

# Kentucky

WORKFORCE  
INNOVATION BOARD



## Environmental Scan of Kentucky's Workforce System

November 8, 2017

## Contents by topic

	<b>Executive Summary</b>	
	• Project Overview	4-5
	• KWIB Strategic Planning Initiative	6
	• Environmental Scan Approach	7
	• Key Takeaways from Environmental Scan	8
	<b>Current Landscape</b>	
	• Evolution of Kentucky's Industrial Landscape	11
	• Declining Labor Force Participation	12
	• Unemployment: A Misleading Economic Indicator	13
	• Workforce: An Economic Development Imperative	14
	<b>Observations on KY's Workforce</b>	
	• Introducing the Workforce Lifecycle	16
	• Foundational Education: P-12	17
	• Postsecondary Credentials	22
	• Steady State Employment	28
	• Life Events and Special Populations	36
	• Retirement-Aged Workers	42
	<b>Leading Practices</b>	
	• Leading Practices in Workforce Development	47
	<b>KY Workforce Resources &amp; Programs</b>	
	• Administrative Assessment	50
	• State Workforce-Related Programs	51-53
	<b>Stakeholder Interview Feedback</b>	
	• Interview Approach	55
	• Summary of Interview Themes	56
	• Theme 1: Enhancing Kentucky Education	57
	• Theme 2: Increasing Industry Engagement	58
	• Theme 3: Improving Alignment Statewide	59
	<b>Appendix</b>	
	• KWIB Strategic Planning Team	63
	• Interview Participants and Questions	65-67
	• List of State Workforce Programs	69-76

# Executive Summary

*Overview of the project and the scope of the environmental scan effort*



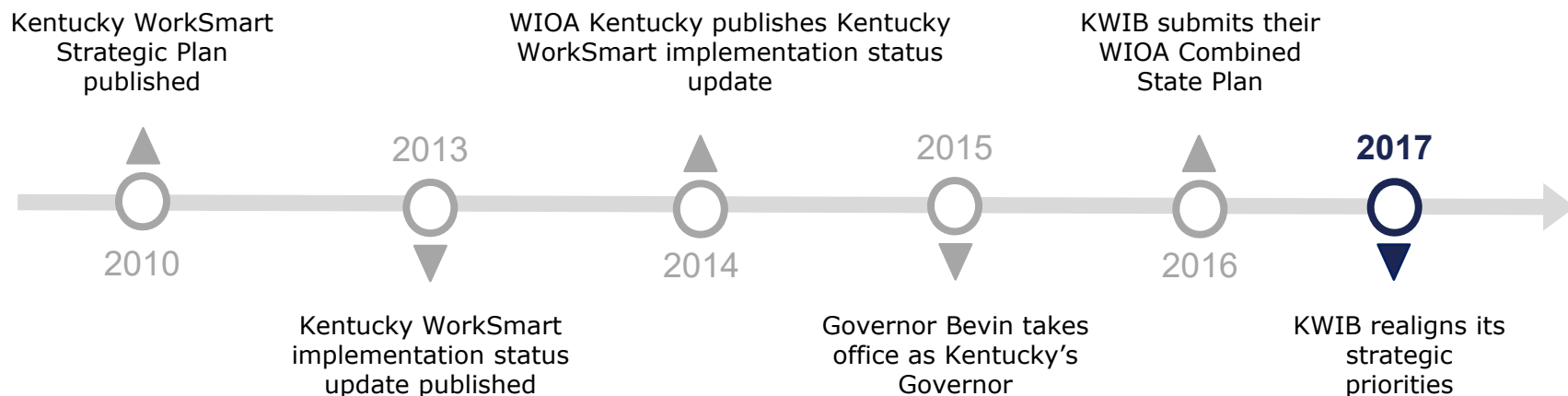


## Background: KWIB has evolved over time to adapt to the rapidly changing demands of workforce development in Kentucky

Over the past decade, the Kentucky Workforce Innovation Board (KWIB) has evolved to meet the changing needs of citizens.

In the 20 years that KWIB has existed as an advisory board to the Governor and the Commonwealth workforce system, the Board has been impacted by the evolution of federal legislation, administration changes at the state and federal levels, and larger macro trends impacting the statewide workforce landscape. The timeline below highlights key shifts throughout the history of KWIB and the Workforce Innovation and Opportunity Act (WIOA) since 2010.

### Highlights and Milestones of the Kentucky Workforce Innovation Board (2010 – present)



KWIB has established a renewed focus to improve the workforce development system in Kentucky, which has spurred an effort to revisit the Commonwealth's strategic vision and approach to investing in its workforce.





## Context: KWIB must now shape Kentucky's strategy to improve the statewide workforce development system

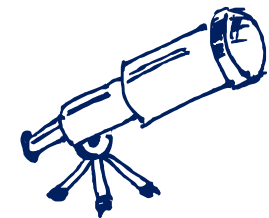
KWIB has identified the need to revamp its overarching strategy and approach in order to align the Commonwealth's workforce stakeholder groups, and create a common strategy and direction (a 'North Star') that will prepare the Kentucky workforce for both current and future workforce needs.

To meet its stated mission to be a leader and catalyst in creating a comprehensive, customer-driven workforce development system that meets the changing needs of job seekers, incumbent workers and employers, KWIB will establish and implement a Commonwealth-wide workforce development strategy that:

- Sets a common strategic direction – a 'North Star' – for workforce development activities across Kentucky
- Identifies priority actions that are attainable and measurable using key performance metrics
- Increases and improves communication and collaboration with employers, educational and training entities, regional WIBs, and government organizations
- Identifies challenges and opportunities to provide sustainable improvements to the workforce system through an increase in workforce participation and retention, improvement of sustainable earnings, and providing high quality, easily accessible, and more targeted workforce training programs

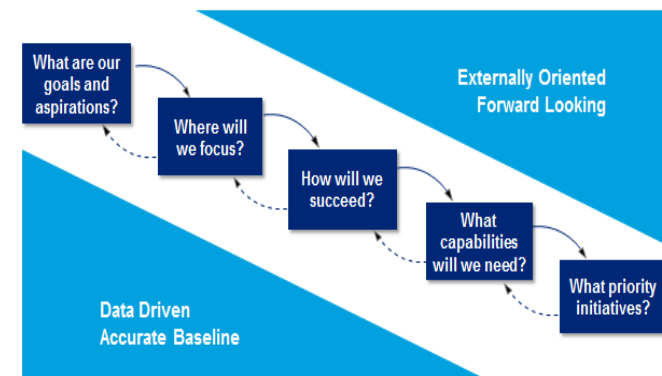


**Where have we been?**



**Where do we want to go?**

**How are we going to get there?**





## The Environmental Scan is a key input to the strategic planning process

In August 2017, the Kentucky Workforce Innovation Board (KWIB) kicked off a strategic planning process to guide the Commonwealth through creation of a comprehensive workforce development strategic plan. The objectives for the effort are to be realized through the creation of three key outputs.

The first of these outputs, the Environmental Scan, assesses at a high level the current macro environment and infrastructure of the Kentucky workforce development ecosystem to help policymakers engage in informed dialogue about how to position that system to better serve the citizen of the Commonwealth.

### Strategic Planning Objectives

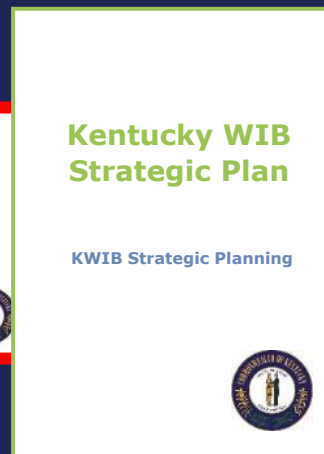
- Assess current conditions and operating environment of the Kentucky workforce development system
- Clearly define the strategic direction and objectives for the Commonwealth's workforce system
- Identify priority actions and key performance indicators to measure outcome and success
- Increase communication, collaboration, and overall alignment with key stakeholders in business, education, and government



### Strategic Planning Outputs



**Perform research and analysis to assess current conditions and operating environment**



**Facilitate a strategic planning retreat to identify and formalize strategic objectives and priorities**



**Define key action steps and measures to achieve the strategic objectives and priorities**

## A scan of Kentucky's labor market contributes data-driven inputs to the strategic planning process

The Environmental Scan analyzes the current state of the Kentucky labor market and the operating environment of the KWIB, identifying areas for opportunity and improvement.

- As workforce development becomes increasingly critical to keep pace with the technological and industrial transformations impacting society, the KWIB has taken on more responsibility for ensuring the Commonwealth has a strategic vision and plan to prepare and improve Kentucky's workforce system.
- KWIB is now developing a strategic plan for workforce development, with actionable objectives to address the delivery of services and benefits for which it is now responsible.
- To support the formulation of a strategic plan and implementation roadmap, an Environmental Scan was conducted to provide an assessment of both the internal environment at KWIB and external factors that impact or drive programs and operations at KWIB.
- This document summarizes the high-level findings of the Environmental scan, and provides structure for more in-depth conversations around the Commonwealth's strategic priorities.

### **EXTERNAL ENVIRONMENT**

*What macro trends in workforce development are relevant to KWIB? What socioeconomic factors are driving programmatic needs and spending? What are peer states doing to drive positive outcomes?*



### **INTERNAL ENVIRONMENT**

*How are KWIB's priorities reflected within the Commonwealth today? How have KWIB's responsibilities and budget changed over time and where are those funds allocated? What programs does KWIB support and where is there overlap within the established partnerships?*



## Takeaways from the scan reveal a deep commitment by cross-sector stakeholders to act quickly as well as substantive opportunities for KWIB to affect near-term and long-term change

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The Environmental Scan analyzes the current state and operating environment of the KWIB and highlights areas for opportunity and improvement.



### **Current Industrial Landscape Observations**

- In the past two decades, offshoring, technological innovation, and an aging population have driven Kentucky (along with the nation) from a goods-driven production economy to a knowledge-driven services economy.
- While manufacturing remains the predominant industry, innovations in technology and production processes put workforce skills and quality at the front of mind for site selection and business development related to growth.



### **Kentucky's Labor Market Data Observations**

- Segmentation of the state labor shed into phases of a “workforce life cycle” provides a unique view of Kentucky’s current and future workers at their current level of development
- From cradle to grave, Kentucky possesses opportunities to improve workforce development and increase workforce participation through a combination of long-term, sustained investment and “quick wins” with respect to upskilling the current labor pool.
- Educational attainment, while increasing in Kentucky, appears to be the leading factor associated with labor force participation, unemployment, and the ability to obtain a sustainable living wage.



### **Internal / Administrative Observations**

- While Kentucky allocates over \$1.2B annually to workforce development-related efforts, details on programmatic spend and return on investment are largely unavailable at a level of detail sufficient to conduct analysis or gauge impact
- The plethora of Commonwealth programs directed to various stages of the workforce life cycle indicate a broad pool of stakeholders who can leverage collective resources for change



### **Interviews with Kentucky Labor Leaders**

- One-on-one and small group interviews with 50+ Kentucky workforce development organizations and 100+ Kentucky workforce development leaders revealed support to reinforce the P-12 and postsecondary education systems, increase business and employer engagement in workforce development, and improve integration between the efforts of state and local leadership





## Next Steps: Environmental Scan inputs will be used to drive the creation of a Strategic Plan and Implementation Plan

The Environmental Scan, along with strategic objectives and priorities developed by KWIB serve as inputs into the KWIB Strategic Plan. The Strategic Plan will, in turn, drive the creation of an Implementation Plan to support execution and performance measurement.



## Current Industrial Landscape

*Macroeconomic factors that foster urgency for Kentucky to identify and address workforce challenges now*

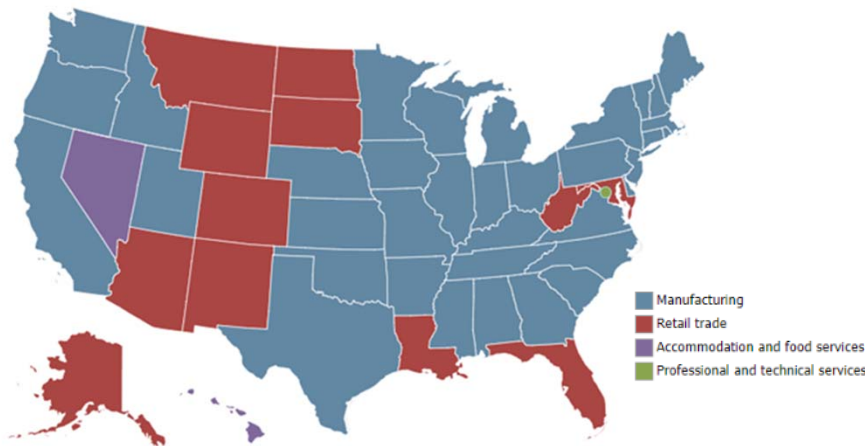




## Why focus on workforce? The U.S. industrial landscape is rapidly evolving – simultaneously altering the future of work

In the past two decades, the nation's industrial base has shifted dramatically from a production and goods-based economy anchored by manufacturing and retail, to a services-based economy, focused on health care and social assistance.

