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Creating a Kentucky Culture of Competitiveness





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Executive Summary

Can Kentucky create a culture of competitiveness that brightens the future for all of its citizens? Achieving that goal will require leaders that are informed and committed; citizens that are healthier, less dependent, more skilled and better educated; and businesses that are globally engaged, finding the talent they need and working collaboratively with elected leaders to increase success. We must all make a commitment to competing to win, not just maintaining our current position. Easy? No. Possible? Yes. Necessary? We believe, absolutely.

This report from the Kentucky Chamber of Commerce sets forth a vision for the Commonwealth that will build toward prosperity on the community and statewide levels. It suggests a new focus on the issues that influence our economy and on the actions that will chart a path toward success.



## Establishing a framework

To establish a framework for the vision, the report details:

- Kentucky's current and recent economic performance, including strengths and weaknesses
- The economic, workforce and technology trends affecting Kentucky
- The perspective of the business community on the issues in need of immediate attention, those that most affect their ability to be successful and whether the education and workforce systems are effectively aligned

The vision rests on four pillars:

#### Workforce:

#### **Q**

To create a globally competitive talent development system that produces a healthy and skilled workforce, benchmarked against the best education and workforce preparation systems in the world

#### Government: Sustainable State Government

To create and sustain a state government that is financially stable and creates a competitive environment for economic growth

### Infrastructure:

To create and maintain a modern infrastructure to capitalize on the state's strategic advantages and to advance its energy agenda

#### Jobs: Aggressive Job Creation

To create and implement a customized economic development program that recognizes the potential of Kentucky's distinct regions and industry sectors and encourages and rewards entrepreneurship and innovation

The pillars, in turn, encompass more than 50 building blocks that represent the specific progress points Kentucky must achieve to ensure a strong and prosperous future.



To gauge Kentucky's performance in building the pillars for prosperity, the Kentucky Chamber will monitor key indicators, make them available 24/7 through an online dashboard, and report regularly on the findings.

- Increased employment growth at a rate higher than the national average
- Increased education attainment levels
- Improved state rankings for businesses and competitiveness
- Per capita income growth higher than the national average
- Improved health rankings
- Gross State Product per capita growth at a rate higher than the national average

- Increased state exports per capita relative to the national average
- More postsecondary degrees and certificates
- Lower state poverty rate
- Decreased state debt per capita
- Improved state pension funding position
- Improved condition of state's physical infrastructure
- Increased availability of broadband
- Sustained low energy costs

Our hope is that someday soon leaders in Kentucky will value economic competitiveness the same way they value competitiveness in basketball. We want our leaders to plan for future years of sustainability with the same enthusiasm as when we anticipate a young colt, an aged bourbon or spring. We want to change the culture and the opportunities for every citizen in our state. To do that we offer Four Pillars for Prosperity: Creating a Kentucky Culture of Competitiveness.

### Introduction



KENTUCKY AND THE UNITED STATES have experienced unprecedented change and significant economic challenges over the past 15 years. Transformational forces such as globalization and urbanization, fueled by technological advancements, have reshaped the foundations of competitiveness for places and people. The Great Recession reset our view of success, and the subsequent recovery has been uneven, leaving citizens and communities with no clear path to future prosperity. If we want better, and the members of the Kentucky Chamber of Commerce do, we have to engage more Kentuckians to push together toward common goals.

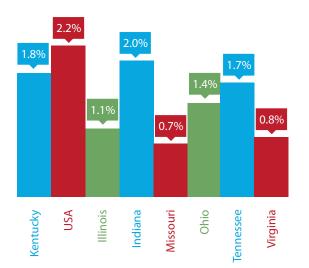
Kentucky enjoys a strong cultural identity, with a mix of Southern, Midwestern and Appalachian influences, that is framed by history, regional diversity and a strong sense of place. We all take great pride in where we have been and celebrate our successes. Yet, around kitchen tables and boardroom tables the future is less clear, and, often, less hopeful. How can communities keep and attract young people? What skills are needed for a good job? Can our leaders collaborate and get things done to make our lives better? How can Kentucky compete globally for jobs and investments?

