



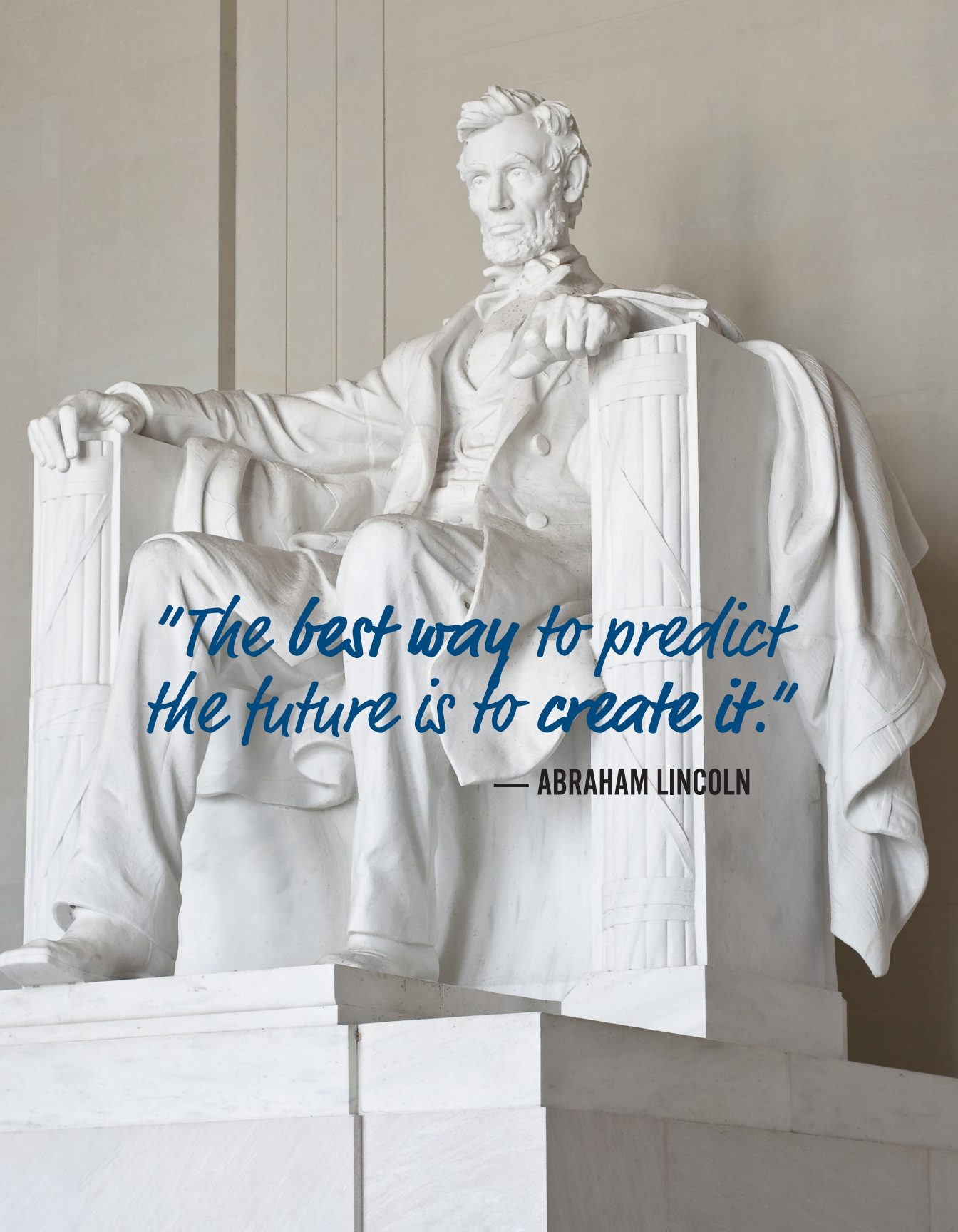
Kentucky Chamber
Uniting Business. Advancing Kentucky.

4 Pillars Prosperity

**Making *Kentucky*
More Competitive**

WORKFORCE | GOVERNMENT | INFRASTRUCTURE | JOBS

FEBRUARY 2019



*"The best way to predict
the future is to create it."*

— ABRAHAM LINCOLN

Executive Summary

Predicting the future is difficult. However, as Abraham Lincoln famously said, “The best way to predict the future is to create it.” With that advice from a Kentuckian who shaped the future of our nation, we offer a vision for a more prosperous Kentucky, and we invite a serious discussion of that vision.

Kentucky’s business community is optimistic about the state’s future, with a vision that rests on four pillars reflecting the goals that must be attained to ensure progress:



A Healthy, Educated and Skilled Workforce

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



Quality, Knowledge-Based Jobs

We must enhance Kentucky’s competitive business environment and implement economic development initiatives that recognize the potential of Kentucky’s distinct regions and industry sectors while encouraging knowledge-based entrepreneurship and innovation.



21st Century Infrastructure

We must create and maintain a modern infrastructure to capitalize on the state’s strategic advantages, including low-cost energy and central location.



Effective & Efficient Government

We must create and sustain an effective and efficient system of state and local governments that are financially stable, that invest in education to improve prospects for the future, and which together create a competitive environment for economic growth.

Kentucky has recorded many successes since the Kentucky Chamber of Commerce offered its initial *4 Pillars 4 Prosperity* in 2015. We offer this updated version that reflects where Kentucky is today and what we believe is necessary for continued advancement.

The 2019 race for governor offers an opportune time to communicate, through this updated *4 Pillars*, where the business community stands on key issues. It also is the right time to encourage candidates and policy leaders to create a policy agenda – and to monitor their work to do so – that will ensure the progress that is so critical for our state and its citizens.

This report chronicles:

- Kentucky’s economic performance since the end of the recession
- Kentucky’s ranking on national indicators of business performance, economic activity, fiscal performance and other key areas
- National economic, technological and talent supply trends affecting the state
- The perspective of Kentucky employers on key issues affecting their ability to succeed

It is our hope that this *4 Pillars 4 Prosperity* will stir a robust exchange of ideas, inspire creative thinking, and fuel the development and implementation of a bolder and even more ambitious program of progress for our state.

Introduction

Uncertainty was the prevailing condition when the Kentucky Chamber of Commerce published the initial *4 Pillars 4 Prosperity* in 2015. Economic uncertainties, transformational forces and technological advancements were framed by a mixed recovery from the national recession, presenting key challenges to the state's efforts to create a culture of competitiveness.

The focus then was on charting a course to prosperity for Kentuckians and their state in challenging times. Today, charting a course to prosperity remains the continuing priority of the Kentucky Chamber and the focus of this updated *4 Pillars 4 Prosperity*.

Changes and developments during the intervening years have altered the landscape for such efforts. Recovery from the recession has gained strength, although it remains mixed in different regions of the Commonwealth. Growth-friendly legislation, such as right to work, has been enacted to spur job creation. The unemployment rate, which peaked at 10.7% in June 2009, was 4.4% as of December 2018. After decades of dominance by the Democratic Party, and several years of divided leadership in the legislative and executive branches, the Republican Party holds the majority in both.