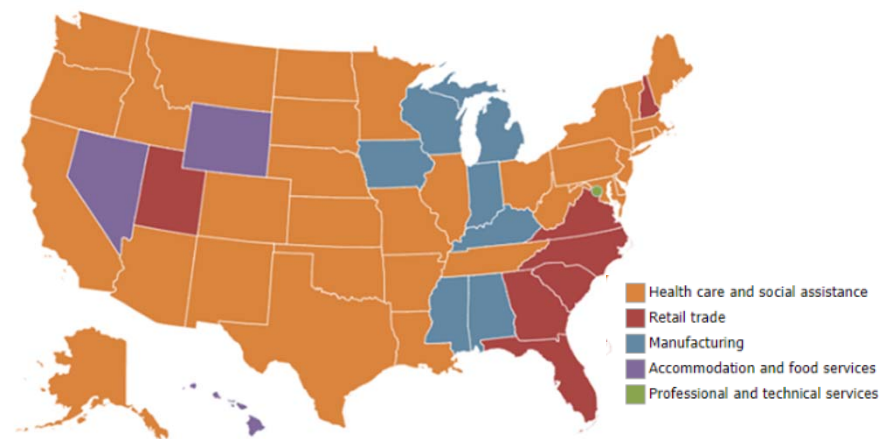
**Industries with Highest Employment (1990)**



Source: [Bureau of Labor Statistics](https://www.bls.gov/)

This shifting industrial mix and infusion of technology across all industries necessitates new skills from workers and an emphasis on knowledge over physical labor; Kentucky's largest employers, a concentration of health care, advanced manufacturing, and professional services, require an "upskilling" of the labor shed to meet their human capital needs.

**Industries with Highest Employment (2015)**



**Kentucky's Top Employers (2015)**

United Parcel Service (UPS)	12,961
Humana	12,500
CVG International Airport	8,500
Toyota Motor Manufacturing	8,200
Ford Kentucky Truck Plant	7,850
St. Elizabeth Healthcare	7,000
UK Chandler Hospital	6,192
GE Appliances	6,000
Ford Louisville Assembly Plant	4,960
Lexmark International	4,300

Source: US Department of Labor, Career One Stop (2015);  
KY Cabinet for Economic Development

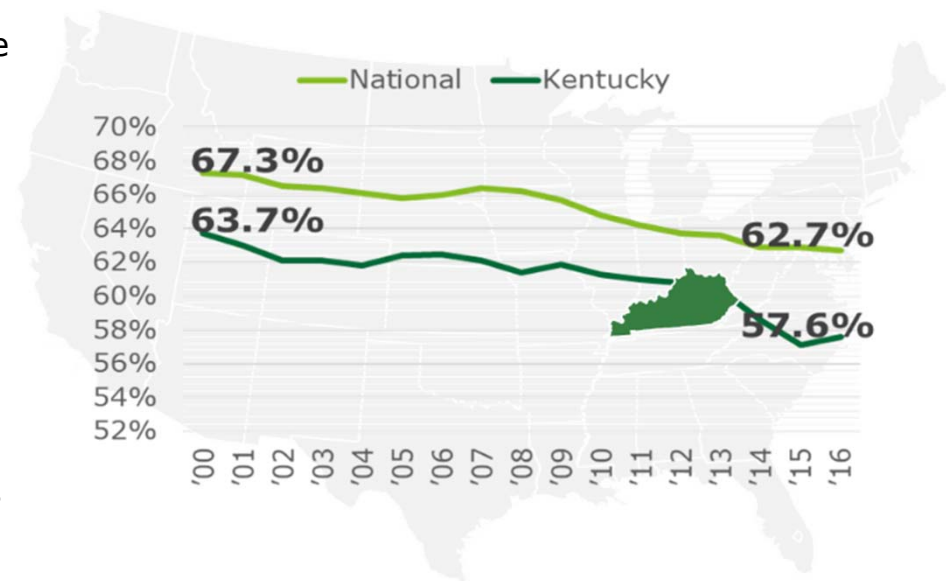


## Why focus on workforce? A steadily falling labor force participation rate may forecast larger labor challenges ahead

Although labor force participation rate (LFPR) has been falling steadily nationwide, Kentucky continues to be below the national average.

- As of September 2017, Kentucky's LFPR is 59.2% – meaning that out of the 2,061,437 available civilian workers aged 16 and older, 1,220,371 are currently working or seeking work, with the remaining 841,066 out of the labor force.
- Although the Commonwealth's workforce participation does not deviate substantially from comparable geographies, an additional 165,000 workers would need to re-engage to meet the national average.
- While not all out-of-labor-market individuals are able to work (some are enrolled in school, disabled, etc.), it is likely that enough individuals to close this gap could potentially re-engage through targeted policy and programs designed to identify and re-skill disenfranchised workers.

**Labor Force Participation Rate (2000-2016)**

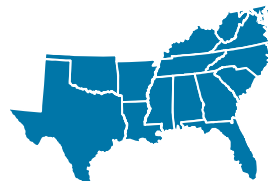


**Labor Force Participation Rates: Comparative BLS Geographies (as of September 2017)**

**Kentucky: 59.2%**



**The South: 61.5%**



**U.S.: 63.1%**





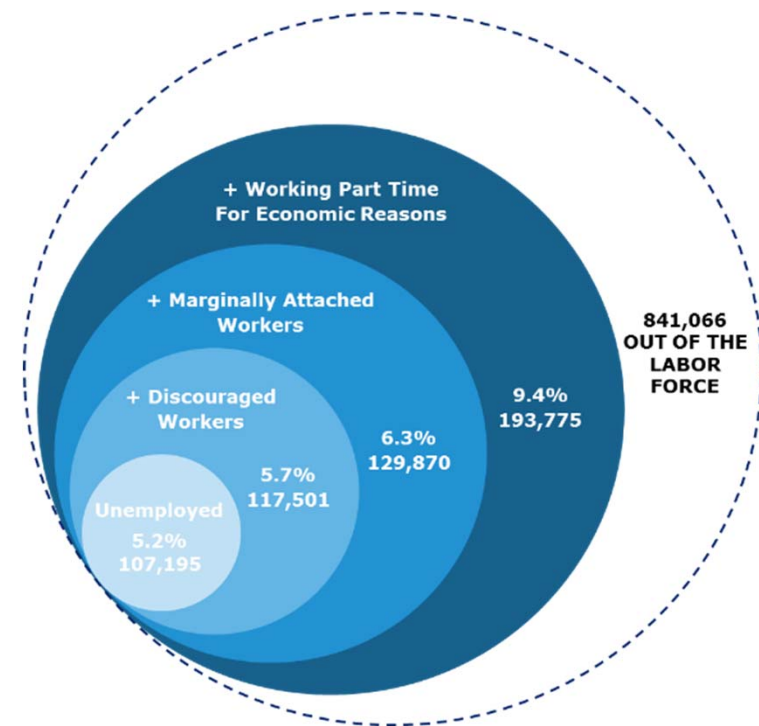
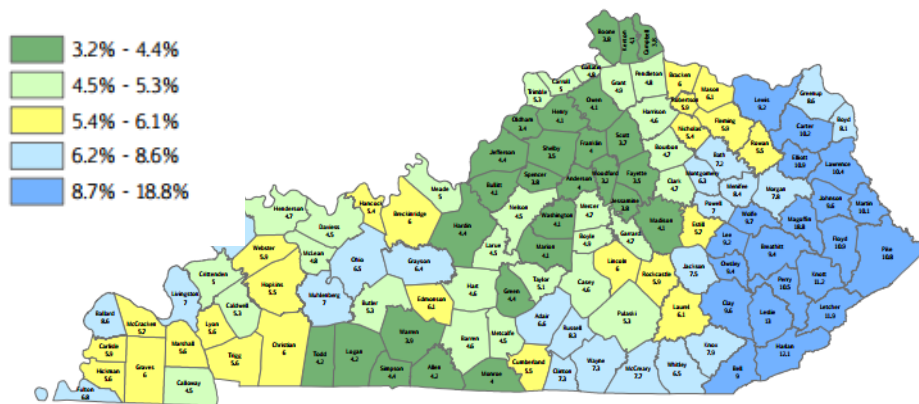
## Why focus on workforce? The misleading notion of “full employment” obscures immediate and long-term issues

Macroeconomic focus on the low national unemployment rate masks larger issues of underemployment, low workforce participation, and regional economic disparities. In addition, the significant presence of open job vacancies (3.9% of employment in the South, 4% nationwide) despite the evidence of underemployed or disengaged workers highlights the presence of a growing skills gap between what skills the workforce currently possesses, and what is demanded by the jobs of the future.

### A Low Unemployment Rate Does Not Equate to “Full Employment”

**Total Kentucky Civilian Labor Force (October 2017): 2,061,437**

- Employed: 1,954,242
- Unemployed: 107,195
- Unemployment Rate (U3): 5.2%



Source: [Bureau of Labor Statistics](#) – Seasonally Adjusted – (10/20/2017);  
[KCEWS](#), 2016 Unemployment Rates by County





## Why focus on workforce? The companies Kentucky hopes to attract, retain, and grow expect a high quality labor market

As Kentucky markets its economic assets to the business community and plans for future growth, the availability of highly skilled labor has consistently risen to the top of site selection factors for companies looking to relocate or expand their business.

- Kentucky's employment is expected to grow by 15.2% through 2024, creating over 326,000 new jobs, at least 1/3 of which will be in fields that increasingly demand postsecondary credentials of their workers
- Kentucky's priority industries (Advanced Manufacturing, Business Services and IT, Construction Trades, Health Care, Transportation and Logistics) will also largely demand skilled labor to attract new business, as well as retain and grow existing firms
- Industry's focus on labor quality and availability (over cost) has made workforce the top site selection factor for economic development; companies look not only for a supply of workers, but for evidence of a pipeline for future talent
- While Kentucky's workforce development efforts are gaining recognition, much remains to be done to compete for the business of tomorrow's employer

### Site Selectors Seek Evidence of Workforce Capacity and Investment



#### "What Matters Most": SITE SELECTORS' MOST IMPORTANT LOCATION CRITERIA (November 2016)

1. Workforce skills
2. Incentives
3. State and local tax scheme
4. Transportation infrastructure
5. Land/building prices and supply
6. Workforce development
7. Utilities (cost and reliability)
8. Higher education resources
9. Ease of permitting and regulatory procedures
10. Quality of life

### AREA DEVELOPMENT

#### Critical Site Selection Factor #1: Availability of Skilled Labor

“ It pretty much goes without saying that any operation will need an adequate supply of workers who have whatever skills are required to do the job well. ”

#### Kentucky State Rankings

Publication	Category	Rank
2016 CNBC "Best States for Business"	Workforce	46 out of 50 states
2016 Site Selection Workforce Development Rankings	Workforce Development	#1 in the South Central region
Chief Executive "Best and Worst" Rankings	Workforce Quality	5.88 / 10

# Labor Market Analysis & Observations

*A labor market segmentation and data overview of the prevalent trends impacting the Kentucky workforce*

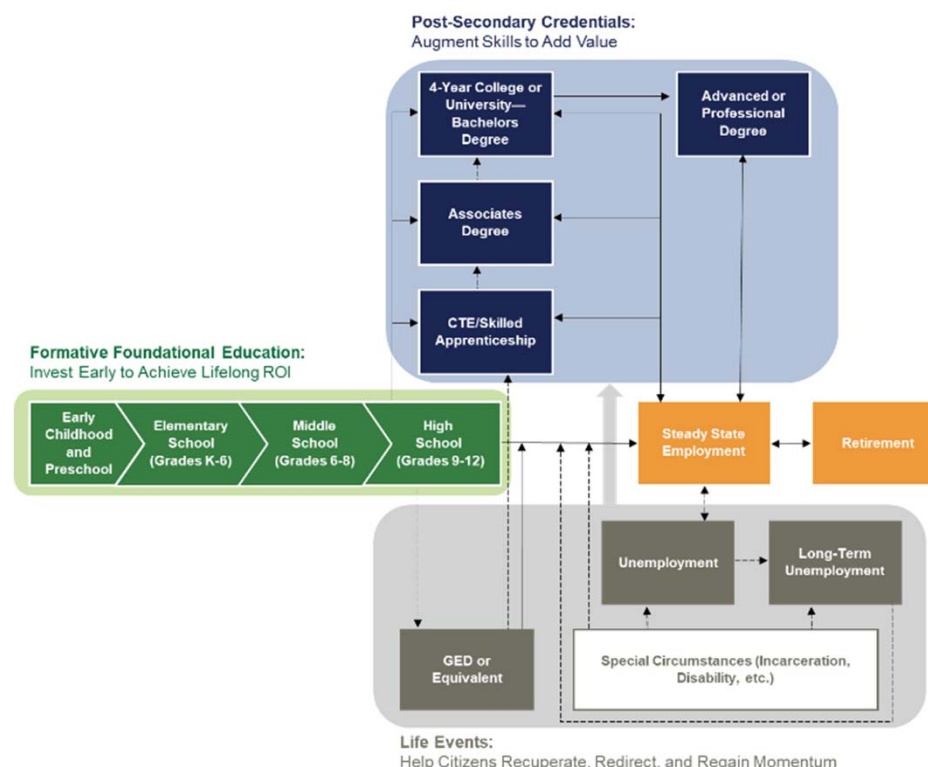


## Segmentation of the labor market by phases of the “Workforce Lifecycle” reveals a portfolio of workforce investment opportunities

Viewing Kentucky’s 2 million workers through the rough lens of typical milestones experienced in the course of a working lifetime provides a “bird’s eye view” of the labor force today, as well as the workforce of the future.