Simply, how can we create a culture of competitiveness that brightens the future for all Kentuckians? We cannot, unless our leaders are informed and aligned. We cannot, unless our citizens are healthier, less dependent, more skilled and better educated. We cannot, unless our businesses are globally engaged, finding the talent they need and working collaboratively with elected leaders to increase success. We can, if we chart a path toward a more competitive Kentucky, if we focus on the issues that influence our economy and if, together, we all make a commitment to competing to win – not just maintaining our current position. Easy? No. Possible? Yes. Necessary? We believe, absolutely.

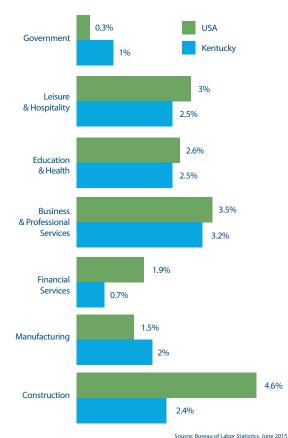
#### 4 • INTRODUCTION

## What do the numbers say?

One Year Employment Change, April 2014-15



### One Year Employment Change by Sector, April 2014-15

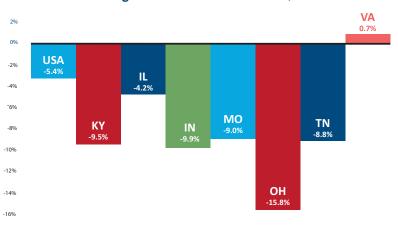




### The ueed for a new focus

To evaluate the need for a new focus, the first step is to examine current and recent economic performance to decide if we are satisfied with the results.

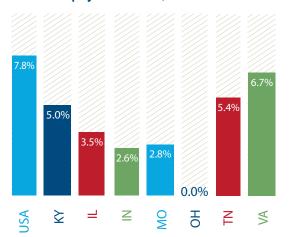
Over the past year Kentucky jobs have grown by 1.8% compared to 2.2% growth for the United States. Kentucky's recent performance looks good when compared to its neighbors, but lags behind leading states. Kentucky's employment growth is uneven, with strong growth in manufacturing, but slower than national growth in many other sectors.



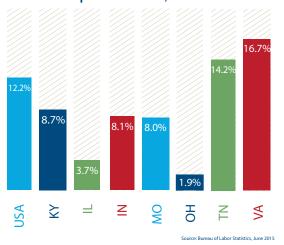
#### **Real Change in Median Household Income, 2004-2013**

#### Employment Growth, 2004-2013

-18%



Population Growth, 2000-2013

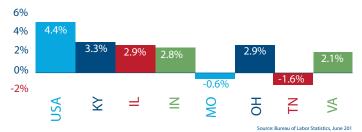


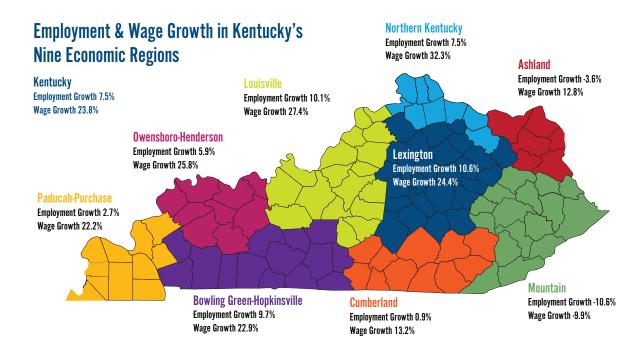
### Economic performance

A longer view of economic performance reveals some strengths and obvious weaknesses. Both population and employment growth in Kentucky has been stronger than its Midwestern neighboring states but remains slower than the national growth rate and the growth of its Southern neighbors.

Kentucky's Real Gross Domestic Product grew faster than all of the neighboring states' but was below the national average. The losses in Real Median Household Income were almost universal. It is easy to understand why many Kentucky families still feel the impact of the recession.