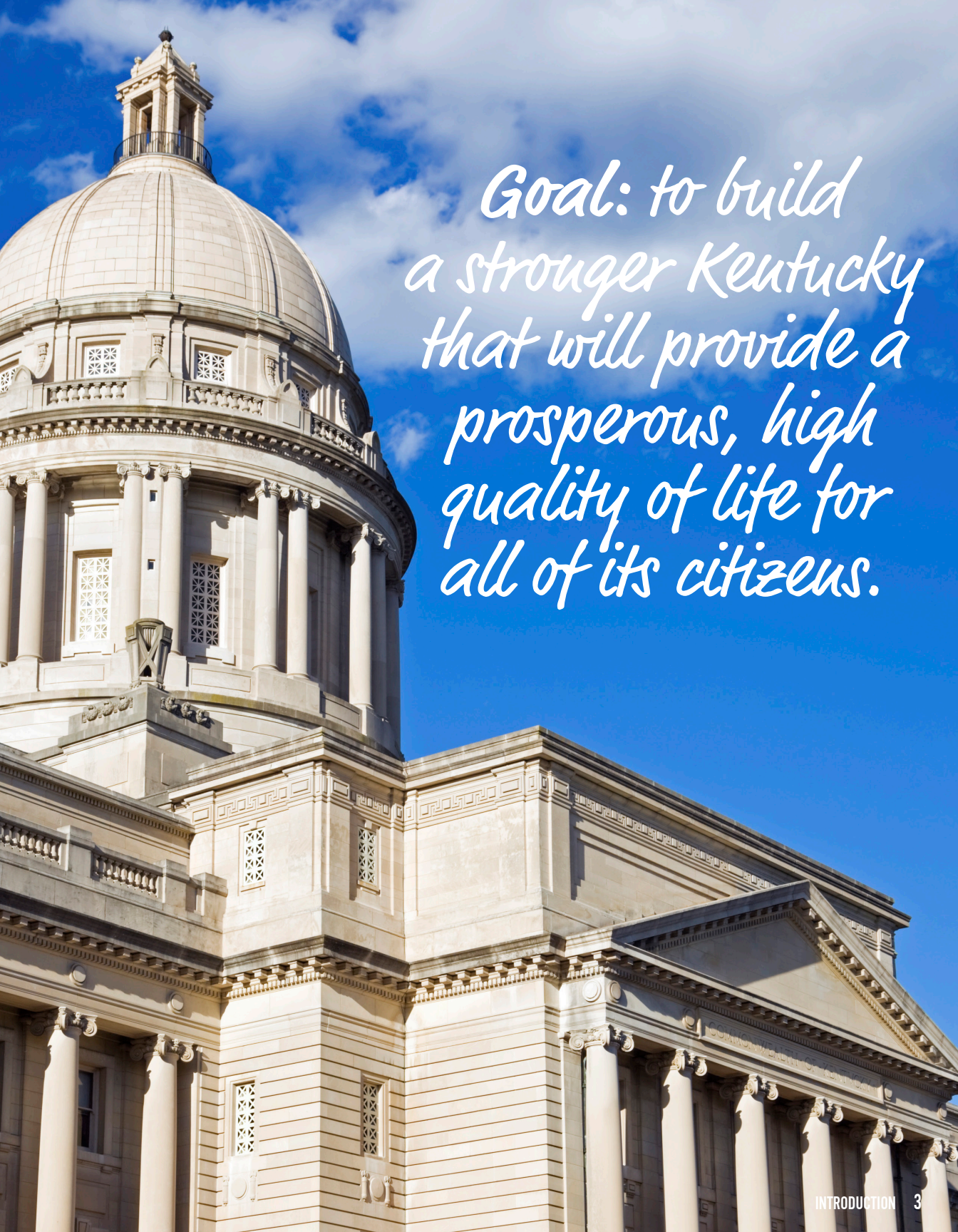
Meanwhile, the state's pension obligations, Medicaid costs and increasing demands on the corrections system have continued to drain state funding away from the investments in education that will secure a brighter future. As we strive for progress in a state with limited public resources, it is becoming more apparent that additional resources, wisely invested, will be necessary for Kentucky to achieve its goals for individuals and the state as a whole.

These developments are significant, but they have not altered the fundamental questions that Kentuckians must address if we are to create the culture of competitiveness necessary for stronger economic growth.

- **How can we improve the skills, education and health of Kentuckians?**
- **What can we do to keep talented young people in our state and attract more to relocate here?**
- **How can we succeed in drawing more employable adults who are not now working into the workforce?**
- **How can Kentucky compete globally for jobs and investments?**

The pillars for prosperity focus on these fundamental questions and call for all of us – in both the private and public sectors - to act even more boldly, especially in areas that seem intractable. We cannot sit by passively, hoping to somehow get our share of progress occurring across our nation's economy; we must create a positive future through strategic action.

As the governor's race begins, the Kentucky Chamber issues this update of the *4 Pillars 4 Prosperity* to inform the dialogue and debate of the campaign as well as the policy agenda of state leaders going forward. Beyond sharing these insights from the business community, the Chamber will monitor and report on the issues and statements presented by gubernatorial candidates to elevate Kentuckians' awareness of the candidates' positions. We do this in support of the goal we all share: to build a stronger Kentucky that will provide a prosperous, high quality of life for all of its citizens.



*Goal: to build
a stronger Kentucky
that will provide a
prosperous, high
quality of life for
all of its citizens.*

Kentucky's Economy by the Numbers

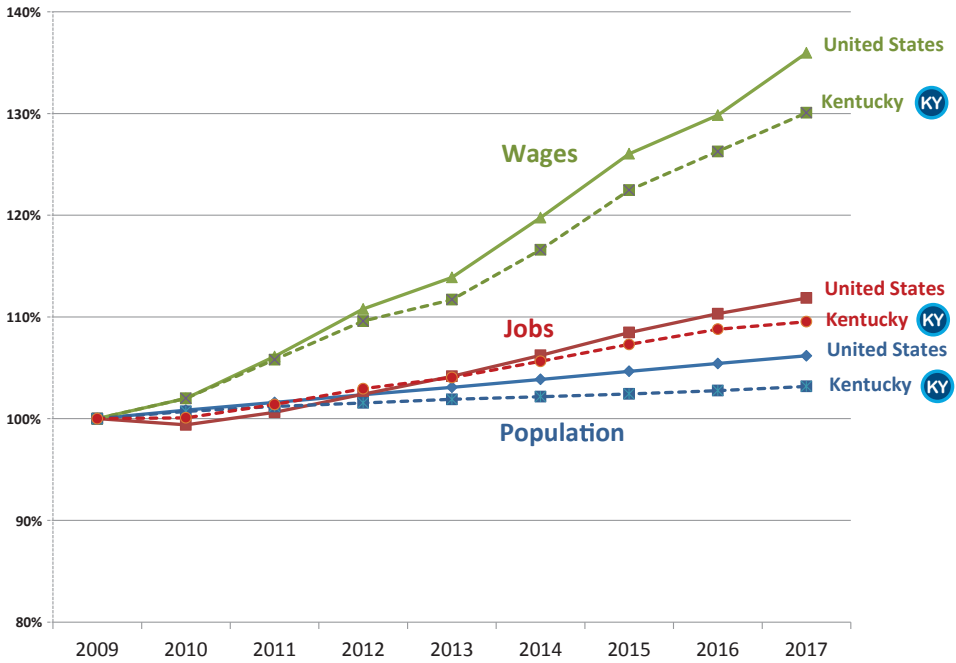
Kentucky continues to trail the nation in the growth rate of jobs, population, and wages and salaries, but has outperformed more than half of its bordering states in those categories.

Tracking Kentucky's economic conditions since the end of the national recession in 2009 shows a mixed performance. The state continues to trail the nation in the growth rate of jobs, population, and wages and salaries but has outperformed more than half of its bordering states in those categories.

(The economic information was developed by Dr. Paul Coomes in a 2018 report for the Chamber, Kentucky's Economy Since the Recession.)