- As demonstrated by the lifecycle chart, many diverse pathways exist for Kentucky workers to achieve occupational success from early childhood through their retirement years
- Three specific areas are highlighted to emphasize their unique value in supporting and maintaining a strong Kentucky labor force:
  - Formative / Foundational Education: Early childhood and P-12 education lays the groundwork for essential skills development and lifelong learning. Investments made during this early stage have a rate of return as high as \$8:\$1
  - Postsecondary Credentials: Augments workers’ skill sets and knowledge beyond the high school level to permit access to competitive opportunities in growing industry sectors with sustained demand for skilled labor
  - “Life Events”: Either planned or unplanned, these events have the potential to destabilize an otherwise productive worker and often require remediation to regain productivity

### The Workforce Lifecycle Depicts Common Pathways and Milestones to Support Strategic Analysis of the Kentucky Labor Shed



# Analysis: Formative Foundational Education (P-12)

*Workforce development begins with foundational education and the cultivation of "essential skills." The P-12 education system is the Commonwealth's most substantial investment in its future labor force.*

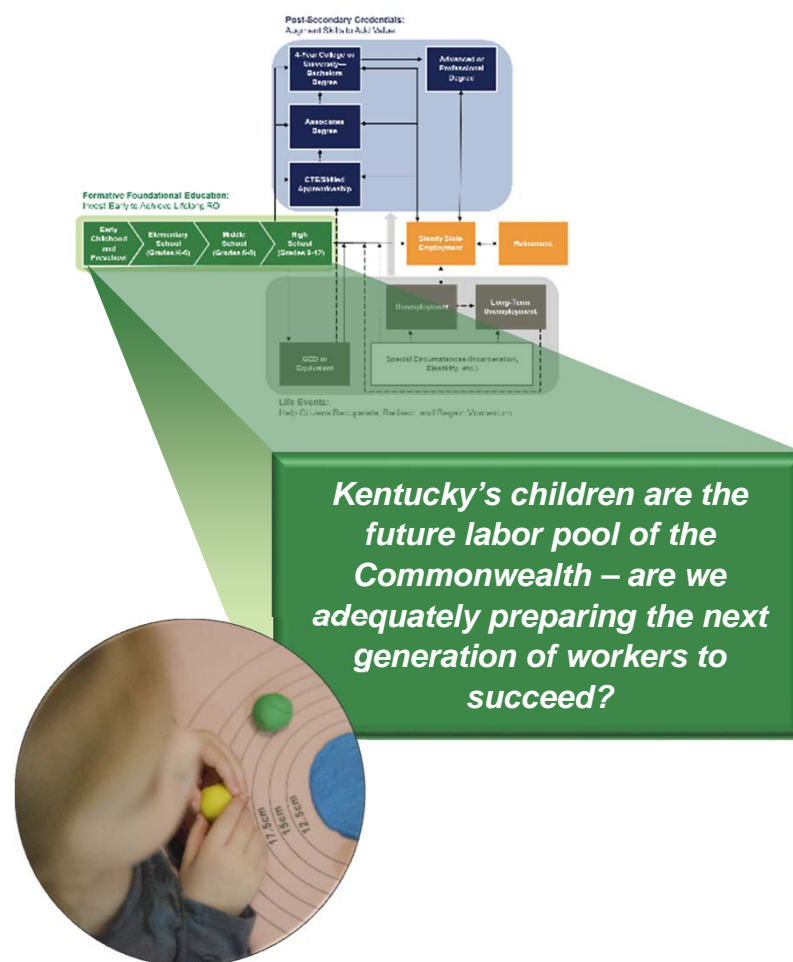




## Foundational Education: Early childhood and P-12 education are early determinants of Kentucky's future workforce quality

Given declining fertility rates (US: 3.7 births per female in 1960 to 1.8 in 2015) and neutral in/out migration, Kentucky's economy depends on an increasingly smaller number of citizens to support large historic levels of growth and innovation in a highly technical environment.

- While this cohort (ages 3-18) is at present in the earlier stages of skill formation (the youngest members will reach peak working age in 2039), the world of work they enter will likely be vastly different from that of today's labor force
- Though the Commonwealth has quality programs to give young Kentuckians a head start towards their future, 58.4% of pre-school aged children do not participate in early childhood education, creating a learning gap from which many do not recover
- Educational challenges experienced early in life persist through high school, where student achievement on ACT testing lags national norms, and 31.5% of students graduate neither college nor work ready, despite higher-than-national-average state graduation rates of 85%
- Six years after high school, 73.9% of all Kentucky high school seniors lack a postsecondary credential critical to success in today's economy. While approximately 55% matriculate, the prevalence of remedial education at the postsecondary level, and employer feedback on "essential skills" indicates that as many as 1/3 lack the capabilities required to succeed.







## Early childhood: Kentucky offers quality pre-school education, but less than half of all children participate

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As of 2016, Kentucky's population has 112,000 children between the ages of 3-4. By 2030, this population will start to enter the workforce. Early childhood education could provide these children the foundational skills necessary to thrive in the workforce of the future.

265

Certified early childhood programs in the Commonwealth

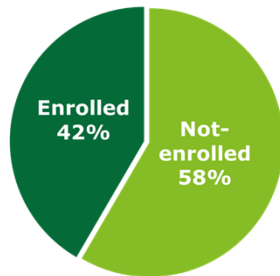
8/10

National quality benchmarks met by KY's state pre-school program

74%

Children who attend pre-school perform better on IQ and achievement tests than non-attendees

Kentucky has a strong early childhood education infrastructure, with 265 certified programs statewide. Research has demonstrated that early childhood education is associated with higher lifetime earnings, greater educational attainment, and fewer negative social outcomes.



Over half of 3-4 year olds not in Pre-K

50%

Half of KY students enter school not ready for kindergarten

Less than half of Kentucky's 3-4 year-olds participate in preschool. As such, half of Kentucky's children start kindergarten educationally unprepared, setting them on a lower scholastic trajectory, and placing additional strain on the P-12 system to remediate learning gaps.

25.8%

Families with children under 5 living below poverty line

36%

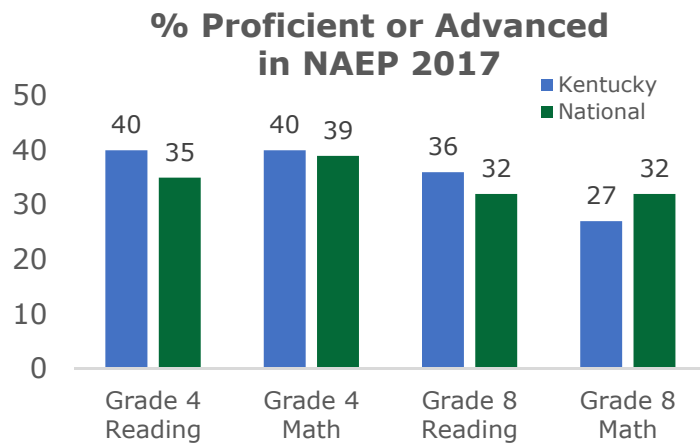
Preschool participation by children in Kentucky poverty families

Access to early childhood education may be an issue as only 36% of children living in families below the poverty line attend preschool. Kentucky's state preschool program spans 2 years (ages 3 and 4), but families in poverty only receive financial assistance for the second year.



## Primary School: 5-14 year-olds struggle to maintain performance in school and many battle economic challenges outside the classroom

Kentucky has 563,000 elementary and middle school-aged children (age 5-14). By 2019, this population will start to enter the workforce. During this developmental phase, students learn skills that focus on reading comprehension and math, as well as some of the “essential/soft” skills required to be successful in a team working environment.



While Kentucky’s statewide performance on standardized testing is generally on par with rates of scholastic proficiency nationwide, more than half of students lag behind proficiency levels in reading and math. Minority students perform significantly lower, with less than 25% proficiency in 4<sup>th</sup> grade and less than 15% proficiency in 8<sup>th</sup> grade standardized testing.

***Nationally, the achievement gap between the poor and the non-poor is twice as large as the achievement gap between Black and White students.***

- Educational Testing Services

**35<sup>th</sup>**

KY ranking in “Chance of Success” by Education Week

**70.6%**

Children qualify for reduced or free school lunch

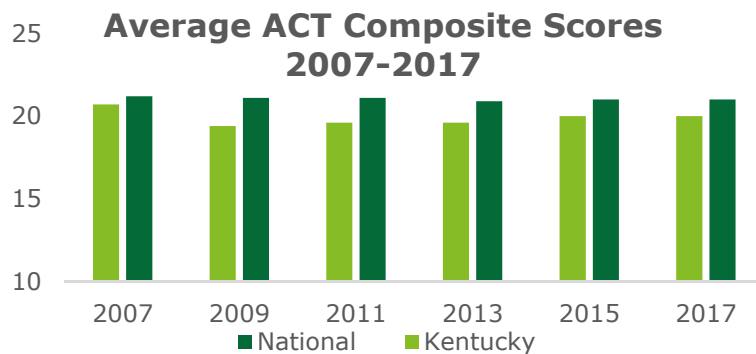
Many of Kentucky’s primary school students lack economic support at home, further challenging learning efforts. In addition, according to the National Center on Family Homelessness, the Commonwealth has the highest number (66,000) of homeless children in the nation.

The Commonwealth ranks 35<sup>th</sup> in Education Week’s national composite rankings for “Chance of Success” that takes into account economic wellbeing, achievement in school and educational background of parents.



## Secondary School: Kentucky's high school-aged youth may be old enough to graduate, but many are neither college nor career-ready

Despite impressive graduation rates, Kentucky's 234,000 high school students (ages 15 – 19) start to diverge from their national peers in terms of scholastic performance, and a significant number go on to struggle with college readiness. Those that proceed directly into the workforce from high school face high rates of unemployment and low earning potential.



- From 2013-2017, over 85% of Kentucky students graduated high school, consistently 5% more than the national average. However, Kentucky's average composite ACT scores during the same period were consistently lower than the national average, and 31.5% of students graduated were assessed to be neither college nor work-ready in 2016.
- Those students who proceed directly into the workforce without postsecondary education face high rates of unemployment (6.9%) and even three years out, earn average annual salaries of \$11,500, placing them below the poverty level for an individual in Kentucky (\$12,060).

**31.5%** HS graduates neither college nor career-ready

**39.6%** Graduates did not pursue postsecondary education

**\$11,500** Average annual salary 3-years after high school with no postsecondary study

**32.4**  
Births per 1,000 girls  
aged 15-19

**15.2%**  
Youth Aged 16-24  
Out-of-school and  
Out-of-work

**9%**  
Students suspended  
from school at least  
once

**1.4K**  
Arrests per 100,000  
children aged 10-17  
in 2014

- High school is also a time when events may begin to occur that destabilize a student's education and future workforce engagement. Teen pregnancy, juvenile delinquency, and disengagement can have long-term effects on employment and productivity.
- In 2014, over 6,000 children aged 10-17 were arrested, more than 4,000 students dropped out of school, and Kentucky ranked in the lowest quartile in terms of engaged youth.

# Postsecondary Education & Training

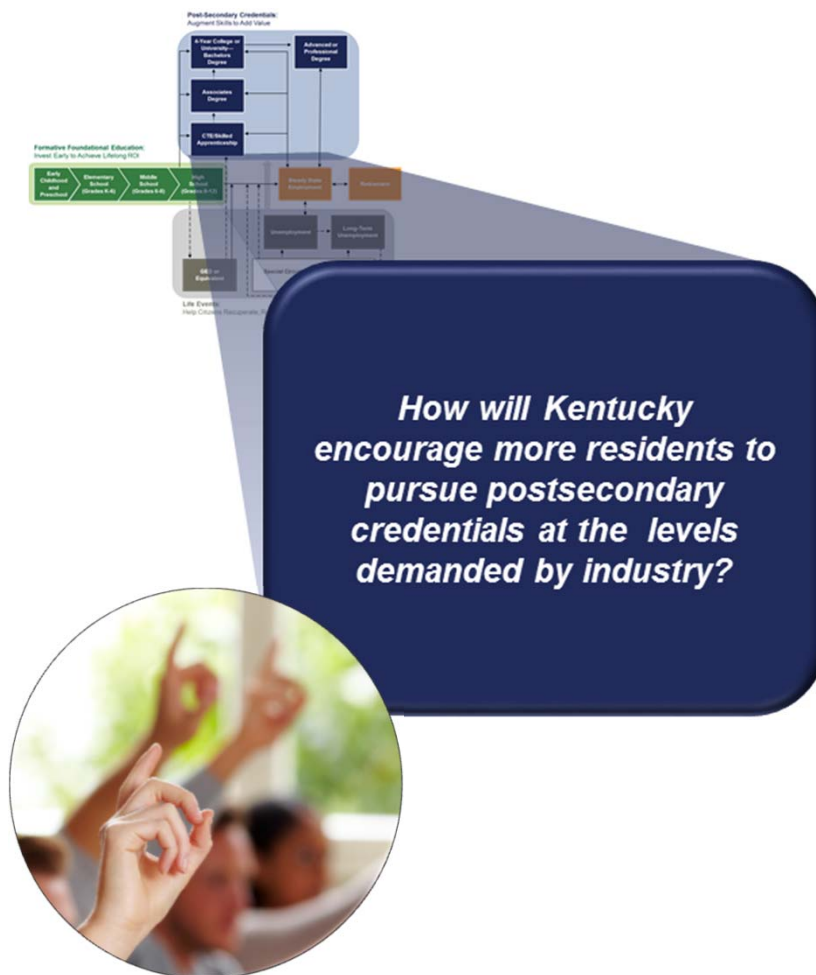
*As industry evolves towards a technology-driven future, labor demand favors candidates with credentials and technical skill sets beyond a high school diploma, making postsecondary education a “non-negotiable” for securing sustainable employment at a wage that supports self-sufficiency.*



## Postsecondary Credentials: Postsecondary credentialing represents Kentucky's "quickest fix" for upgrading the labor force

Despite recent improvements, Kentucky has a historically low educational attainment level while the economy previously supported family-sustaining wage jobs with only a high school diploma, further education is fast becoming a non-negotiable for achieving a "living wage" income.