#### Real GDP Per Capita, 2004-2013



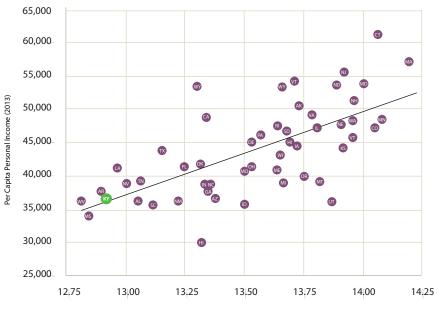


Kentucky's Nine Regions

The economic performance of Kentucky's nine regions shows even more mixed results. In his June 2015 economic report for the Kentucky Chamber, economist Paul Coomes looked at how each of Kentucky's regions had recovered since the bottom of the last recession in terms of both employment and wages/salary. Eastern regions of the state have the poorest performance with the Mountain region still suffering severe job and wage losses. All regions continue to lag the United States in terms of average pay per job.

#### Kentucky vs. the National Average

Per Capita Gross Domestic Product (2013)		\$38,830
Per Capita Persona Income (2013)	N////hh	\$36,214
Average Annual Wage (2013)		\$40,793
Change in Real Productivity (2004-2013)		+4.3%
Change in Rea Wages (2004-2013)	+/ b%	-0.3%
Total Goods Exports Per Capita (2013)		\$5,753



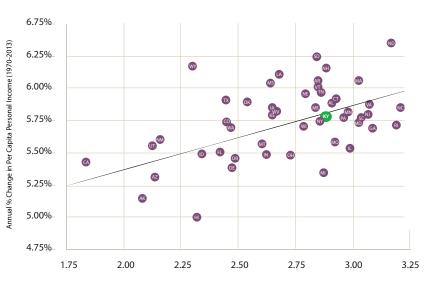
#### Income vs. Level of Education, 2013

### Iucorne vs. education level

In today's economy, educational attainment and economic prosperity are inextricably linked. As the chart to the left shows, Kentucky continues to struggle in the lower left corner among the poorest states in income and in relative educational attainment (with about 12.9 average years of education).

Years of Educational Attainment (2013)

(Source: "Small Differences in Education Drive Large Income Gaps Among States," by Mark Snead, President and Economist at Region Track, Inc.)



#### Income Growth vs. Education Gains, 1970-2013

Change in Years of Educational Attainment (1970-2013)

Kentucky is in the middle of the pack in the rate of growth of per capita income (with about as many states above Kentucky as below) and in the growth of average educational attainment. Kentucky's increase of about 2.8 years per adult puts it closer to the top third of all states.

However, this chart, measuring economic

growth for the past 40-

plus years, shows that

(Source: "Small Differences in Education Drive Large Income Gaps Among States," by Mark Snead, President and Economist at Region Track, Inc.)

## What do the raukings say?



How we see ourselves is important, but how Kentucky is viewed by outside decision makers will determine whether the state can attract new investments and jobs. Some national rankings have characterized Kentucky as less competitive than we would prefer. Two publications that base their rankings on specific categories are Forbes and CNBC. In its latest Best States for Business, Forbes ranked Kentucky 33rd among the states, with good marks

for business costs (#14) and a middling ranking (#24) for regulatory environment. Kentucky earned low rankings for labor supply (#46) and quality of life (#34).

g- Although rauked No. 1 for the lowest The health remains a l cost of living, the state scored among the advantage. <sup>The health</sup> advantage. Kentuck plagued by

In CNBC's America's Top States for Business, Kentucky ranked 39th overall. Although ranked No. 1 for the lowest cost of living, the state scored among the bottom half of states in most categories, including 47th in access to capital, 46th in economy, and 42nd in quality of life.

The American Legislative Exchange Council's 2015 Rich States, Poor States ranks Kentucky 27th in economic performance and 30th in economic outlook. Site Selection Magazine looked at actual performance for new plant locations and firm activity and ranked Kentucky a solid 8th best. The state also was awarded Site Selection's Governor's Cup award for its first-place national ranking in new and expanded industry activity per capita in 2014.