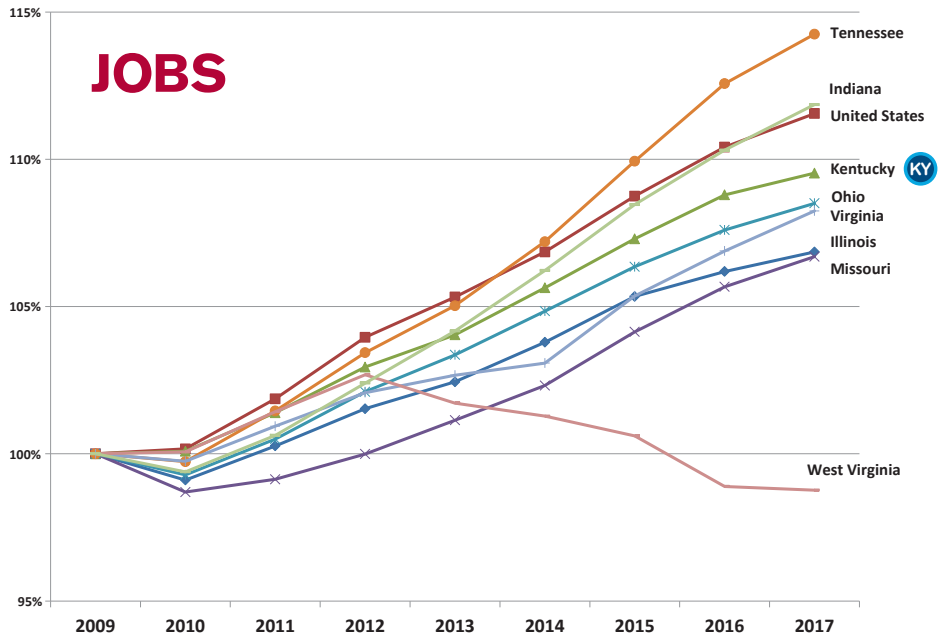


Economic Growth in Kentucky & United States Since End of National Recession

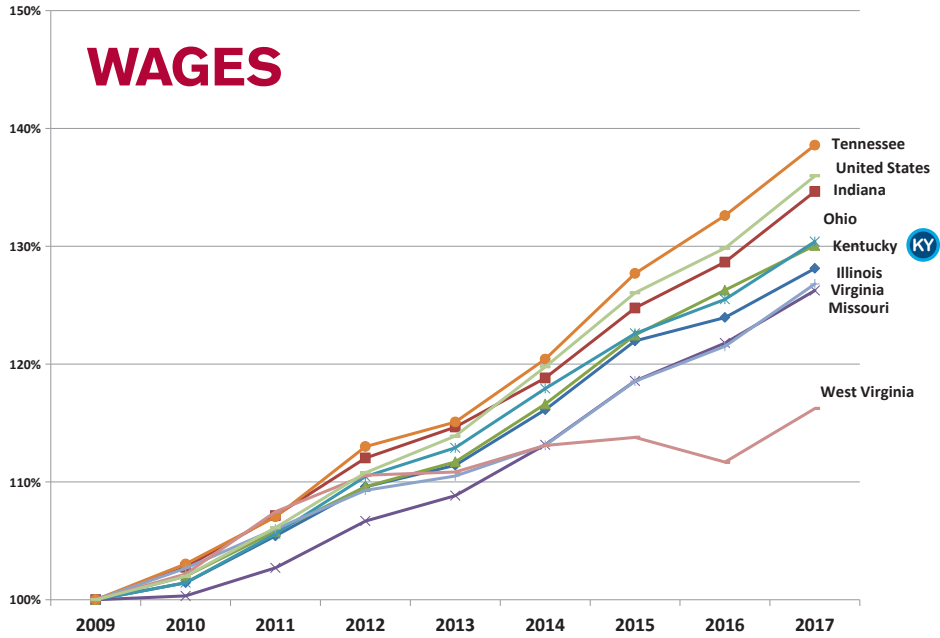


Sources: Jobs and wages from US Bureau of Labor Statistics, Quarterly Census of Employment and Wages program, nonagricultural wage and salary jobs only; population data from US Census Bureau.

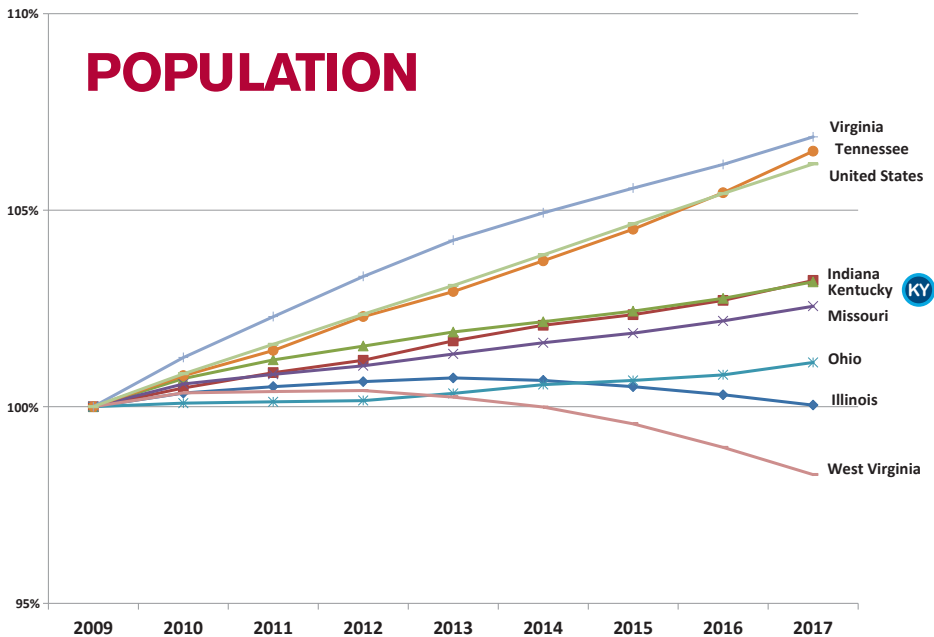
Job Growth in Kentucky & Bordering States Since 2009