- Though Kentucky's current occupational mix still retains work that can largely be performed with a high school education or less, by 2020, 2/3 of all jobs nationally will require some postsecondary credential beyond high school
- Excess demand currently exists in the "middle skills" labor market, where a hiring gap of 10% exists and most jobs require less than an undergraduate degree but more than a high school diploma
- Lack of educational attainment is correlated with lower wages (26.4% lower than national average), lower workforce participation (20% lower than those with postsecondary degrees), and higher incidences of unemployment (2x more likely than those with postsecondary degrees)
- Over 19,000 certificates are awarded annually for technical training statewide, combined with "earn while you learn" apprenticeship models (>275 registered apprenticeships in KY) that yield a ROI of \$1.47 for every \$1 invested in apprentices





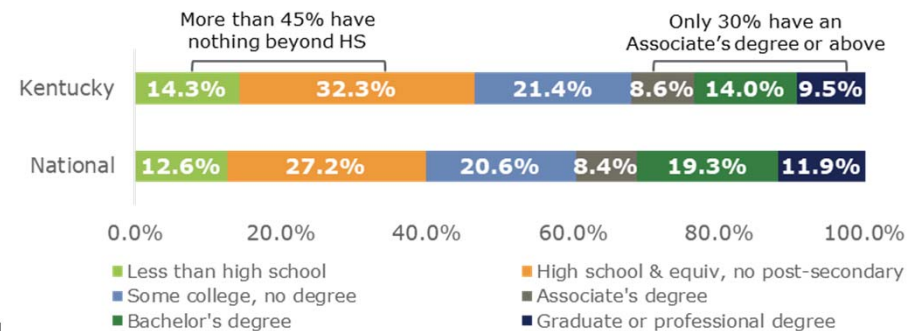


## In the age of workforce-led economic development, Kentucky is lagging the nation in attaining postsecondary credentials

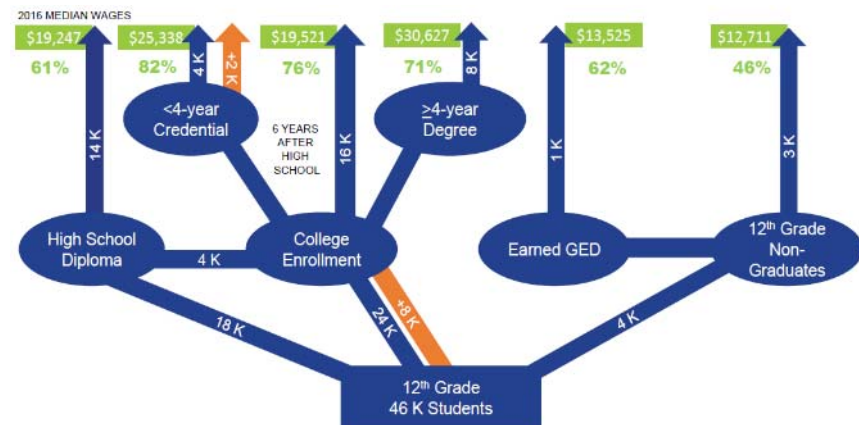
By 2020, 65% of the nation's jobs will require some sort of postsecondary credential; however, the Commonwealth workforce pursues postsecondary education at rates lower than the rest of the nation.

- While Kentucky citizens have sought higher aggregate levels of education over the past decade, today the Commonwealth trails the national average of adults with postsecondary degrees by 8%, and almost half of the adult population in Kentucky do not possess education beyond high school.
- Compared to those those who pursue postsecondary credentials, those who do not are 20% less likely to participate in the labor force and are more likely to experience unemployment (6.9% compared to 3.6%).
- Attempts at postsecondary education that do not result in completion fare little better than no attempt in terms of earnings. In Kentucky, individuals lacking postsecondary training earn approximately 2/3 the wage of those who have a postsecondary credential.
- At a time when postsecondary education is paramount, 73.9% of Kentucky high school seniors do not obtain any postsecondary credential within six years of leaving the P-12 system, leaving them vulnerable to shifts occurring in the labor market.

### Highest Educational Attainment For Adults Aged 25+ (2016)



### Lack of Postsecondary Credentials Limits Earning Potential





## 2-Year Degree Programs: Not enough students graduate on time, but when they do, employment prospects are sound.

Kentucky's community and technical college system serves many high school graduates and adults alike. While reasonable-time graduation rates trail behind national levels, most of those who do graduate earn credentials aligned with industry needs and find a productive place in the Commonwealth economy.

22%

High school graduates enrolled in KCTCS

60K

Enrollment of students ≤24 years old

45K

Enrollment of students 25+ years old

- In 2016, the Kentucky Community and Technical College System (KCTCS) had a total of 100K+ students enrolled in one of the 16 colleges. Approximately 22% of all high school graduates enroll in KCTCS programs.

35%

First-year students need remedial education

26%

Students drop out within the first year

12.8%

Students graduate within 3 years

- Less than 15% of students seeking a 2-year degree graduate within 3 years – 25% lower than the national average. A persistent need for remedial education of high school language and math may explain part of the delay: Among the 35% of students who need remedial education, only 1 in 20 graduate within reasonable time.

86.6%

Graduates employed in KY 5-years-out

\$30,000

Average annual salary of graduates 5-year-out

### Top 5 Associate's Degrees in Kentucky



Registered Nursing



Medical Assistant



Information Technology



Law Enforcement



Business

- The most popular technical and skills-based degrees earned by KCTCS students are nursing and medical aid, law enforcement, business, and IT – altogether adding up to more than 25% of the 6,000 degrees awarded each year. 35% of students graduate with a degree in liberal arts or sciences.
- About 2% students graduate with a degree in mechanical technologies and another 3% with engineering technology degrees.



## 4-Year Degree Programs: Kentucky needs more college graduates who will meet workforce demands in priority industries.

The Commonwealth produces graduates that can equip the state economy to meet priority industry demands. Apart from boosting graduation and in-state employment retention, Kentucky should encourage more students to pursue degrees in the Commonwealth's industries of interest.

27%

HS graduates enroll in KY public universities

128K

Students enrolled in public universities

- In the year 2016, a total of 128,000 students were enrolled in Kentucky's public university system. 80% students attended school full-time.

30%

First-year students need remedial education

10%

Students drop out within first year

49.4%

Students graduate within 6 years

- Reasonable-time graduation rates for Kentucky's public universities are 10% less than the national average. Among those who need remedial education, the number dwindles to 1 in 3 students who graduate within six years from a four-year degree program.

53.3%

Graduates employed in KY 5 years out

\$34,000

Average annual salary of graduates 5 years out

### Top 5 Bachelor's Degrees in Kentucky



Registered Nursing



Business



Psychology



Biological Sciences



Elementary Education

- The most popular degrees earned by Kentucky's university students are nursing, biological sciences, psychology, business, and education – altogether adding up to more than 20% of total degrees awarded by public university systems.
- Degrees aligned with industries identified as high priorities for the Commonwealth represented less than 10% of awarded degrees (2% advanced manufacturing technology, 3% engineering and 2% information technology).

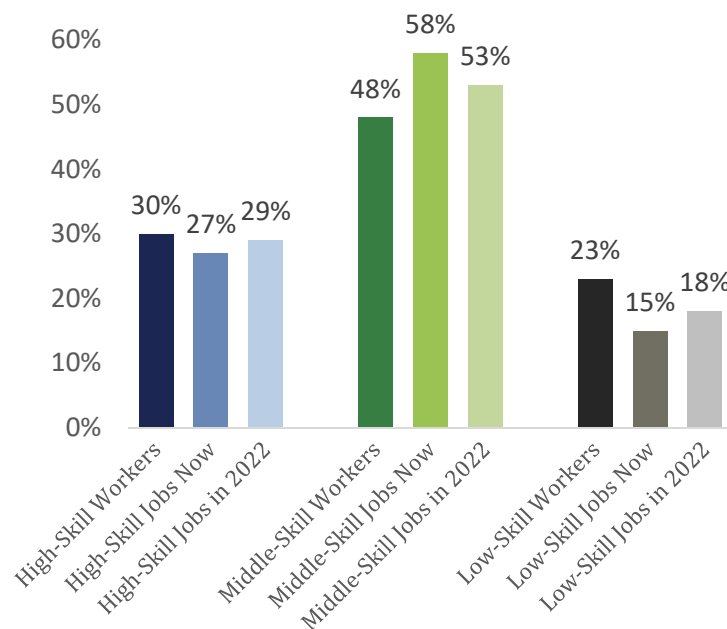


## Career and Technical Education (CTE): Non-degree credentials create successful pathways into employment and further education

Postsecondary credentials are crucial to career development and in Kentucky, middle-skill workers are, and will continue to be, of high demand. While a majority of high schools students are enrolled in CTE programs, it is crucial that the training they receive is well-aligned with the Commonwealth's economic development interests and that graduates can transition smoothly into employment through adequate apprenticeship offerings.

From now through 2022, the National Skills Coalition's analysis projects that Kentucky will need an increase in middle-skill workers to support the demand for jobs which require some sort of industry credential or technical training.

**KY Jobs and Workers by Skill Level**



**67.2%**

High school students  
enrolled in CTE programs

**5%**

Enrolled in  
STEM  
pathways

**14%**

Enrolled in pathways  
aligned with priority  
industries

While many high school students are involved in CTE, many enrollees are participating in programs not directly aligned to Kentucky's priority industries. Out of 218,000 CTE participants, only 5% pursue manufacturing, 4% information technology, 3% construction, and 2% transportation. Over half of students focus on business, marketing and FCS, another 15% in agriculture.

**275**

Registered  
apprenticeships  
in KY

**19K**

Certificates  
awarded annually  
by KCTCS

**\$1.47**

Payback in productivity  
on every dollar spent  
on apprenticeships

There are over 180 registered apprenticeship sponsor companies in Kentucky that offer 275 programs ranging from welding and plumbing to computer system administration and childcare development. KCTCS also awards around 19,000 certificates annually and serves over 8,000 Kentucky Adult Education participants.

# Steady State Employment

*"Steady State" employment refers to the current population of mostly prime-age (workers 25-54) engaged in the labor force and employed, for whom this phase of the workforce life cycle represents the most critical period for gaining experience, building wealth and saving for retirement.*



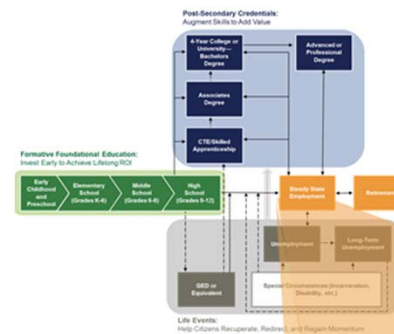




## Steady State Employment: Kentucky's workforce currently resembles its economic past more than its emerging future

Kentucky's history as a manufacturing, mining, and construction center yielded a wealth of sustaining, "family wage" jobs requiring little more than a strong work ethic and a high school education. As these industries were disrupted (through offshoring and technology), the jobs that backfilled vacancies were mostly service industry jobs paying significantly lower wages than before.

- Lack of workforce participation, often a leading indicator of future economic growth, is a significant concern, particularly for specific demographic groups
- Today, the occupations with the largest employment statewide represent largely low-wage service sector work, requiring little formal education
- Given the state's economic development priorities and industry growth projections (heavily weighted towards healthcare), it is doubtful whether the existing labor shed has the right mix of education and skills to meet the needs of industry
- For employees lacking a postsecondary credential or certification, even full-time employment will likely enable only entry-level jobs and not provide the economic means to support a family without public assistance
- Upskilling represents an opportunity to advance Kentucky's steady state workforce to a higher level of productivity and earnings



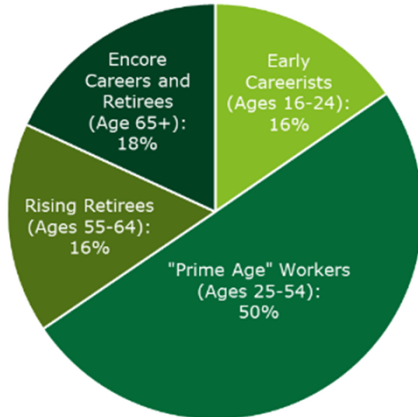
*How will Kentucky help its current workforce adapt to the shifting labor force demands of the knowledge economy?*



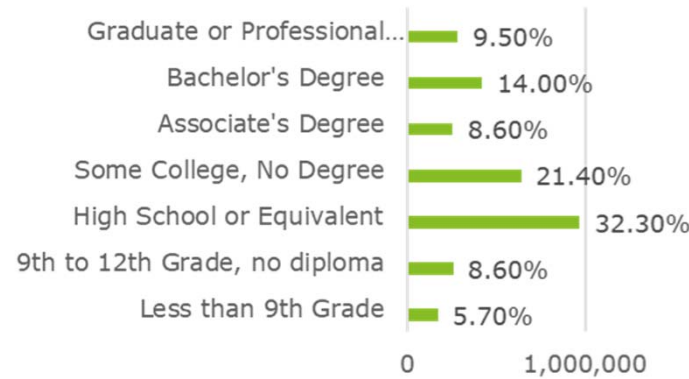
## While the Commonwealth maintains a robust base of prime-age workers, a lack of postsecondary education and low workforce participation are growing concerns

Kentucky's workforce is slightly younger than the nation as a whole (40.8 versus 41.1 years), but also relatively lower in educational attainment, with approximately 47% of individuals concluding their education at the high school level.