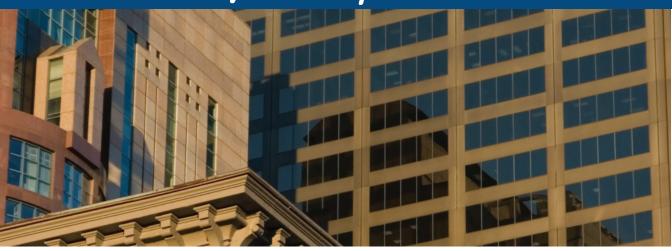
Two areas where Kentucky continuously scores low are health and the fiscal sustainability of state government. In the 2013 report, State of Kentucky Well-Being by Gallup, Kentucky scored 49th in overall well-being. The state scored 49th in emotional health, 49th in life evaluation, 49th in physical health and 49th in healthy behaviors. Only work environment scored

> better than 40th, ranking 25th. The health of Kentucky citizens remains a huge competitive disadvantage.

Kentucky continues to be plagued by the unfunded liabilities – totaling tens of billions

of dollars – of its public employee pension systems. A 2014 estimate put the Kentucky Employee Retirement System's unfunded liability at 79%, with funding available to meet 21% of the future obligations to retirees. The Kentucky Teachers Retirement System, meanwhile, estimates it will need as much as \$400 million per year in additional funding to make up for underfunding in the past and ensure the fiscal viability of the system. This debt level has led national bond rating services to downgrade Kentucky – meaning higher costs for bond-financed projects.

## Trends Affecting Kentucky



The most predictable constant in today's economic reality is accelerating change. Charting a path forward requires looking around the corner and preparing for what is next. As the often quoted line from Wayne Gretzky goes, "skating not to where the puck is, but where it will be." To see that future, we start by examining the trends that are reshaping the world in which we compete.

The United States has been rapidly urbanizing for more than a century. Today more than 90% of the country's GDP and 86% of the jobs are located in urban areas, with most growth happening in larger communities that offer new 21st century infrastructure such as commercial airports, large research universities and hospitals. This trend has a significant impact on us due to Kentucky's relatively high percentage of rural and small town residents. It also necessitates a nuanced approach to economic development that recognizes regional differences in both strengths and needs.

Educated workers, especially younger workers, seem to be even more attracted to an urban lifestyle. Census data shows that the larger the metropolitan area, the faster the growth in recent years.

According to Joe Cortright, an economist with the regional economy firm Impresa, "about 25 percent more young college graduates live in major metropolitan areas today than in 2000, which is double the percentage increase in cities' total population." These choices ripple through and strengthen the urban economy. Enrico Moretti, an economist at the University of California, Berkeley, and author of The New Geography of Jobs, stated "For every college graduate who takes a job in an innovation industry, five additional jobs are eventually created in that city, such as for waiters, carpenters, doctors, architects and teachers." For Kentucky cities to compete for talent they must invest in downtown quality and also in the infrastructure that young talent demands.

Growth sectors continue to change. Now, five years into the rebound from the Great Recession, jobs are being generated at the best rate since the 1990s, and wages have begun to show some positive signs. But recovery has been slow and uneven. Over the past 20 years, manufacturing jobs, the foundation for many communities, have been reduced by globalization. Automation and efficiencies have also eliminated the need for many production workers. Although there is a constant drumbeat about the loss in manufacturing in the United States, the manufacturing share of national GDP has remained constant for decades, while the number of workers needed in that industry has dropped significantly.

Most experts do not expect significant manufacturing

job growth in the coming years, but this will not mean that manufacturing will be less important for Kentucky. Kentucky's challenge will be to successfully compete for emerging advanced industries. Brookings, in its 2015 report, America's Advanced Industries, concluded that, "Advanced industries tend to cluster in large metropolitan areas. Looking across the country, the 100 largest metro areas contain 70% of all U.S. advanced industry jobs." Smaller areas that have significant advanced industry jobs typically fall into two categories: places with major research universities or smaller communities that are the founding home of a major supplier. Kentucky's ability to provide highly skilled workers and connections to higher education expertise and innovations will determine success.

Today, a dense concentration of skilled labor is often the deciding factor in business locations and expansions. Finding workers with the right skills is one of businesses' top priorities. The talent bar—what is needed to be successful at any job—is rising. Having citizens with the right skills is a prerequisite for most places to successfully compete. Smaller communities with limited concentrations of talent and states with lower skill and educational levels are at a clear competitive disadvantage.