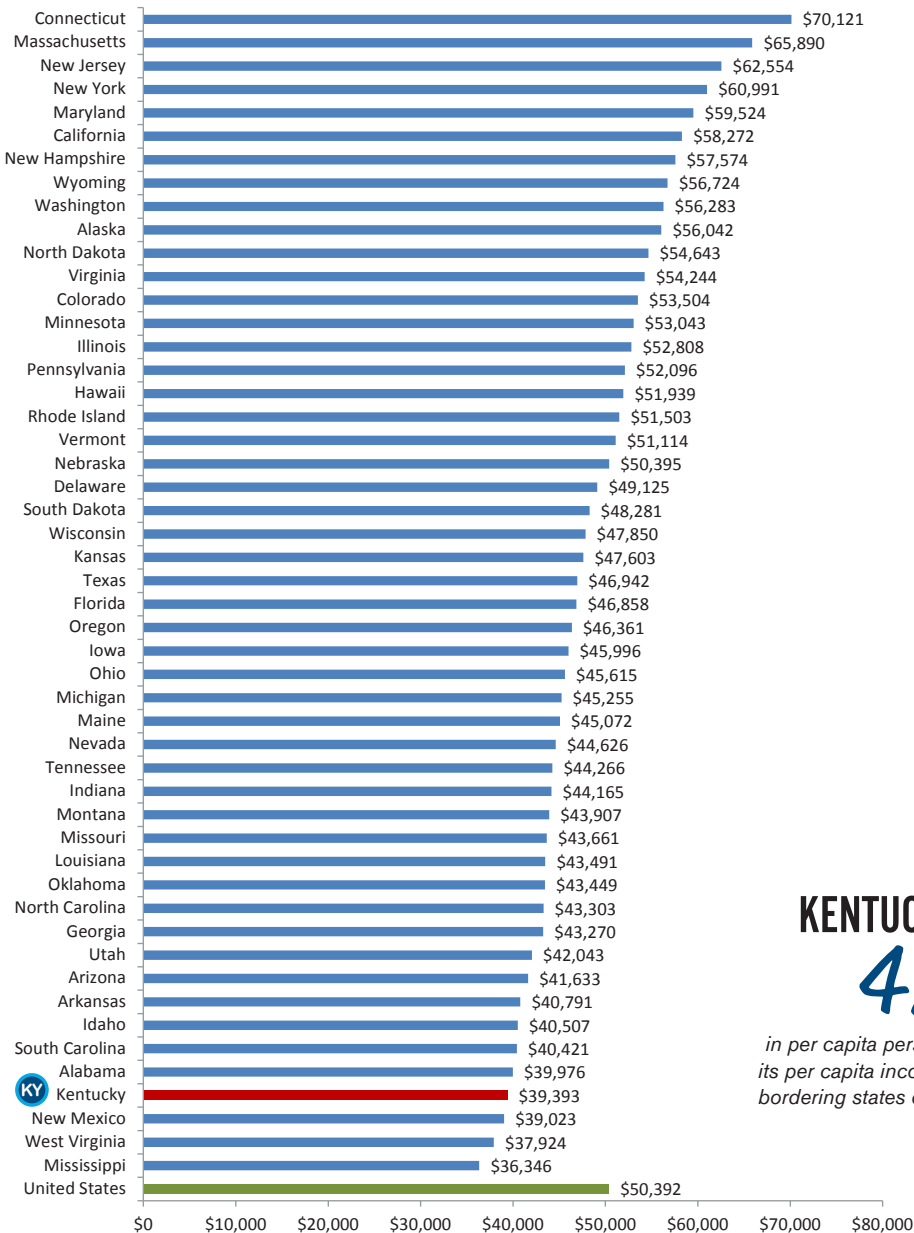
Wage & Salary Growth in Kentucky & Bordering States Since 2009



Population Growth in Kentucky & Bordering States Since 2009



Per Capita Personal Income, 2017

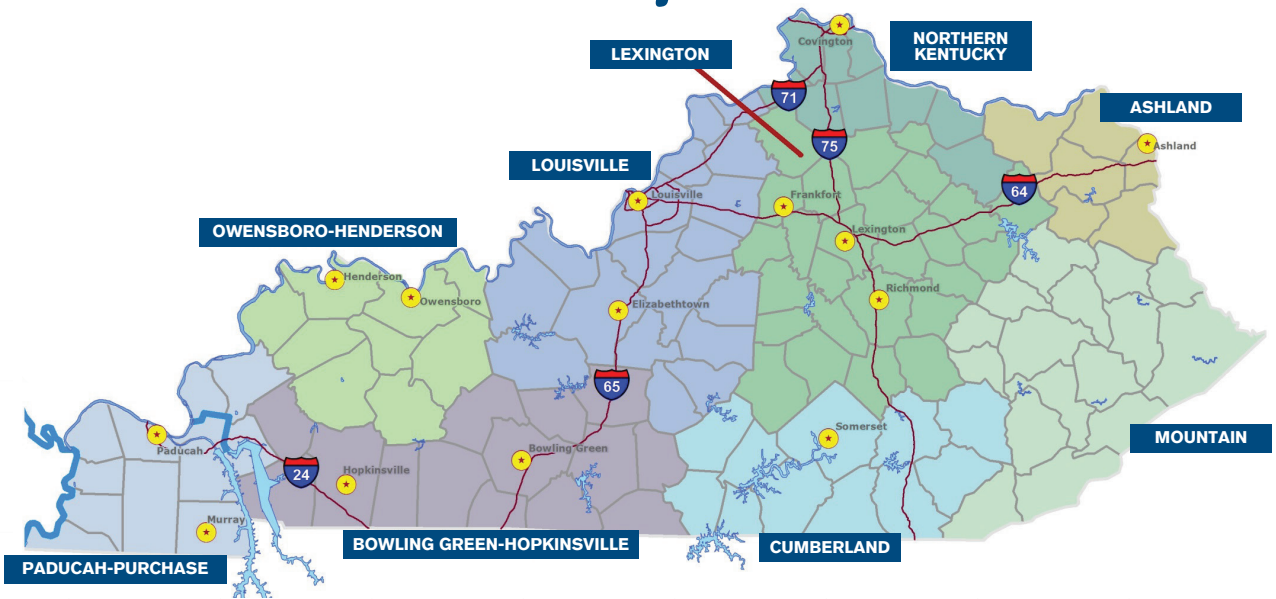


KENTUCKY RANKED
47th

*in per capita personal income in 2017;
its per capita income is lower than all
bordering states except West Virginia.*

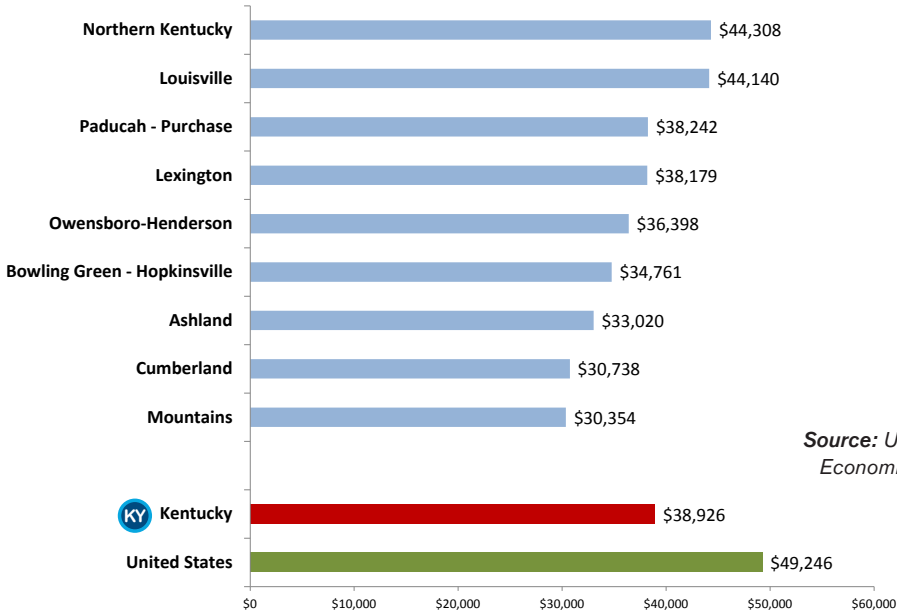
Source: US Bureau of Economic Analysis.

Nine Economic Regions Around Kentucky



The economic performance of Kentucky's nine regions shows mixed results, but no region exceeded the national average in per capita income.