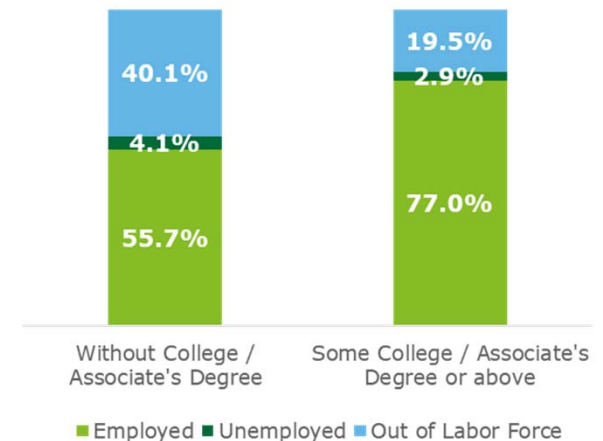
**Civilian Labor Force by Age Cohort**



**Civilian Labor Force by Educational Attainment**



**Labor Force Participation by Educational Attainment**



Source: U.S. Census Bureau, 2011-2015 and 2016 American Community Survey; Bureau of Labor Statistics

- Lower educational attainment is correlated with both lower wages, higher rates of unemployment, and lower workforce participation – the overall workforce participation rate within the Commonwealth is currently 59.2%
- Though Kentucky's current occupational mix accommodates those without a postsecondary credential, the Commonwealth has observed a gradual shift towards occupations that will require more education in the future, particularly within the advanced manufacturing, health care, and social assistance fields.



## Of those in the workforce, many are currently employed in service occupations requiring little to no postsecondary education

Kentucky's largest occupational categories reflect the transformation of the state's industrial base from one rooted in skilled trades and goods-producing industries (such as coal and manufacturing) to a mix of high and low-skill service occupations.

Occupations w/Highest Employment					
Rank	Occupation	2014 Employment	Projected Annual Openings	Median Annual Earnings	Typical Education
1	Combined Food Preparation and Serving Workers, Including Fast Food	62,120	2,770	<\$22,330	No formal educational credential
2	Retail Salespersons	60,940	2,530	<\$22,330	No formal educational credential
3	Cashiers	48,230	2,360	<\$22,330	No formal educational credential
4	Registered Nurses	45,090	2,670	>\$56,230	Bachelor's degree
5	Customer Service Representative	35,240	1,450	\$22,610 – 34,720	High school diploma or equivalent
6	Team Assemblers	32,560	970*	\$22,610 – 34,720	High school diploma or equivalent
7	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	32,130	670*	\$22,610 – 34,720	High school diploma or equivalent
8	General and Operations Managers	30,860	1,340	>\$56,230	Bachelor's degree
9	Waiters and Waitresses	30,160	1,510	<\$22,330	No formal educational credential
10	Laborers and Freight, Stock, and Material Movers, Hand	29,950	1,390	\$22,610 – 34,720	No formal educational credential

**Source:** U.S. Dept. of Labor, BLS Career One Stop

\*Red text indicates that the occupation was not among the Top 10 in terms of future employment

- The ten occupations with the highest employment account for approximately 20% of Kentucky's employment base (407,280 employees)
- Many of the largest concentrations are in services, whose prevalence rose following a national trend to offshore skilled production in manufacturing in the 1990s
- Only 18% of occupations with the highest employment (Registered Nurses and General and Operations Managers) typically require education beyond a high school diploma
- The majority of the jobs represented in occupational categories with the highest employment yield an annual salary that falls below the state's median household income of \$43,740, a figure which itself has yet to attain pre-2008 recession levels
- Current hiring demand in KY largely mirrors this list, projecting continued labor demand for service work in the near future

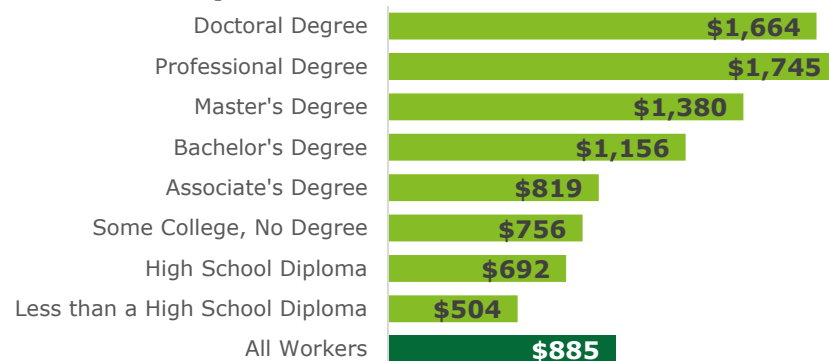


## For Kentucky employees lacking postsecondary credentials, even full-time work may not equate to financial self-sufficiency

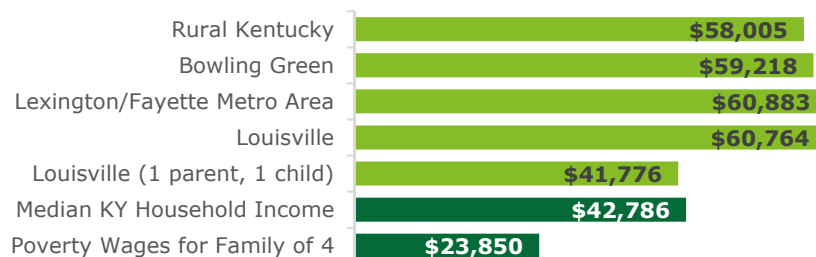
Kentucky's large population of workers lacking postsecondary credentials, coupled with the prevalence of available jobs that do not require education (but pay relatively lower wages), translate to a significant number of steady state workers who are unable to afford a "secure, yet modest" standard of living.

- Nationally, Kentucky has the largest share of jobs statewide (742,710, or 41.7%) that require no education beyond a high school diploma. The median wage of those jobs is \$32,130, less than the statewide median but above the poverty level.
- In 2016, 27.4% of jobs in Kentucky were classified as "low-wage" jobs, and 3 in 10 Kentucky workers fell into the category of the working poor, earning wages that were lower than the poverty level, an increase of 4.7% in this population since 2001.
- Of the nearly 1.1 million workers paid hourly rates in Kentucky in 2016 (55% of the civilian labor force), 23,000 earned exactly the prevailing federal minimum wage of \$7.25 per hour, while 28,000 earned less.
- Low educational attainment garners low-wage work, which in turn creates affordability problems for working families in both urban and rural communities.

### Median Usual Weekly Earnings for Population 25+ by Educational Attainment, 2016



### Median Income Insufficient for "Secure Yet Modest" Living for Two-Parent, Two-Child Family



■ Estimated Cost of Living ■ Actual Income Levels



## Within Kentucky's available workforce, specific "pockets" of low participation may necessitate further inquiry

While demographics and structural economic shifts explain some of the decline in workforce participation over time, significant discrepancies ( $\geq 5\%$ ) were observed between Kentucky's labor force participation and that at the national level. Variances were observed with respect to the following areas:

### KY vs. U.S. Labor Force Participation Rate by Age

2015 Census ACS		KY Population	KY LFPR	US LFPR	KY UR	US UR
Total		3,493,098	59.6%	63.7%	8.4%	8.3%
Early Careerists	16 to 19 years	228,618	41.4%	37.5%	23.9%	25.1%
	20 to 24 years	309,264	75.8%	73.7%	14.0%	14.2%
"Prime Age" Workers	25 to 29 years	280,666	79.4%	82.1%	10.8%	9.3%
	30 to 44 years	285,283	78.9%	82.1%	8.8%	7.8%
	35 to 44 years	564,344	78.6%	82.4%	7.2%	6.6%
	45 to 54 years	619,749	73.2%	80.2%	5.7%	6.2%
Rising Retirees	55 to 59 years	303,308	63.0%	72.2%	4.8%	5.9%
	60 to 64 years	268,891	46.0%	55.2%	5.0%	5.6%
Encore Careers, Lifelong Workers and Retirees	65 to 74 years	369,111	20.9%	25.4%	3.6%	5.4%
	75 years and over	263,864	5.5%	6.1%	3.9%	4.9%

### Variances of $\geq 5\%$ from US LFPR

- Age – workers in the latter half of their career (ages 45-74), despite lower relative levels of unemployment within the age cohort
- Disability Status – any form of disability (41.1% US participation compared to 32.5% KY)
- Poverty Status – those living below the poverty line (52.2% US participation compared to 45.5% KY)
- Educational Attainment – no educational attainment beyond the high school level
  - Less than HS: 60.6% US participation compared to 44% KY
  - HS Diploma or Equivalent: 72.9% US participation compared to 67.7% KY

Source: U.S. Census Bureau, [2011-2015 American Community Survey 5-Year Estimates](#)



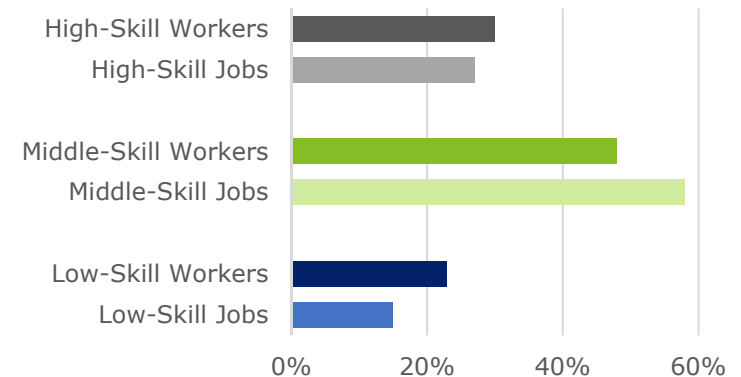
## As Kentucky's industrial base evolves towards healthcare and advanced manufacturing, demand will rise for "middle skill" workers with postsecondary credentials

Kentucky's employment is expected to grow by 15.2% through 2024 - while a majority of opportunities will continue to accommodate those without a postsecondary credential, occupations requiring more education are increasing as a share of total employment.

### Kentucky Employment Projections (2014-2024)

Educational Attainment	Employment				Change	
	Number of Jobs		% Distribution		2014-2024	
	2014	2024	2014	2024	Number	%
<b>Total</b>	<b>2,150,864</b>	<b>2,476,961</b>	<b>100%</b>	<b>100%</b>	<b>326,097</b>	<b>15.2%</b>
Doctoral or Professional Degree	53,246	65,406	2.5%	2.5%	12,160	22.8%
Master's Degree	41,704	52,281	1.9%	2.1%	10,577	25.4%
Bachelor's Degree	364,814	424,686	17.0%	17.1%	59,872	16.4%
Associate's Degree	93,752	119,528	4.4%	4.8%	25,776	27.5%
Postsecondary Non-Degree Award	134,048	164,912	6.2%	6.7%	30,864	23.0%
Some College, No Degree	43,851	49,306	2.0%	2.0%	5,455	12.4%
High School Diploma / Equivalent	869,807	986,285	40.4%	39.8%	116,478	13.4%
Less than High School	549,642	614,557	25.6%	24.8%	64,915	11.8%

### Skills Supply vs. Demand (2015)



- Although 65% of Kentucky's projected near-term job growth may not require postsecondary education, growth in low-skill occupations will slow compared to those requiring higher levels of education.
- While lower skill jobs will continue to be plentiful through the next decade, they will also continue to be low-paying. BLS data indicates that only 6% of the top-earning 150 occupational categories in 2024 would require no postsecondary credential, and first-wave automation (up to 47% of all jobs at risk) could additionally threaten employment stability at the lower end of the skills spectrum.
- Research estimates that by 2020, 2/3rds of all job openings nationwide will require a postsecondary credential beyond high school, placing a heavy emphasis on "middle skill" occupations (requiring less than a Bachelor's Degree but more than a high school diploma), for which there is currently an excess labor demand in the Commonwealth.

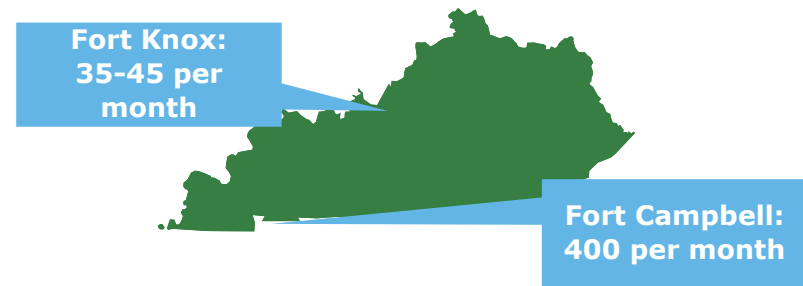


## Veterans may present an opportunity to leverage existing Commonwealth human capital and improve workforce participation

With the 12th largest military employment in the nation, the 34,595 active duty military personnel stationed at Kentucky's military installations represent a robust potential source of workforce talent, particularly as they transition from active duty to civilian life.