Nationally, job growth since the end of the recession has been concentrated in lower wage service sectors such as food preparation, administration and sales, and in highly skilled, highly educated sectors such as business, scientific and professional services. Currently there are too few people with the specific skills that are in high demand, creating a market that favors the employee and drives up the costs of finding highly qualified labor and the wages of those hired. At the same time, too many people with limited (or in low demand) skills are creating a market that favors the employer, stagnating the wages paid to low skilled labor and increasing the skill level of those that actually get hired. For many Kentuckians, lifelong skill upgrades will be needed to increase their wages and standards of living.

The types of skills needed and the types of jobs being

# Top factors for companies considering new investment

- 1. Highway accessibility
- 2. Occupancy or construction costs
- 3. Available land
- 4. Available buildings
- 5. Availability of skilled labor
- 6. Labor costs
- 7. Right-to-work state
- 8. Proximity to major markets
- 9. Energy availability & costs
- 10. Coporate tax rate
- 11. Tax exemptions
- 12. State & local incentives

Source: Area Development 29th Annual Survey of Corporate Executives, March 2015

created are different from what they were in the past, and they will be different in the future. A recent Bureau of Labor Statistics report concluded that, despite millions of people unemployed in America, businesses had millions of job openings, with 50% saying that they cannot find the talent they need.

Everyone is frustrated by the mismatch between available workers in need of work and employers who cannot find the skills they need to compete. Without expanding economic opportunity it is almost impossible to find good jobs. But even with a growing job base, some citizens still struggle. For Kentucky a robust education and worker training system that is responsive to business needs can address many problems.

This will require a focus on the demand side of worker training. By focusing on the demands of business, this approach allows citizens and service providers to understand the opportunities that exist for current and future employment and what specific skills are necessary to take advantage of those opportunities. Some of the components of a demand approach include:

- An education system where curriculum is informed by business and where the graduates possess the skills and knowledge needed to successfully obtain in-demand employment
- Flexible training opportunities, widely available to citizens throughout their work life
- Structured linkages among employers, unions, educators, government, non-governmental organizations and individual citizens in the labor market to improve the content and delivery of skills
- Broad, promoted access to real-time labor market information
- Rethinking credentialing to certify and quantify skills mastery gained throughout life

Another trend is the corporate outsourcing of labor, but not necessarily overseas. The United States is experiencing rapid growth in the "free-agent" workforce. Sometimes referred to as freelancers, contractors, consultants or contingent workers, temporary workers have always been used to modulate the needs of business. But this growth is different. According to Workforce Software Inc., "sputtering global economies and tight labor markets have recently led to a dramatic increase in the number of individuals classified as 'temp workers.' Since 2009, for example, the United States temp services sector has been growing at a rate five times faster than that of other industries."

### Observable technological trends are affecting every facet of the economy and society. Robotics,



" 1 in 3 Americans, or roughly 42 million people, are now freelancers, according to the Freelancers Union that tracks this demographic. That's onethird of the U.S. workforce. "

Source: Elaine Pofeldt, CNBC.com

the Internet of everything, 3-D printing, drones and wearable technology are redefining corporate activities daily. Each offers new methods, current job displacement, new job opportunities and consumer choice and control. Chamber leaders from health, financial service, education and personal services can easily recount how their companies are being transformed.

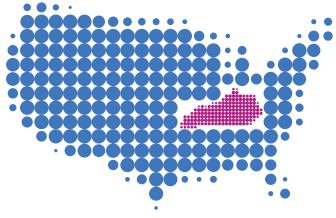
Electronic medicine is exploding. Health care in rural Kentucky is changing rapidly with remote, robotic surgery becoming more common. In the near future tele-diagnostics and telemedicine will be available to any home with Internet access. Robotic home health aides are beginning to be deployed. The impact on rural Kentucky health care and especially rural hospitals is projected to be dramatic.

Crowd-capitalization is emerging across many platforms. Crowdfunding is "the practice of funding a project or venture by raising monetary contributions from a large number of people, typically via the Internet." As this becomes mainstream it eliminates the need for some types of local financing and might reverse the problems that were created in micropolitan regions as banks consolidated and took lending decisions to larger metro areas.