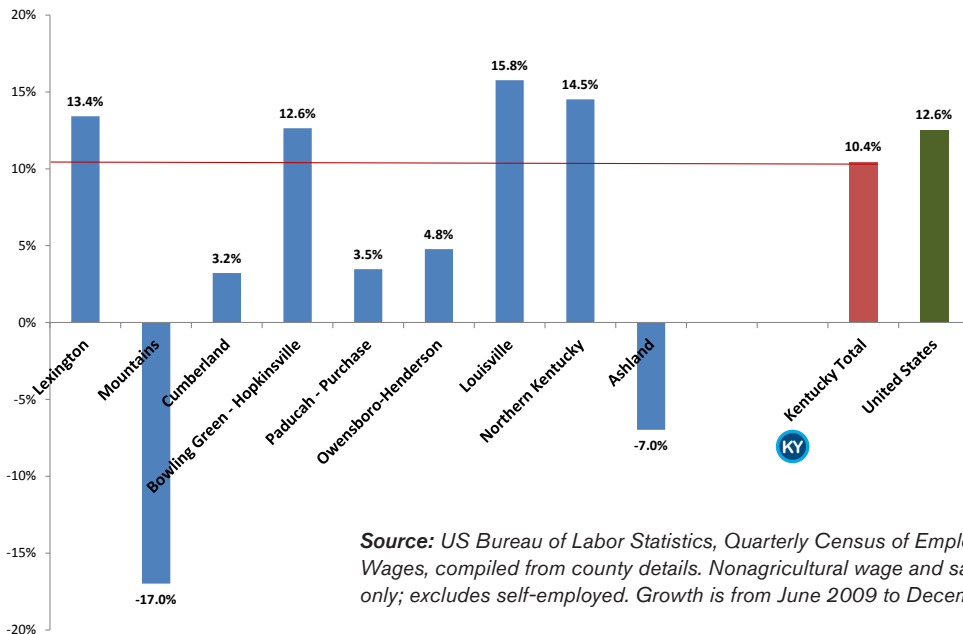
Personal Income Per Capita, 2016, by Region



Source: US Bureau of Economic Analysis

The Louisville, Northern Kentucky, Lexington and Bowling Green-Hopkinsville regions had the highest growth rates in total jobs since the end of the last recession, surpassing the national average. The Mountain and Ashland areas have fewer jobs than they did eight years ago.

Employment Growth Since End of Last Recession, Nine Kentucky Regions — All Industries



Source: US Bureau of Labor Statistics, Quarterly Census of Employment and Wages, compiled from county details. Nonagricultural wage and salary jobs only; excludes self-employed. Growth is from June 2009 to December 2017.

How Does Kentucky Rank?

Kentucky's performance relative to other states is reflected in national rankings on indicators that measure education attainment and health status, assess the business climate and economic activity, and gauge government's fiscal performance.

Such rankings provide insight into the state's potential as a profitable place to do business and whether it is a viable target for new jobs and investments.

As with Kentucky's economic performance in recent years, the state's national ranking news is mixed when compared to 2015. Two publications cited then, Forbes and CNBC, base their rankings on specific categories.

In Forbes' latest Best States for Business (2018), Kentucky ranked 36th overall, down from 35rd in 2017. Its marks for business costs dropped from 10th to 13th, while the ranking for regulatory environment improved from 31st to 28th. Kentucky's quality of life ranking stayed the same at 22nd, as did our low ranking for labor supply (48th). The state's ranks for economic climate and growth prospects were also in the lower tier, both at 38th.

CNBC's America's Top States for Business 2018 found Kentucky dropping seven spots, from 35th in 2017 to 42nd in 2018 (Kentucky's ranking was 39th when the initial *4 Pillars* was published). The state slipped from 10th to 16th in cost of living but made the Top 10 in cost of doing business (10th) and infrastructure (7th). The state's lowest rankings came in workforce (49th), quality of life (37th), economy (47th) and business friendliness (46th).

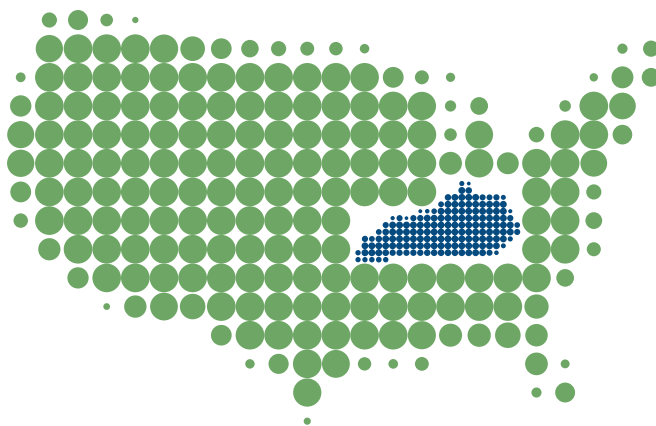
Kentucky's Business Tax Climate Index moved from 39th in 2017 to 23rd for 2018, a jump of 16 places — more than any other state. The Tax Foundation, which compiles the annual report, attributed Kentucky's significant progress to the tax reform package passed by the 2018 Kentucky General Assembly.

The American Legislative Exchange Council's 2018 Rich States, Poor States ranked Kentucky 24th in economic performance, a three-place change from its previous ranking of 27th. The measure is based on state gross domestic product, domestic migration and non-farm payroll employment. Kentucky's ranking in economic outlook, based on policy variables that are influenced through the legislative process, was 31st (down from 30th).

Kentucky's 2018 Economic Freedom ranking, as measured annually by the Cato Institute, moved up seven spots among the 50 states to 26th from 33rd in the last ranking. This measure assesses fiscal policy, regulatory policy and personal freedom.

KENTUCKY RANKED
36th Overall

According to Forbes' latest Best States for Business (2018)





Kentucky Ranked 24th in Economic Performance.

Source: 2018 Rich States, Poor States, American Legislative Exchange Council

Kentucky continues to score low in health status and the fiscal condition of state government. In the 2017 State Well-Being Rankings by Gallup, Kentucky scored 45th in overall well-being (up from 49th in the 2016 report). America's Health Rankings placed Kentucky at 45th in 2018, down from 42nd 2017.

The state's pension liabilities continue as a drag on competitiveness. The 2018 U.S. News & World Report Best States analysis ranks the state 46th overall for fiscal stability. Kentucky's pension fund liability is ranked at 43rd and its government credit rating score at 42nd.

As Kentucky continues to award more postsecondary degrees and credentials (awards increased from 65,829 in 2015-16 to 70,146 in 2016-17), the state's education attainment levels are slowly increasing. The number of Kentuckians aged 25 or older with a bachelor's degree or higher grew from 21.5% in 2015 to 23.2% in 2018. The national average of 28.8% in 2015 increased to 30.9% in 2018.

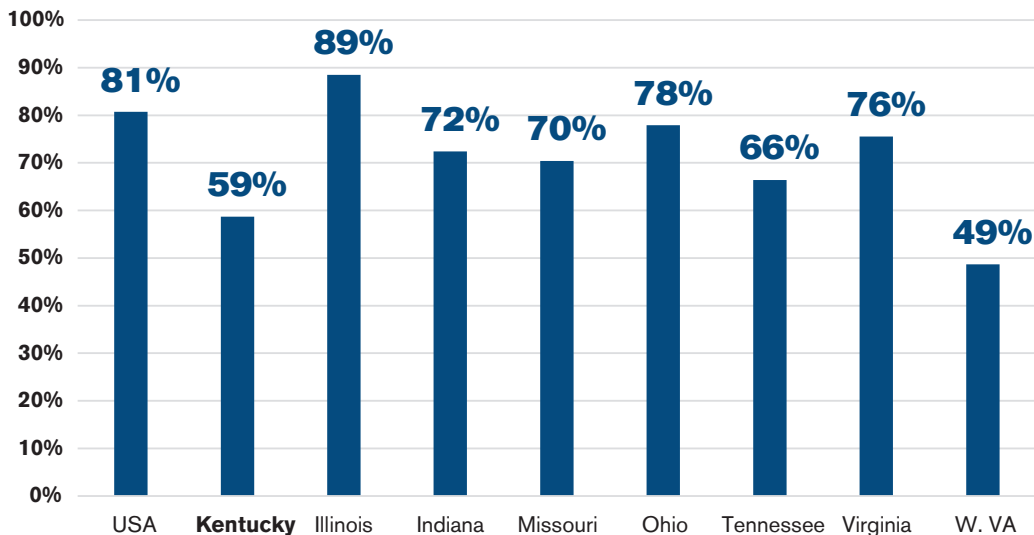
Trends in Kentucky

The pace of change continues to accelerate, and we are all trying to find opportunities to excel among the social, technological and business transformation we face. Since *4 Pillars 4 Prosperity* was first published, many of the trends that were identified have intensified, and evidence is mounting that external factors will have a greater impact on the future of our state. Understanding and successfully riding these waves of change remains our competitiveness challenge.