- Approximately 5,000 service members transition annually from active duty at the Commonwealth's two largest military installations Fort Campbell (25,543 active duty) and Fort Knox (4,777 active duty) to return to civilian life
- In the months prior to their transition, service members can take advantage of training supports to upskill and recruit into skilled occupations; the educational attainment profile of transitioning service members, combined with their technical capabilities, work ethic, and leadership skills, make them highly sought-after employees in Kentucky's growing "middle skill" occupations
- Because they are not counted in the labor force participation rate, timely employment of veterans upon discharge from active service could potentially raise the state's participation rate
- A challenge exists with retaining this valuable pipeline of talent - neighboring states such as Tennessee present competition given a lower state tax burden and competitive quality of life

### Average Monthly Service Members Transitioning From Active Duty in Kentucky



Source: Kentucky Cabinet for Military Affairs

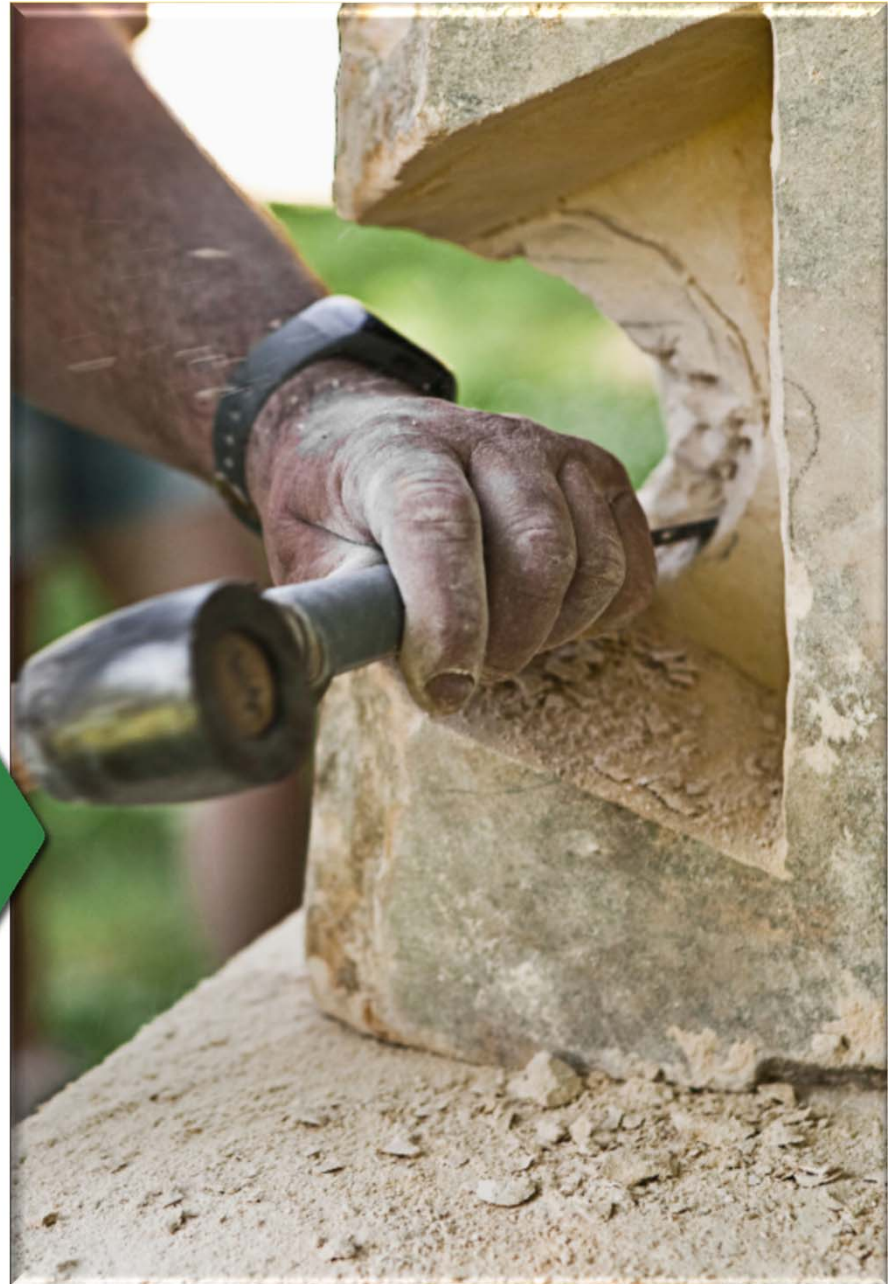
### Educational Attainment of Kentucky Veterans

	Veteran	Non-Veteran
Less than high school	10.6%	16.1%
High school graduate (includes equivalency)	34.8%	33.8%
Some college or associate's degree	34.9%	27.7%
Bachelor's degree or higher	19.7%	22.5%

Source: American Community Survey 2014, US Census Bureau

# Special Populations & Life Events

*The majority of Americans will experience a downturn or personal setback during the course of a working lifetime; what determines whether these life events are destabilizing or altogether derailing depends on how quickly an individual can recover, and return to a productive path of self-sufficiency*

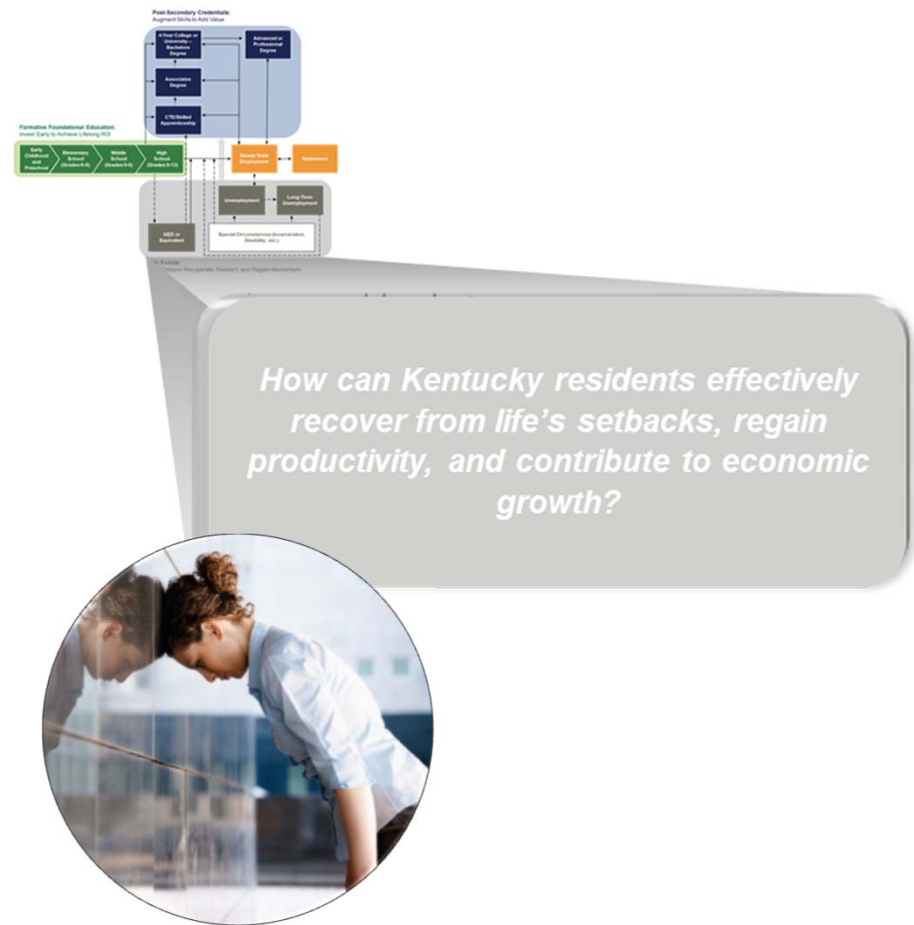




## Life Events: Citizens who suffer life's downturns often struggle to regain their footing

At some point, a majority of Americans find themselves in at least one of several potentially destabilizing situations, such as a temporary or protracted period of unemployment, acquiring disability status, criminal system involvement, or other employment disrupting events.

- Kentucky's unemployment landscape varies widely throughout the Commonwealth – with a statewide unemployment rate of 5.2%, only 21,000 of 107,000 unemployed residents currently claim unemployment, and 30.2% exhaust their UI benefits before finding work, which places them at risk of long-term unemployment
- Over 8.1% of Kentucky citizens receive disability benefits, at a rate almost two times the national average – over 2/3 of Kentucky residents with disabilities suffer from mental health or musculoskeletal injuries that inhibit their ability to work
- While the Commonwealth has implemented measures to reduce its incarcerated population, the introduction of formerly institutionalized populations to the labor force without sufficient workforce training can negatively impact labor force participation. Criminal backgrounds possessed by nearly 1/3 of the adult working population also create additional barriers to employment

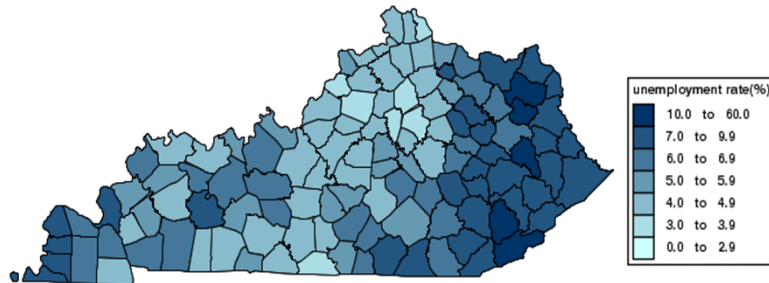




## Unemployment: The employment landscape is uneven, and those out of work past six months face additional hurdles

While statewide numbers are optimistic, communities in the eastern and western ends of the Commonwealth continue to face unemployment rates above 10%. The average unemployed citizen exhausts UI benefits, and faces serious challenges to being re-employed after being out-of-work past six months.

### Unemployment by County (August 2017)



**5.2%** **21K**

Unemployment  
Rate, Sept 2017

People on State  
Unemployment  
Benefits

**9.4%**

Unemployment,  
Underemployment &  
Marginal Attachment

There are currently 106,000 unemployed people in Kentucky

Unemployment is especially severe in Eastern Kentucky, where many displaced workers in the mining and manufacturing industries reside.

**1.6%**

Long-term  
unemployment  
rate in 2014

**30**

Weeks of  
unemployment  
on average

More than 30% of Kentucky's unemployed have been out of work for more than 27 weeks and many of those remain unemployed for much longer. Overall, the average duration of unemployment in the Commonwealth is 30 weeks.

***"[There is] a sharp drop-off in the number of interview requests for those whose non-employment spell topped six months"***

- Rand Ghavadi, Harvard University

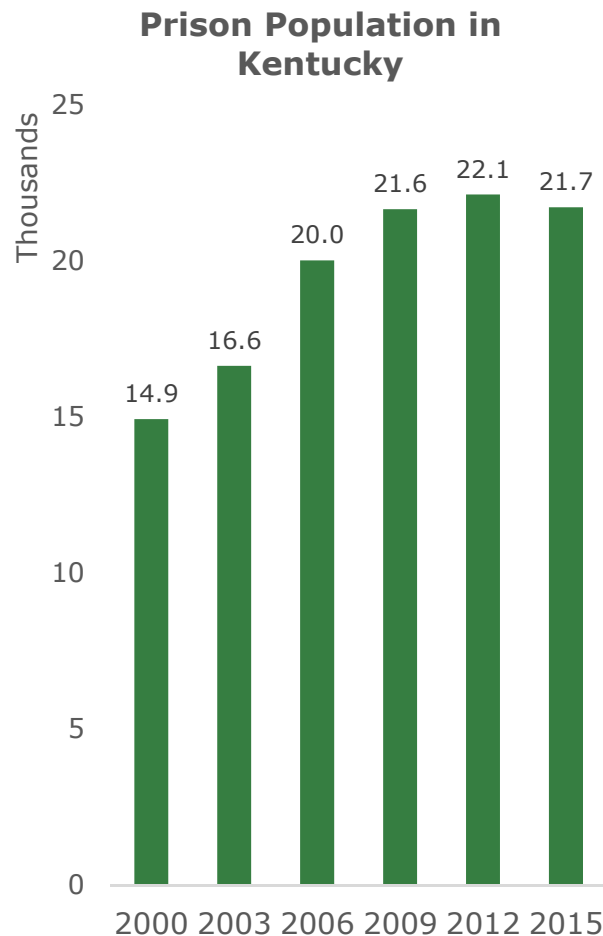
The Commonwealth does award a maximum \$2,400 tax credit to employers in exchange for hiring the long-term unemployed; however, for this population, securing a job may be especially difficult - a number of studies have concluded that job seeking becomes significantly more challenging as the period of apparent unemployment on a resume lengthens.