### Education and skill gamification — the use of game playing elements to teach skills — is

displacing traditional classrooms. Education may be the industry sector facing the most pressure to change. Technology can provide self-monitored, individually tailored training on a broad variety of skills that are quantifiable. Technology and personal economics are driving pricing down, and industry is demanding more flexibility and more quantifying of actual skills.

Application technology is global. Unlike in previous technological advances, rural and micropolitan re-

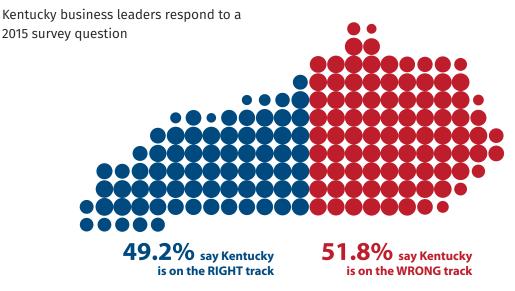


gions no longer experience a significant lag time for new innovations. New map software, consumer preference applications, businesses sharing services and many other "new, cool things" are released with coverage of the whole country at once.

Our conclusion — after looking at the economic numbers, reading how others rank our state, and examining the trends that are affecting our future — is that Kentucky's economic performance needs to improve. The competition is growing more diverse, more determined and more formidable. We want increased investment and more good jobs for Kentucky. We want our citizens to prosper. If we expect better economic results we will have to address our weaknesses and maintain our strengths. We will have to take intelligent intentional actions. If we want better, we will need to do better.

## What the business community thinks

### Is Kentucky on the Right Track?



In early 2015, almost 500 Kentucky businesses completed a survey that asked them to identify the issues they felt were important and needed immediate attention.

The first question showed that businesses shared the concern that the status quo was not sufficient, with more businesses believing the state was on the wrong track than thought it was on the right track.

When asked about their level of satisfaction on issues that affect their ability to be successful, statewide businesses were the most satisfied with the quality of life in their community, the availability of water and sewer, and the availability of affordable and reliable energy. They were the least satisfied with government regulations, business taxes, quality and costs of health care, and availability of workers with appropriate skills.

When asked to identify industry sectors that would be important to Kentucky's future, respondents named advanced manufacturing, health services, hospitality and tourism, agriculture, educational services, and energy.

Business leaders felt strongly that the skills of the Kentucky workforce were a major concern. Less than 10% of respondents agreed that "Overall the local workforce has good skills." Almost one third, 27%, agreed that "Employers have trouble finding people with good soft skills," and another third, 33%, agreed "Employers have trouble finding people with the right technical skills."

Over a fourth of the respondents, 28%, felt there was a mismatch between what is being taught in K-12 and the skills employers have identified as necessary to be successful in the workplace. A quarter, 25%, responded the same way about what was being taught by higher education

When asked what could be done to help businesses in Kentucky, the most common responses could be grouped in two categories: education and skills training for employees and a competitive business climate.



Conclusion

Those areas receiving the most votes were:

- 1. Reduce government regulations
- 2. Invest more in K-12 education
- 3. Reduce business taxes
- 4. Promote Right to Work reforms
- 5. Invest more in higher education
- 6. Create more work experiences for students
- 7. Invest more in job training

Also included in the responses were:

- Greater emphasis on developing infrastructure (water/ roads)
- Promote better health
- Better support for entrepreneurs
- Take a more active role in business retention and expansion
- Take a more active role in business recruitment
- Promote early childhood education
- Civil justice reform (tort reform)
- Promote tourism
- Provide more access to capital
- Kentucky Chamber acts as aggressive watchdog to push for sustainable government
- Emphasize exports and international trade

Respondents were also asked to identify the most important thing for state government to do to grow the Kentucky economy and create jobs. Improving the state's financial sustainability was the top action, followed closely by education for citizens, providing incentives and aggressive marketing to attract new jobs and companies.

In other comments, members stressed the need for bold leadership, continuous measurement and assessment of progress, and the articulation of a big vision.