Urbanization

Increased growth in our nation's urban cores and the adjacent suburbs creates several competitive challenges. According to the Conference of Mayors, "From 1990 to 2016, national employment in metro areas increased by 34%. The job gains of 32.2 million represented 93% of total US job gains." In 2016, metros captured 95% of the country's job growth, and today nearly 90% of the country's jobs, wages and gross domestic product are in metropolitan regions. Kentucky remains among the states with the lowest percentage of its population living in urban areas.

Urbanization of Kentucky & Surrounding States, 2010



Source: 2010 U.S. Census

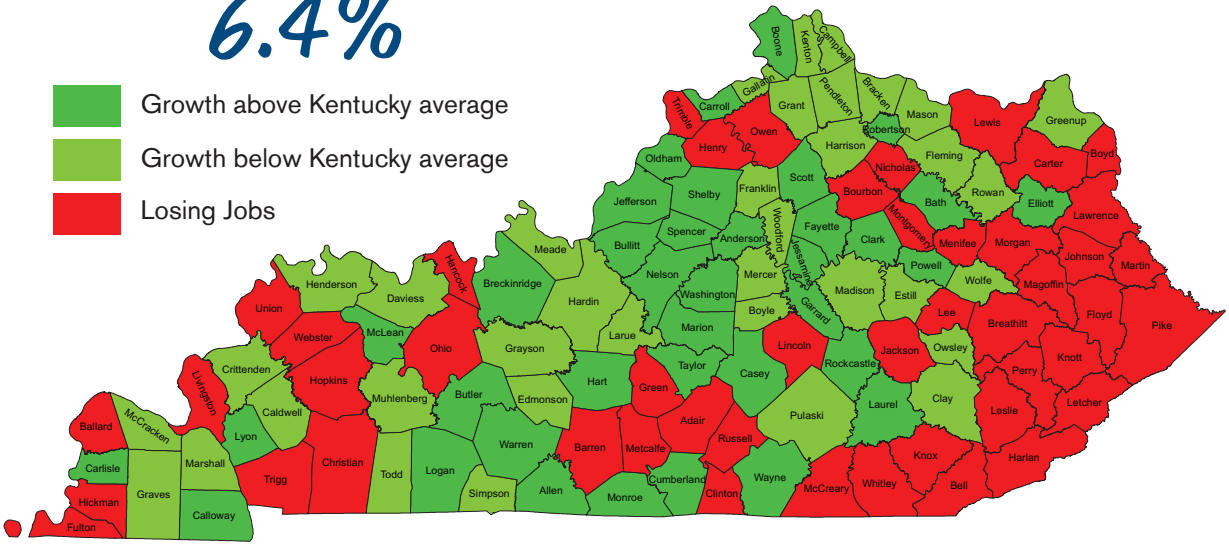
Urbanization, a persistent trend that is more than a century old, creates two distinct challenges for our state. As the map (on page 13) shows, despite strong a strong national economy, dozens of Kentucky counties have continued to lose jobs over the past five years.

Targeted support is needed to help rural parts of Kentucky successfully compete. Better, targeted worker training, high-speed broadband, and suitable buildings and shovel ready sites are prerequisites to success. Both strategic investments and committed statewide leadership are needed to build linkages between our urban and rural regions.

KENTUCKY AVERAGE GROWTH

6.4%

- Growth above Kentucky average
- Growth below Kentucky average
- Losing Jobs



Source: U.S. Bureau of Labor Statistics QCEW

Urbanization's second challenge is the imperative to strengthen Kentucky's urban areas so they can compete against other metros. Sophisticated data analytics are now used to compare potential regions for new investment, and while we must remain committed to all our counties and cities, a focus on the competitiveness factors of our economic engines is a must.

The cost of doing business, available infrastructure, depth of skilled workforce and proximity to markets and suppliers remain critical; but as the latest national survey of corporate executives shows, quality of life is now a top concern, and proximity to a major airport has risen to 12th among several dozen factors. Quality of life is associated with a region's ability to attract new workers.

Source for the Top Factors List: Area Development 32nd Annual Survey of Corporate Executives

TOP FACTORS FOR COMPANIES CONSIDERING NEW INVESTMENT

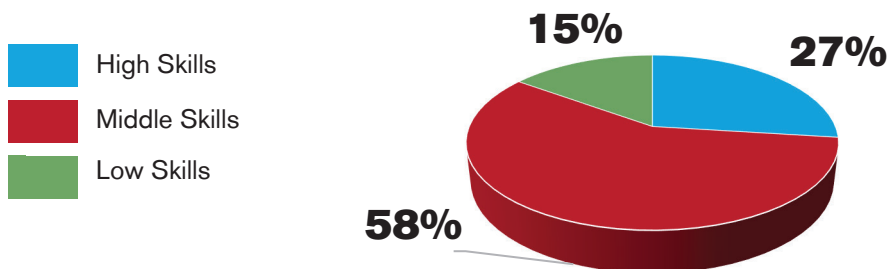
- 1) Highway accessibility
- 2) Labor costs
- 3) Availability of skilled labor
- 4) Quality of Life
- 5) Tax exemptions
- 6) Occupancy/Construction Costs
- 7) Proximity to major markets
- 8) Corporate Tax Rate
- 9) State & local incentives
- 10) Available land
- 11) Expedited or "fast-track" permitting
- 12) (tie) Proximity to suppliers
- 12) (tie) Accessibility to a major airport

The availability of a workforce with the right skills

remains a critical concern. As unemployment has continued to drop, baby boomers retire, and Kentucky's labor force participation rate remains among the nation's lowest, the general availability of workers is a top concern for Kentucky employers. Both the quantity of workers and the quality of worker skills act as a restraining throttle on business growth. Workforce development has become a top concern of employers across the country, prompting states to aggressively experiment with new ideas. Several themes have emerged spanning the whole life cycle of skills development from early childhood education to the retraining of older workers.

Raising parent, student and teacher awareness of the abundant job opportunities for middle skills is now more common. Middle skills are defined as those requiring more than high school graduation, but less than a bachelor's degree. The National Skills Coalition estimates that although only 44% of Kentucky workers have middle skills, 58% of current jobs need those skills. They further estimate that 53% of job openings between now and 2022 will be for jobs requiring middle skills.

Skill Demands for Current Kentucky Jobs



Source: National Skills Coalition, Kentucky Middle-Skill Fact Sheet

The use of county and regional occupational and industry trend data will allow more targeted sector strategies and occupational training development. In some places, broad coalitions of education and training groups are working with business organizations to better define curriculum and capacity to meet the local demands. Focusing on the demand side of workforce remains critical.

To be successful we need:

- An education system with curriculum informed by business and where graduates possess the skills and knowledge needed to successfully obtain in-demand jobs.
- Flexible training opportunities, widely available to citizens throughout their work life.
- Structured linkages among employers, unions, educators, government, non-government 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 skill mastery gained throughout life.