## Incarceration: Earning skills and credentials are crucial for the formerly incarcerated to re-integrate into the workforce

Despite the recent downward trend in the Commonwealth's incarcerated population and recent legislation to establish a Prison Industry Enhancement Certification Program (PIECP), many formerly incarcerated individuals in Kentucky are released without having earned credentials that are crucial to re-engagement in the workforce.



**24K**

People Incarcerated in the Commonwealth

**37**

Average Age of Inmate

Kentucky incarcerates 540 per 100,000 residents. Of the 24,000 currently incarcerated, 47% are in jail, 49% in state corrections institutions and 3% in halfway houses.

**13 Years**

Average Sentence of a KY Inmate

**1 in 5**

Incarcerated for Drug-Related Offenses

20% of inmates are convicted of drug-related offenses, significantly higher than the national level (13.8%).

Studies have found that many re-entrants struggle to find work after release – and when they do, they earn significantly less than their counterparts who have no history of incarceration.

**680**

Technical program completions in 2016

***Eight months after prison, over half of those released remain unemployed.***

- Urban Institute (National Data)

**288**

GED Degrees earned by inmates in 2016

***Ex-inmates earn 40 percent less compared to people in similar circumstances who have not spent time in prison.***

- Pew Center (National Data)



## Criminal Background: Non-incarcerated individuals with criminal records in their backgrounds also face barriers to employment.

People with criminal backgrounds and arrest records who have never served jail time likewise face serious adversities in finding work. These difficulties translate into higher unemployment rates for those affected and a drag on labor productivity for the community at large.

**100M**      **1 in 3**

Records in state criminal history repositories nationwide

Americans will have been arrested by the age of 23 (Estimate)

***"Have you ever been arrested or convicted of a crime?"***

Frequent question posed in approximately 48% of job applications

From violent crimes to arrests with convictions, estimates indicate that over 80 million U.S. citizens have a criminal record.

The number of records in state criminal history repositories nationwide equals 1/3 of the American adult population.

**31%**

Employers think "arrest without conviction" is influential in employment decision.

**50%**

Less chances of employment for those ever convicted of a crime

**\$5.8K**

Forgone benefits to the community annually for each criminal record

**-\$60B**

Estimated impact on national GDP of the justice-involved population

***Ex-offenders who did get hired were no more likely to be fired later than non-offenders. And they were less likely to quit.***

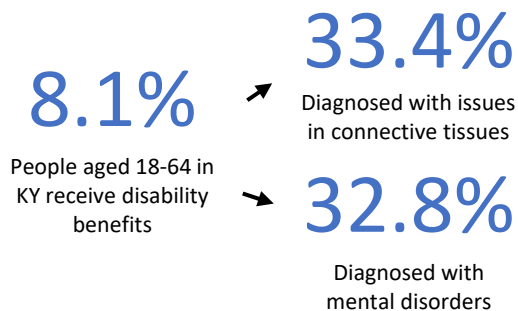
- Pritzker School of Law, Northwestern University

- Individuals with arrest records ("rap sheets") face barriers to employment. In 2016, the Commonwealth of Kentucky made 395,695 arrests.
- Criminal backgrounds cost the Commonwealth: those who have been convicted of a crime are 50% less likely to receive a job offer, and Stanford University researchers estimated that \$5,680 worth of productive benefits to the community are forgone for each criminal record.
- Recent measures in Kentucky such as a "ban-the-box" initiative and SB120 (passed in 2017) attempt to address barriers faced by justice-involved individuals, including work training programs for incarcerated individuals, as well as remediation for those who may lose professional licensure due to an arrest or conviction.



## Disability's Impact on Kentucky Employment: Individuals with disabilities participate less and experience barriers to employment

Kentucky has one of the highest disability rates nationwide - the high percent of individuals with disabilities translates to more individuals who are out of the labor force, while those who do participate experience challenges in securing employment.



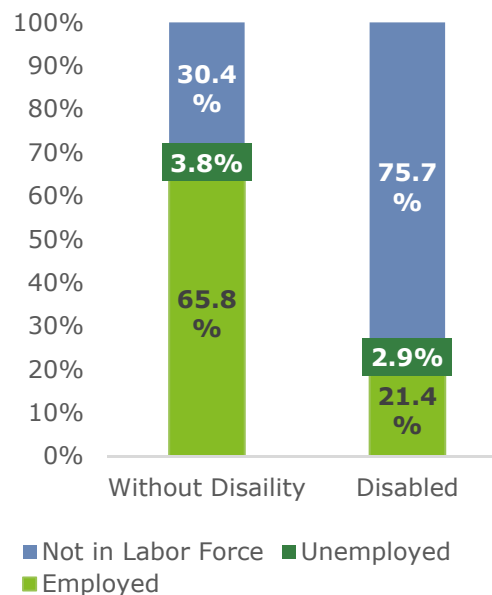
***Routine lifting of heavy objects and daily exposure to whole body vibration are common causes to musculoskeletal disorders.***

- Centers for Disease Control & Prevention

More than 750,000 of Kentucky's civilian non-institutionalized population (17.9%) live with disabilities. 2/3 of diagnoses relate to mental disease and musculoskeletal disorders.



**Labor Force Participation by Disability Status in Kentucky**



***"More than 40% of SSDI recipients [in the country] take opioid pain relievers, while the prevalence of chronic opioid use is over 20% and rising."***

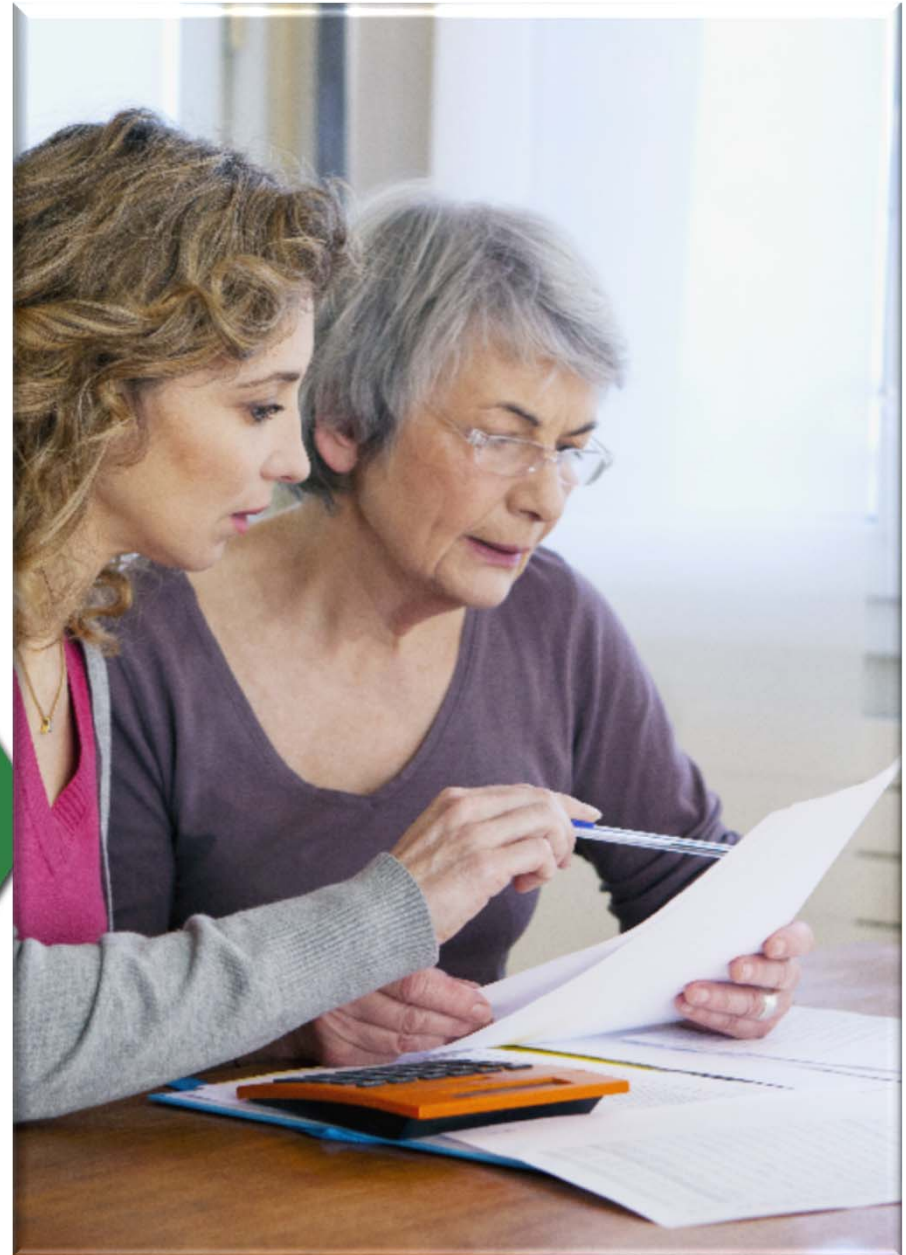
Morden, et al. Journal of Medical Care, American Public Health Association, Sept. 2014

Kentucky has one of the highest proportions of SSDI beneficiaries with six or more opioid fills per year in the nation.

The phenomenon is prevalent across the Commonwealth, with the exception of the Greater Louisville area.

# Encore Careers & Retirement-Aged Workers

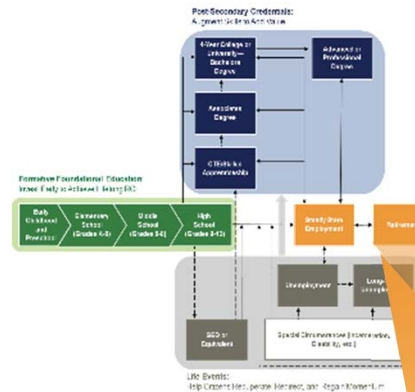
*Kentucky's population of older workers will soon constitute 1 in 4 citizens – these experienced individuals present an opportunity to retain human capital, conduct succession planning, and train the next generation workforce during a period of high labor demand*



## Retirement-Aged Workers: As Kentucky's population ages, the workforce faces both a large-scale loss of institutional knowledge, as well as an opportunity to retain needed human capital

Today, approximately 1 in 7 Kentucky residents is 65 or older – by 2030, that number will increase to 1 in 4 individuals – almost a quarter of the Commonwealth's population.

- "Rising Retirees" (ages 55-64) and retirement-aged individuals (age 65+) represent a fast-growing proportion of Kentucky's population
- Older Kentucky workers enjoy relatively lower levels of unemployment (3.1%); however, advanced career individuals in Kentucky demonstrate a lower level of workforce participation (15.3%) than their national counterparts (18.6%)
- Regarded as a low-cost state with generous retirement income tax deductions, Kentucky residents tend to retire earlier on average (at age 62) than most other Americans, though post-Recession, many may need to continue working for economic reasons
- Sectors suffering skills gaps may need to rely on retaining retirement-aged individuals longer to sustain operations, preserve institutional knowledge, and train the next-generation workforce



*How does Kentucky plan to harness the productivity of its older workers to enrich the next generation and support economic growth?*



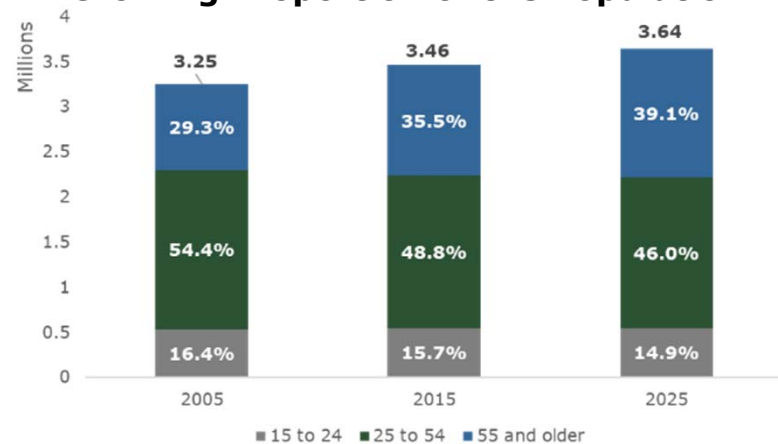


## Kentucky's retirement-aged population is growing rapidly, and on average the population works less than older Americans in general

Mirroring national demographic trends, the population of older residents in Kentucky is growing faster than other age cohorts; by 2030, 1 in 4 Kentucky residents will be aged 60 or older (a 91% increase since 2000).

- There are currently 633,000 citizens in the Commonwealth age 65+, with a median age of 72.8 years old. In addition, a "rising retiree" population (aged 54 to 65) of 703,576 workers (16% of the civilian workforce) are beginning to exit the workforce, presenting challenges to industries who rely on their institutional knowledge to support operations.
- Older Americans are increasingly continuing to work later into their retirement years - U.S. projections indicate a 3.1% increase in labor force participation by this group through 2024. That said, Kentucky's labor force participation amongst retirement-aged workers is significantly lower than the national rate.
- Kentucky is a state whose low cost of living and favorable tax treatment of retirement income (up to \$41,110 tax-free with no age restriction, greater than the median household income of \$32,538 for the 65+ population) supports a lower average retirement age (62) than most other states.

