established a number of programs and nonprofits designed to attract and build jobs in science and technology. The StartUP West Virginia program, administered by TechConnectWV, offers grants to new technology entrepreneurs to aid them through the startup process. Companies can use the funds to access services including commercialization support and prototyping. More substantial support is provided through the state's INNOVA Commercialization Group, offering small businesses and entrepreneurs

### West Virginia's Place in the Rankings

#4 Business Closure Rate#8 Short-term Job Growth

#11 Higher-ed Degree Output

#11 Per Capita Income Growth

#17 Long-term Job Growth

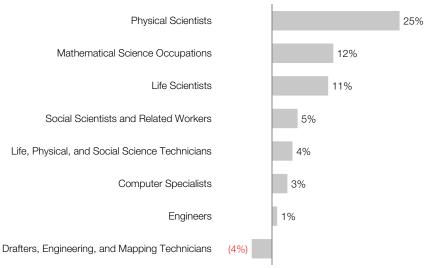
#19 Higher-ed Efficiency

#23 Business Tax Climate

up to \$250,000 of seed investment to help get their products to market. The group also offers professional services and equipment loans designed to support nascent technology companies with growth potential. The state's' Mid-Atlantic Technology, Research and Innovation Center (MATRIC) is home to dozens of research scientists and technicians working with public, private, and educational-sector partners to conduct advanced research with commercial potential. Building on the state's history of petrochemical innovation, the center specializes in chemical and environmental technologies.

Efforts to grow the state's science and technology economy may be paying off. West Virginia's STEM workforce has grown 3.9% since 2007, more than five times the national rate.

# West Virginia STEM Job Categories Fastest Growing, 2007-2011



Source: EMSI Complete Employment 2012.1

Since taking office at the beginning of 2011, Governor Scott Walker has pressed a wide-ranging agenda focused, among other issues, on economic development policy, improving Wisconsin's business climate, and creating 250,000 jobs by 2015. While the debate over the governor's various proposals has been contentious at times, the state has implemented several reforms and programs during the last year aimed at job creation.

As part of his job-creation initiative, Governor Walker launched a Special Cabinet on Economic and Workforce Investment. Led by the state's lieutenant governor, the cabinet gathered input from business, workers, and other workforce and job creation stakeholders to identify policy changes the state could implement to spur economic growth. The information gathered was used to shape the governor's "Wisconsin Working" initiative, which is intended to work with and through the state's departments of Workforce Development, Veterans Affairs, and colleges to reform and expand job placement and training efforts.

Wisconsin is also exploring innovative new ways to connect the unemployed with job-skills training. Under the state's new Wisconsin Wins pilot program, businesses can work with the state to offer on-the-job occupational training to individuals receiving unemployment benefits. Participants receive a stipend in addition to their existing benefits, and may gain full-time employment with the business upon completion of the placement. The program connects businesses directly to unemployed workers, cutting down on the cost of initial placement.

Regulatory reform was another key reform agenda item in 2011. State agencies are now required to submit proposed rules to a cost-benefit analysis, measuring the regulation's potential impact on businesses and the state's economy. The governor has also been given added powers to stop proposed new rules during promulgation, and to kill other proposed regulations, providing a new check to state regulatory power.

Wisconsin has also expanded its loan support programs for small and growing businesses during the past year. Its Housing and Economic Development Authority was granted increased funding and flexibility to make loans in partnership with private-sector lenders. The program is designed to fill financing gaps

#### Wisconsin's Place in the Rankings Tax Environment for New Firms **Bridge Quality** #4 Median Family Income #8 #9 **Business Closure Rate** Academic R&D Intensity #10 #13 College Affordability **Export Intensity** #14 #17 Growth in Share of National Exports #20 **Export Intensity Growth** #20 **Educational Attainment** #24 Small Business Survival Index #21 Higher-ed Efficiency

that are underserved by other lenders, supporting private-sector job creation in partnership with local economic development organizations.

Job Placement Efficiency

High School Advanced Placement Intensity

Cost of Living

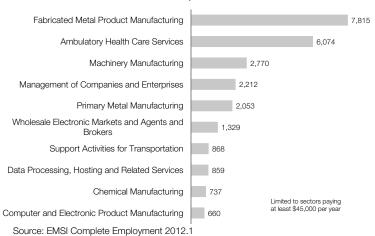
#23

#23

#23

Manufacturing remains an essential driver of the Wisconsin economy. Of the higher-value industries in the state, the fastest job growth has come in heavier-metals-related manufacturing sectors, along with company management offices, health care, and wholesale sales.

# Growth in High-value Wisconsin Sectors Job Growth, 2009-2011



# **Wyoming**

Wyoming is second to none in America when it comes to energy resources. The state is ranked number one in coal production, has high-quality wind potential and uranium reserves, and is ranked in the top three for natural gas compared to other states in the U.S.

Twenty-five percent of Wyoming's \$35 billion gross regional product (GRP) was attributed to mining, quarrying, and oil and gas extraction in 2010. Energy directly accounted for \$10 billon of the state's exports and 9% of all jobs in Wyoming in 2011. Just over 3,500 jobs were created in the sector from 2010 to 2011, accounting for 26% of all new jobs created in Wyoming during that timeframe.

The Wyoming Infrastructure Authority (WIA) is tasked with diversifying and growing the economy by developing electric transmission infrastructure. WIA has \$1 billion in bonding authority for transmission infrastructure in Wyoming, which can be used for generation lead lines between the generation facility and the transmission line. Currently under development is more than 15,000 megawatts of transmission capacity originating in Wyoming and connecting with major population centers in the West, representing potentially more than \$15 billion in investments in transmission and an equivalent amount in generation facilities.

Wyoming is leading in areas beyond natural resources. In 2011, all 10,000 of Wyoming's state employees migrated to Google Apps for Government – the first statewide implementation in the U.S. This is projected to save the state \$1 million per year with all state employees consolidating from 13 different platforms to one. The cloud-based computing environment will improve document sharing and facilitate scaling up storage as the state's needs change. The statewide enterprise rollout to Google Apps is part of Governor Matt Mead's top priorities – to move technology forward in Wyoming – improving productivity and the delivery of government services.

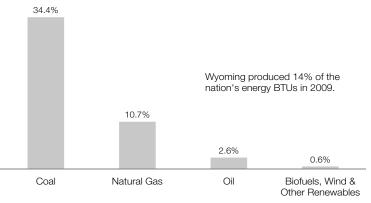
Wyoming's reputation as a hotbed for data centers got another notch recently with Microsoft's announcement that it is opening a data center near Cheyenne, Wyoming. It joins other data centers in the state including those operated by EchoStar, Ptolemy Data Systems, T3Media (formerly Thought Equity Motion)

### **Wyoming's Place in the Rankings**

- #1 Tax Environment for Mature Firms
- #1 Business Tax Climate
- #1 College Affordability
- #2 Long-term Job Growth
- #2 Gross State Product Growth
- #2 STEM Job Growth
- #3 Gross State Product Growth
- #3 Per Capita Income Growth
- #4 Small Business Survival Index
- #5 Economic Output per Job
- #9 Tax Environment for New Firms
- #11 Business Birth Rate
- #12 Road Quality
- #15 Export Growth
- #19 Business Closure Rate
- #20 Bridge Quality
- #21 Median Family Income
- #22 Short-term Job Growth
- #25 Growth in Share of National Exports

and Green House Data. The state's affordable energy, cool climate, and series of incentives make it an attractive location for the industry.

#### Wyoming Share of U.S. Energy Production By Share of Energy BTUs, 2009



Source: U.S. Energy Information Association

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