Technological advancements

continue to transform every industry in our state. Over the past few years advancements in drone technology, artificial intelligence, and medical diagnostics have been mainstreamed across many business and consumer platforms. Chatbots and new retail design have made it possible for someone in a kitchen, or a shop floor, to say out loud, “I have run out of this item, bring it to me.” In many markets today the chatbot listens, places the order, charges the account and tracks the delivery, often within two hours, to the door. A few minutes later the chatbot asks if you are satisfied. A decade ago this type of retail and logistics service would have been impossible.

Cloud storage has changed technology approaches for small and medium sized businesses. Augmented reality has made information retrieval instantaneous and Smart City use of sensors is controlling street lights, traffic and public services. New technologies use analytics, sensors and drones in combination to maximize agricultural growth, provide real-time simultaneous translation to enhance global trade and next generation robotics to increase manufacturing efficiencies.

Over the next few years as new advances in 3-D metal printing, quantum computing, blockchain technologies and self-learning predictive analytics continue to grow, we should all anticipate even more impactful change. We can expect major shifts in manufacturing, the delivery of medical services and education — three critical industries in our state.

We also need to anticipate and prepare for changes in consumer expectation. Technology tools and the emergence of millennials in the workplace have raised the customer service bar for all businesses and for government.

Our conclusion, as it was a few years ago, is that although Kentucky is doing many things well and has cause for some celebration, competition for investment, jobs, residents and opportunity is fierce. Today we still have challenges to face and even in areas where we are on the right track, competitor places seem to be moving faster. As we said in the initial *4 Pillars 4 Prosperity* report, we expect 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 be better. Times of rapid change create opportunity for the bold. Kentucky must be bold, now.

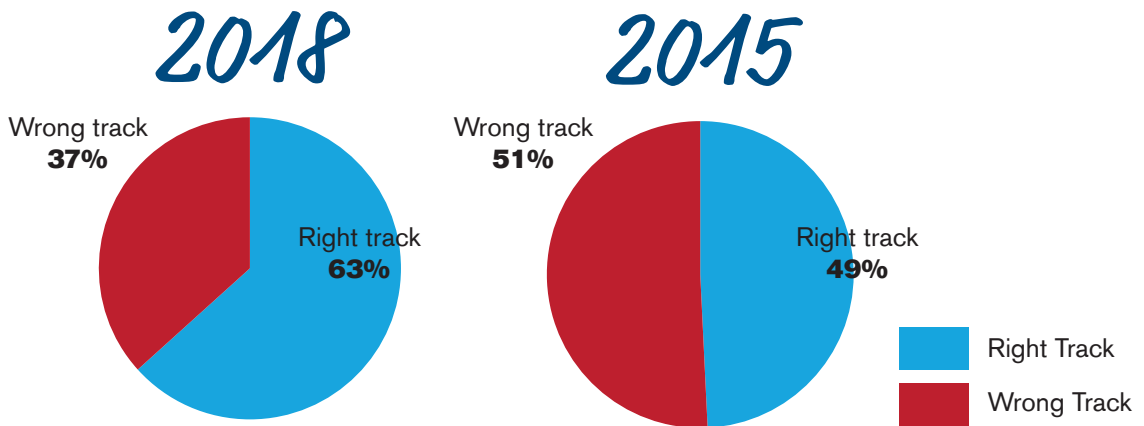


*Kentucky must
be bold, now.*

The View of the Business Community

The opinion of Kentucky business leaders about the state's performance has changed significantly since the initial *4 Pillars 4 Prosperity* was issued in 2015, based on surveys conducted for the Kentucky Chamber then and in 2018 by Economic Leadership, LLC. Responses to a key question reflect the change.

Do You Believe the Commonwealth of Kentucky is on the:



This significant improvement reflects the view of nearly 700 respondents in 2018 (compared to almost 500 in 2015).

Business leaders continued to express concerns about the skills of Kentucky's workforce. Less than 10% of the 2018 respondents agreed that, "Overall, the workforce has good skills." More than one-fourth, 27%, agreed that, "Employers have trouble finding people with good 'soft' skills (such as self management, communication, teamwork, problem solving) while 24% agreed that, "Employers having trouble finding people with the right technical skills."

When asked for the reason for the mis-match between available skills and available jobs, the respondents answered that the mis-match was created in the education system, both K-12 and postsecondary. They also believe that government assistance programs make it too comfortable for some adults to avoid work.

They also suggested that:

- Available jobs don't pay high enough wages.
- Higher education costs are too high.
- There is not enough promotion of careers in the skilled trades.

Respondents were asked to rate their satisfaction with different economic and social factors within the state on a scale of “not at all satisfied,” “slightly satisfied,” “moderately satisfied,” “very satisfied” to “completely satisfied.” On a weighted scale of 1 to 5, with 1 being “not at all satisfied” and 5 being “completely satisfied,” the factors were weighted as:

1 Not Satisfied

5 Satisfied

- The quality of life in your community — **3.61**
- Access to business financing — **3.48**
- Availability of affordable and reliable energy — **3.39**
- Availability and quality of water and sewer infrastructure — **3.23**
- Public higher education, including two- and four-year institutions — **3.10**
- Air transportation infrastructure — **2.94**
- Housing options and affordability for your workforce — **2.88**
- Your local K-12 education system — **2.79**
- Business taxes — **2.70**
- Road transportation infrastructure — **2.65**
- Government regulations impacting your business — **2.60**
- Quality and cost of health care and insurance — **2.26**
- Availability of workers with appropriate skills — **2.24**

Respondents’ opinions about the most important role of state government in growing Kentucky’s economy and creating more jobs is reflected in the following:

- Improve the state’s financial sustainability — **59.28%**
- Reform the state tax code to make Kentucky more competitive for job creation and economic development — **57.39%**
- Provide high-quality education for the workforce — **53.33%**
- Improve the education attainment of citizens — **43.62%**
- Aggressive marketing and branding to recruit new business — **41.01%**
- Train and retrain workers — **38.12%**
- Provide incentives to attract companies in growing sectors — **35.36%**
- Provide technical assistance to existing businesses to help them grow — **25.80%**
- Support entrepreneurial startups — **25.80%**
- Stay out of the way and let the market determine business success — **25.51%**
- Provide capital to small businesses to help them grow — **24.06%**
- Support public and private R&D programs — **18.26%**
- Help businesses export to create new customers — **10.72%**
- Provide incentives to specific industries such as film or sports — **8.70%**
- I don’t know — **0.58%**

They also believe that state government should be:

- Investing more in infrastructure
- Investing more in successful businesses
- Improving internet access

Conclusion



*Together we can improve
Kentucky's competitive
position globally.*

As noted in the initial *4 Pillars for Prosperity*, our hope is that economic competitiveness will one day be valued in Kentucky the same way competitiveness in basketball is valued. We must improve opportunities for every citizen in our state and ensure that our elected leaders are familiar with the business community's agenda for the Commonwealth.

It will require bold and deliberate action to improve the skills, education and health of Kentuckians, to attract and retain talented young people, to draw more non-working, employable adults into the workforce, and to improve Kentucky's competitive position globally.

We offer this vision for Kentucky to provide a framework for the policy agenda that we believe is critical to continuing the state's journey on a path toward success.



The 4 Pillars Prosperity That Will Fulfill That Vision



A Healthy, Educated and Skilled Workforce

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



Quality, Knowledge-Based Jobs

We must enhance Kentucky's competitive business environment and implement economic development initiatives that recognize the potential of Kentucky's distinct regions and industry sectors while encouraging knowledge-based entrepreneurship and innovation.



21st Century Infrastructure

We must create and maintain a modern infrastructure to capitalize on the state's strategic advantages, including low-cost energy and central location.



Effective & Efficient Government

We must create and sustain an effective and efficient system of state and local governments that are financially stable, that invest in education to improve prospects for the future, and which together create a competitive environment for economic growth.