**Our hope** is that someday soon leaders in Kentucky will value economic competitiveness the same way they value competitiveness in basketball. We want our leaders to plan for future years of sustainability with the same enthusiasm as when we anticipate a young colt, an aged bourbon or spring. We want to change the culture and the opportunities for every citizen in our state. To do that we offer *Four Pillars for Progress: Creating a Kentucky Culture of Competitiveness*.

Missiou

Public and private leaders work together to improve the state's economic competitiveness, business growth climate and quality of life.

4 Pillars Prosperity

### A Healthy, Skilled Workforce

To create a globally competitive talent development system that produces a healthy and skilled workforce, benchmarked against the best education and workforce preparation systems in the world

#### Sustainable State Government

To create and sustain a state government that is financially stable and that creates a competitive environment for economic growth

#### 21st Century Infrastructure

To create and maintain a modern infrastructure to capitalize on the state's strategic advantages and to advance its energy agenda

#### Aggressive Job Creation

To create and implement a customized economic development program that recognizes the potential of Kentucky's distinct regions and industry sectors and encourages and rewards entrepreneurship and innovation

What will progress look like?

- Increased employment growth at a rate higher than the national average
- Increased education attainment levels
- Improved state rankings for businesses and competitiveness
- Per capita income growth higher than the national average
- Improved health rankings
- Gross State Product per capita growth at a rate higher than the national average
- Increased state exports per capita relative to the national average
- More postsecondary degrees and certificates
- Lower state poverty rate
- Decreased state debt per capita
- Improved state pension funding position
- Improved condition of state's physical infrastructure
- Increased availability of broadband
- Sustained low energy costs

## Building blocks of the 4 Pillars

Realizing the vision of a culture of competitiveness in Kentucky will require sustained work on key building blocks under each of the four pillars.

## amp Workforce

To create a globally competitive talent development system that produces a healthy and skilled workforce, benchmarked against the best education and workforce preparation systems in the world:

- Ensure high quality teachers in every classroom
- Invest in quality early education programs
- Create an education system that produces graduates who possess the skills and knowledge needed to successfully obtain in-demand employment
- Improve student outcomes and ensure accountability in the performance of postsecondary institutions
- Expand and enhance the research advancements of Kentucky's colleges and universities and the commercialization of intellectual property generated by those institutions
- Develop flexible training opportunities that are widely available to citizens throughout their work lives
- Link employers, unions, educators, government and individual citizens in the labor market to improve the content and delivery of skills
- Rethink credentialing to certify and quantify skills mastery gained throughout life
- Retain rigorous academic standards and tests
- Pass legislation to increase parental choice through Charter Schools
- Reduce tobacco use by passing smoke-free legislation
- Expand availability of substance abuse prevention and treatment programs
- Provide incentives to expand availability of workplace wellness programs

## app Government

To create and sustain a state government that is financially stable, as determined by relevant national rating agencies, and that creates a competitive environment for economic growth:

- Conduct a comprehensive management review of the operations of state government
- Audit, reform and appropriately fund public pension systems
- + Continue cost reductions in Medicaid, employee health insurance and prisons
- Develop an actionable legislative agenda to make the tax code more competitive
- Promote responsible state debt levels
- Systematically review all state regulations to create transparent rules that balance economic and other goals
- Allow local option sales taxes

### and Infrastructure

To create and maintain a modern infrastructure to capitalize on the state's strategic advantages and to advance its energy agenda:

- Support public-private partnerships as an alternative method of procurement, construction, or financing of capital projects
- + Build and maintain needed physical assets, including highways, bridges, airports and riverports
- Expand and improve broadband and wireless services statewide
- Maintain the state's low-cost energy advantage
- Support policies to enhance Kentucky's position as a leading exporter of coal
- Invest in the energy infrastructure for new and existing supplies of energy-producing fuel
- Promote energy efficiency



To create and implement a customized economic development program that recognizes the potential of Kentucky's distinct regions and industry sectors and encourages and rewards entrepreneurship and innovation:

- Take deliberate actions to support Kentucky's strategic industry sectors
- Increase global engagement and trade
- Improve Kentucky's job creation efforts by passing Right to Work legislation
- Enhance Kentucky's entrepreneurial climate
- · Broaden the role of postsecondary education in economic development initiatives
- Provide economic incentives to attract talent
- Develop a strategy to capitalize on Kentucky's central location
- Attract increased public and private research and development
- Develop economic development plans customized for Kentucky's nine regions

Measuring Progress: The Dashboard

Ensuring transparency about progress and helping Kentucky's elected officials, policymakers and civic and social leaders understand competitiveness issues will require ongoing measurements. These will include:

- Creating a public-private signature event to annually assess progress
- · Developing, maintaining and promoting a state competitiveness dashboard of key indicators

**Key Indicators:** To gauge Kentucky's performance in building the pillars for prosperity, the Kentucky Chamber will monitor the following indicators, make them available 24/7 through an online dashboard, and report regularly on findings:

## बाह्न Workforce

- 1. Percentage of population ages 3-4 enrolled in preschool
- 2. Performance by 4th grade students on the National Assessment of Education Progress (NAEP) reading assessment
- 3. Performance by 4th grade students on the National Assessment of Education Progress (NAEP) math assessment
- Performance by 8th grade students on the National Assessment of Education Progress (NAEP) reading assessment
- 5. Performance by 8th grade students on the National Assessment of Education Progress (NAEP) math assessment



- 1. State debt per capita ranking
- 2. State and local tax burden per capita ranking
- 3. Total effective business tax rate
- 4. State and local tax burden as a percentage of state income ranking
- 5. State ranking in unfunded pension liability
- 6. State bond/credit rating compared to the 50 states
- 7. Annual General Fund expenditure growth vs. growth in GSP and/or state income

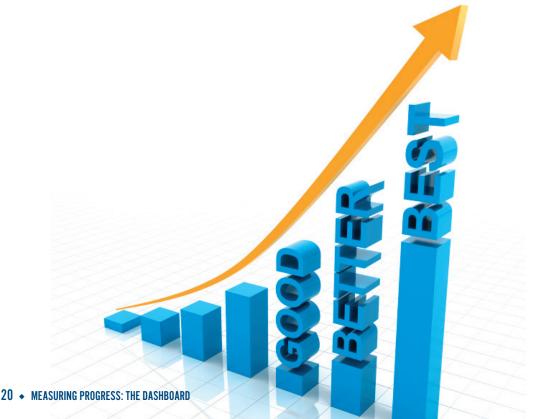
- 6. High school graduation rate
- 7. Postsecondary remediation rate
- 8. Percentage of population with postsecondary education credentials
- 9. Percentage of population with a bachelor's degree or higher
- 10. Percentage of science and engineering degrees awarded
- 11. Average life expectancy
- 12. Violent crime rate
- 13. Average health rankings
- 14. Health care expenditures per capita
- 15. State poverty rate
- 16. Worker productivity
- 8. State government employee growth compared to growth in overall state employment growth
- Rainy day fund balance as a percentage of expenditures (as reported by the National Association of State Budget Officers)
- 10. Growth in General Fund expenditures as a percentage of GSP



- 1. Percentage of population without access to broadband
- 2. Broadband adoption rates
- 3. Total annual infrastructure spending
- 4. Percentage of roads and bridges in poor condition
- 5. State expenditures on roadways
- 6. Average commute time to work
- লাচ বিচাৰ
- 1. Employment growth
- 2. Change in real GDP per capita
- 3. Change in real wages
- 4. Total small business openings less total small business closings
- 5. Manufacturing employment
- 6. Manufacturing output
- 7. Research and development percentage of GDP

- 7. Enplanements of passengers and cargo at all airports
- 8. Energy consumption per capita
- 9. Average retail cost per kilowatt hour
- 10. Average industrial cost per kilowatt hour
- 11. Energy exports

- 8. Patents issued per 1 million workers
- 9. Technology sector employment growth
- 10. Venture capital funding per million dollars GDP
- 11. Total exports per capita
- 12. Regulatory and economic freedom ranking
- 13. Litigation environment ranking
- 14. CNBC Top states for business ranking







The Kentucky Chamber of Commerce provides leadership as a catalyst, consensus-builder and advocate to unite business and advance Kentucky.

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