Together we can Build a Stronger Kentucky.

THE BUSINESS COMMUNITY'S MISSION FOR BUILDING A STRONGER KENTUCKY:

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

What Progress Will Look Like

- Increased employment growth at a rate higher than the national average
- Improved state rankings for businesses and competitiveness
- Per capita income growth higher than the national average
- Increased education attainment levels (postsecondary degrees and certifications)
- 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
- Lower state poverty rate
- Decreased state debt per capita
- Increased number of local government partnerships to achieve efficiencies
- Improved state pension funding position
- Improved condition of state's physical infrastructure
- Increased availability of broadband
- Sustained low energy costs

Building Blocks

Creating a culture of competitiveness to build an economically viable future will require sustained work on key building blocks under each of the four pillars.



Workforce

A Healthy, Educated and Skilled Workforce

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

The Kentucky Chamber's work in this critical area has been accelerated through the Business-Education Roundtable, a group of private- and public-sector leaders convened by the Chamber to develop an ambitious agenda for improving education attainment and workforce quality.

The Roundtable's initial report, *Striving to be Top Tier in Talent: Average Isn't Good Enough*, sets four key goals for the coming generation that are consistent with and reflected in the *4 Pillars 4 Prosperity*:

1. **Invest in early childhood** — to give kids a solid start
2. **Reinvent high school** — to make a diploma relevant for the modern economy
3. **Ensure every adult obtains a marketable degree or credential**
4. **Engage employers to define needed skills and develop talent supply chains**

The Roundtable's continuing work will focus on the foundation it shares with the *4 Pillars* and the building blocks to:

- Align education, workforce and economic development programs to eliminate resource-wasting duplication
- Increase investments in education, especially in early childhood
- Create and customize programs to attract more adults to academic/technical training programs
- Focus on credentials in areas where good jobs are available and unfilled
- Target marketing and media campaigns to specific audiences
- Create a loan-forgiveness pool or other ways to relieve student debt
- Give more at-risk children access to high-quality preschool services
- Eliminate achievement gaps between groups of students
- Revamp high school graduation requirements with a greater emphasis on competency than courses
- Retain rigorous academic standards for all students
- Provide more school and career counseling to give students and parents information on postsecondary education options, career benefits and student debt
- Provide all high school students with the opportunity to achieve postsecondary credits or credentials
- Accelerate efforts to attract, retain and adequately compensate high-quality teachers
- Advance online competency-based academic programming
- Align career pathways with high demand workforce areas to help students navigate easily to completion

- Develop a coordinated, state-level initiative to improve access to high quality work-and-learn programs
- Support immigration reform that reflects current economic and social realities
- Aggressively combat the state's inordinate prevalence of cancer
- Reduce tobacco use by, among other measures, passing smoke-free legislation covering all public areas
- Expand availability of substance abuse prevention and treatment programs
- Provide incentives to expand availability of workplace wellness programs
- Develop a toolkit to assist employers in combatting abuse of opioids and other drugs
- Create an employers group to drive business engagement and support for improving employee health
- Expand availability of tele-health systems
- Maintain basic health coverage for working Kentuckians



Jobs

Quality, Knowledge-Based Jobs

We must enhance Kentucky's competitive business environment and implement economic development initiatives that recognize the potential of Kentucky's distinct regions and industry sectors while encouraging knowledge-based entrepreneurship and innovation:

- Enhance Kentucky's competitive business environment through tax reform, tort reform, incentivizing venture capital financing and similar efforts
- Increase global engagement and trade
- Incentivize the development of technology-based jobs; focus on artificial intelligence, distribution and delivery systems (drones, driverless vehicles)
- Expand and enhance the research advancements of Kentucky's colleges and universities and the commercialization of intellectual property generated by those institutions
- Broaden the role of postsecondary education in economic and workforce development initiatives
- Attract more public and private research and encourage its commercialization
- Provide economic incentives to attract talent
- Provide support for entrepreneurial efforts
- Strategically capitalize on Kentucky's central location
- Take deliberate actions to support Kentucky's strategic industry sectors through the broad implementation of the Talent Pipeline Management (TPM) system



Infrastructure

21st Century Infrastructure

We must create and maintain a modern infrastructure to capitalize on the state's strategic advantages, including low-cost energy and central location:

- Finance, build and maintain highways, bridges, airports, riverports and other needed physical assets
- Expand and improve broadband, IT and wireless services statewide
- Maintain Kentucky's low-cost energy advantage and support policies to enhance the state's position as a leading coal exporter
- Promote energy efficiency
- Expand the use of public-private partnerships to extend state resources



Government

Effective & Efficient Government

We must create and sustain an effective and efficient system of state and local governments that are financially stable, that invest in education to improve prospects for the future, and which together create a competitive environment for economic growth:

- Monitor the performance of and ensure adequate funding for public pension systems
- Create a more competitive tax system
- Promote responsible state debt levels
- Continue regulatory review to create transparent rules that balance economic and other goals
- Continue cost reductions in Medicaid
- Continue reforms of Kentucky's criminal laws to reduce prison overcrowding while ensuring the incarceration of serious offenders
- Encourage regional collaboration/consolidation of service delivery (jails, ambulances, staffing, etc.) with rewards for local governments that achieve savings and/or efficiencies
- Provide management expertise to systematically identify opportunities for efficiencies in local government operations

Measuring Progress: The Dashboard

Ensuring transparency about progress and raising awareness among elected officials, policymakers, and civic and social leaders about competitiveness issues will require ongoing measurements. The Chamber will continue to maintain a state competitiveness dashboard of the following key indicators that compare all 50 states to gauge Kentucky's performance in building the pillars for prosperity.

Measuring Progress: The Dashboard

Workforce

1. Workforce participation
2. Percentage of population ages 3-4 enrolled in preschool
3. Performance by 4th grade students on the National Assessment of Education Progress reading and math assessments
4. Performance by 8th grade students on the National Assessment of Education Progress reading and math assessments
5. High school graduation rate
6. Postsecondary degree attainment (associate and bachelor's)
7. Bachelor's degrees in STEM (science, technology, engineering, math) awarded per 1,000 individuals
8. State health ranking
9. State ranking for adult and teen smoking
10. State rankings for mortality resulting from cancer, heart disease, opioid abuse and other leading causes of death
11. State poverty rate
12. Average life expectancy
13. Violent crime rate
14. Health expenditures per capita
15. State per capita income

Jobs

1. Employment growth
2. Change in real GDP per capita
3. Average wage for all occupations
4. Manufacturing employment
5. Manufacturing output
6. Research and development percentage of GDP
7. Patents issued
8. Bachelor's degrees in science and engineering conferred per 1,000 individuals 18-24 years old
9. Venture capital funding per million dollars GDP
10. Total exports
11. Economic freedom ranking
12. Litigation environment ranking
13. Top States for Business ranking (CNBC)

Infrastructure

1. Percentage of population with access to broadband
2. Broadband adoption rates
3. Percentage of bridges in poor condition
4. State expenditures on roadways
5. Average commute time to work
6. Number of fatal highway accidents
7. Energy consumption per capita
8. Total energy production
9. Average residential energy cost per kilowatt hour
10. Average industrial energy cost per kilowatt hour

Government

1. State debt per capita ranking
2. State and local tax burden per capita
3. Business tax climate ranking
4. State and local tax burden as a percentage of personal income ranking
5. State ranking in unfunded pension liability
6. Trends in local government initiatives and partnerships created to increase effectiveness and efficiency
7. Annual General Fund expenditure growth vs. growth in GSP and/or state income



*We must create a culture
of competitiveness to build
an economically viable
future for Kentucky.*