### Kentucky's Older Residents Represent a Growing Proportion of the Population



### Older Kentuckians are Less Likely to Work Than Their U.S. Counterparts

18.6%

Labor Force Participation Rate  
of U.S. Workers Age 65+

15.3%

Labor Force Participation Rate  
of KY Workers Age 65+

21.7%

Projected U.S. Labor Force  
Participation Rate of Workers  
Age 65+ in 2024

62

Average Retirement  
Age in Kentucky

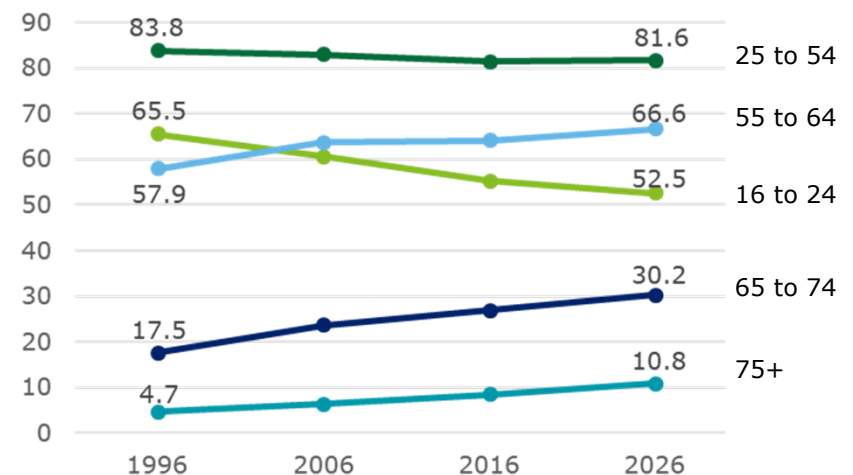


While some are prepared to enjoy retirement at 65 (or sooner), many will need to extend employment into their later years and possibly overcome challenges to secure work

While Kentucky residents tend to retire earlier on average than their national counterparts, labor force participation within this age group is slowly increasing over time, as many continue to work past retirement age to support their standard of living.

- Recent economic shifts, longer life expectancies, and low rates of personal saving (51% of Kentucky adults have <\$1,000 in savings) may lead as many as 2/3 of older workers to extend their working years beyond traditional retirement age.
- While older Kentuckians participating in the labor force enjoy a relatively low level of unemployment, those unemployed spend more time looking for work than younger Kentuckians: 35.5 weeks on average for 55+, compared with 23.3 weeks for 16 to 24 year olds and 30.3 weeks for those 25 to 54 years of age.
- Workers 55 and older are more likely to lack technological skills, to have outdated workforce skills, to be less educated than their prime-aged worker counterparts.
- Increased competition for jobs, biases against hiring older workers, and changes in the types of job skills desired by employers may contribute to longer periods of unemployment.

**U.S. Civilian Labor Force Participation Rate by Age Cohort (1996 – 2026)**



**While Many Older Kentuckians are Employed, the Unemployed Spend More Time Seeking Work**

**2.3%**

Unemployment  
Rate for KY  
Workers 65+

**35.5**

Average Time  
(Weeks) Unemployed  
for Workers 55+

**42%**

Postsecondary  
Attainment Rate for  
KY Workers 55+

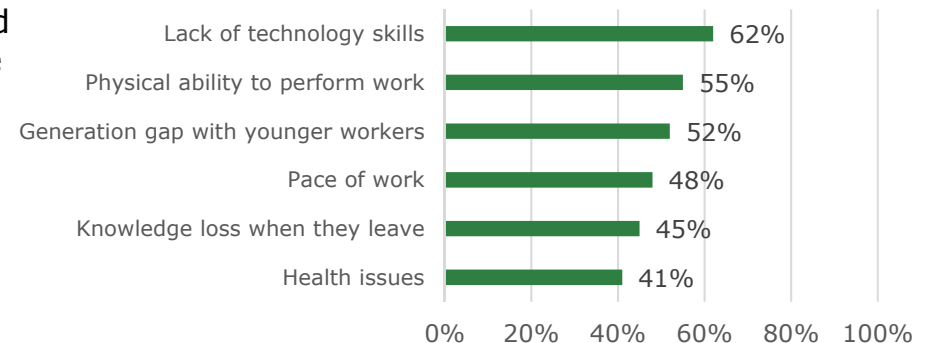
## Many older workers possess skills highly valued in the knowledge economy, but require unique workforce development programming to maximize their performance

Given their substantive and increasing presence in Kentucky's labor market, as well as the capabilities and attributes of this demographic, older workers merit careful attention for the Commonwealth in terms of workforce development.

- Kentucky employers acknowledge the challenges of the aging workforce, which include both practical issues such as employee health, as well as intergenerational issues with younger workers and the challenges of succession planning with a large impending exodus of Baby Boomer employees
- Aside from these challenges, Kentucky's older workers possess many of the highly coveted "soft skills" such as work ethic, customer service orientation, and leadership required to succeed in the economy's rapidly growing sectors, and their experience and mentoring capabilities could aid the transition for younger members of the workforce
- Despite the growing population of older workers in Kentucky, workforce development targeted to this group is largely nonexistent. Only 1 out of 13 federal and state workforce development programs examined by the Kentucky Legislative Research Commission specifically targets workers 55 and older, and industry representatives interviewed acknowledged that their training programs do not specifically target any age cohort.

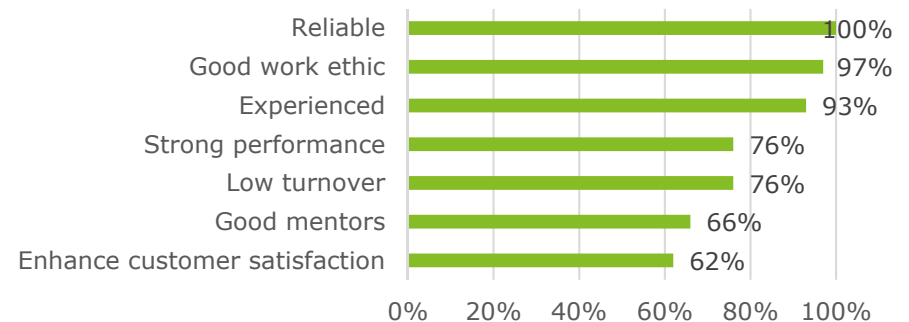
### **Top Workforce Development Issues for Older Workers (Age 55+)**

(as identified by Kentucky employers)



### **Benefits of Hiring Kentucky's Older Workers (Age 55+)**

(as identified by Kentucky employers)



# Leading Practices in Workforce Development

*Summary of leading practices from U.S.  
states focused on workforce development*





## Leading practices in workforce development focus attention at all nodes within the workforce development lifecycle

Recognizing that workforce development operates much like an investment portfolio, leading practices in this field tend to focus on a combination of both short-term, bold plays to narrow the immediate skills gap, combined with long-term, systemic investments in tomorrow's workers to re-engineer the Commonwealth's labor force.



### **Early Childhood:**

Universal Pre-K programs engage students academically earlier in life, focus on behavioral and developmental skills that prepare students to be productive in a P-12 setting, and provide daytime care that permits both parents to work full-time. Such investments can yield a ROI of up to \$8 for every \$1 invested.



### **P-12 Education:**

Exposure to STEM applications and careers as early as elementary school, along with consistent and widespread efforts to dispel negative perceptions around technical education foster the student engagement critical to pursuing career pathways in high-demand, "middle skill" occupations.



### **Postsecondary Credentialing:**

"Earn while you learn" apprenticeship / internship / externship models not only attract students who would otherwise not pursue education beyond high school, but also address many of the affordability issues of higher learning.



### **Steady State Workforce:**

Consistent, sustained dialogue with sector employers to understand skills gaps with specificity, upskilling incumbent workers, emphasis on retaining transitioning military service members in-state, and adoption of "skills-based hiring" to remove barriers to job mobility focuses stakeholders on the essential skills needed to grow the regional economy.



### **Managing Life Events:**

Predictive identification of risk factors and behavioral nudges to avoid negative life events, coupled with structuring programs to provide a smooth transition back to steady state employment and economic self-sufficiency reduce barriers to employment and recidivism for preventable occurrences.



### **Retirement-Age Workers:**

Recruiting "rising retirees" in industries with shallow labor pools for encore careers or to help train and transition the next generation of workers not only provides them with supplemental retirement income, but also smooths the transition of the generational workforce and preserves institutional knowledge.



## Resources and Programs Devoted to Serving the Kentucky Workforce

*Examination of budget and programming oriented to workforce development initiatives occurring across the workforce lifecycle*

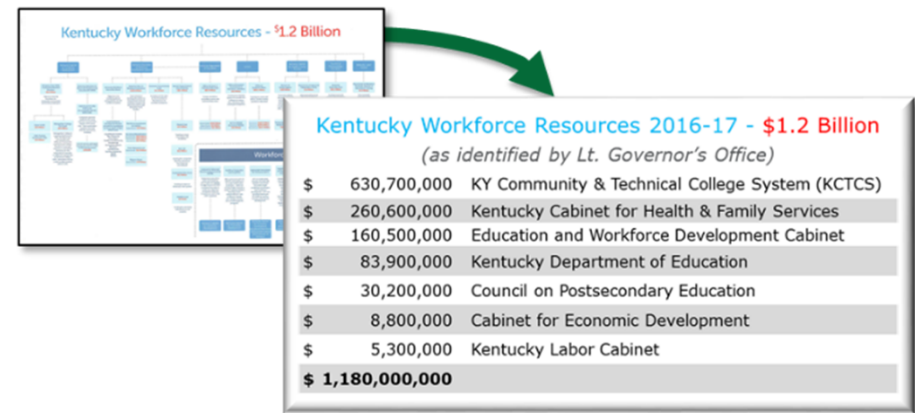




## Significant resources are appropriated each year to fund workforce development, but program transparency is lacking


Although almost \$1.2 Billion was appropriated in the FY17 for education and workforce development, budget documentation does not track programmatic spend at a level that is meaningful to assess program outcomes, alignment to strategic priorities or value for spend.

- The Lt. Governor's Office has worked over the past 18 months to collect spend data on workforce development, employing a "bottom-up" data collection approach at the agency level, but the results provide only an order of magnitude of spending, dissociated from the specific programs funded or outcomes
- Reviews of both the FY17 appropriations bill and operating budget yielded a level of detail too high to assess programmatic spend on workforce programs
- Funding detail is generally categorized by source or high-level administrative line item, but lacks specificity regarding specific programs funded and at what levels
- No documentation was identified regarding dollars spent on delivery of programmatic mission or services versus administrative spend, or on performance measures of output, efficiency, or outcome



**Kentucky Workforce Resources 2016-17 - \$1.2 Billion**  
(as identified by Lt. Governor's Office)

\$ 630,700,000	KY Community & Technical College System (KCTCS)
\$ 260,600,000	Kentucky Cabinet for Health & Family Services
\$ 160,500,000	Education and Workforce Development Cabinet
\$ 83,900,000	Kentucky Department of Education
\$ 30,200,000	Council on Postsecondary Education
\$ 8,800,000	Cabinet for Economic Development
\$ 5,300,000	Kentucky Labor Cabinet
<b>\$ 1,180,000,000</b>	



**Education and Workforce Development**

	Actual FY 2014	Actual FY 2015	Revised FY 2016	Enacted FY 2017	Enacted FY 2018
<b>EXPENDITURES BY UNIT</b>					
General Administration and Program Support	10,559,741	9,854,143	12,524,500	13,203,900	21,831,400
Commission on Proprietary Education	145,258	113,884	209,000	286,500	288,600
Deaf and Hard of Hearing	1,575,860	2,265,641	1,952,700	1,972,500	1,983,500
Kentucky Educational Television	14,400,257	14,301,665	14,100,000	15,265,300	15,374,200
Environmental Education Council	213,180	348,103	221,300	211,900	188,700
Libraries and Archives	15,991,695	17,120,987	16,168,700	17,119,900	17,175,300
Office for the Blind	9,210,156	9,541,403	11,079,500	10,530,100	10,595,200
Employment and Training	723,595,937	475,400,322	710,808,600	707,596,800	716,541,900
Vocational Rehabilitation	58,038,046	64,269,190	60,262,700	60,924,200	61,037,200
Education Professional Standards Board	7,126,506	9,375,561	9,039,100	8,377,200	8,397,400
<b>TOTAL EXPENDITURES</b>	<b>840,856,634</b>	<b>602,590,899</b>	<b>836,366,100</b>	<b>835,488,300</b>	<b>853,413,400</b>



## Diverse initiatives exist across the Commonwealth to address many of the challenges encountered throughout the workforce lifecycle

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The environmental scan identified over 70 Commonwealth programs and initiatives oriented to workforce development across the workforce lifecycle, aligning to most phases of the workforce lifecycle and revealing a broad cross-sector commitment to tackling Kentucky's workforce development challenges.

While not an exhaustive list, the initiatives summarized below highlight a concerted, sustained effort by a broad coalition of Commonwealth leaders and their private and not-for-profit sector partners to direct targeted resources to workforce development. Brief descriptions of these programs are provided in the Appendix to this document.

### **Early Childhood Initiatives**

- Pre-School Partnership
- STARS Preschool Improvement Program
- Early Childhood Regional Training Centers
- Preschool Program Review (P2R) Process
- United Way Born Learning Academies
- Top Early Learning Challenge

### **P-12 Initiatives**

- 21st Century Community Learning Centers
- School Improvement
- Read to Achieve
- Mathematics and Science Partnership
- Math Achievement
- Next Generation Science Standards
- Energy Technology

### **P-12 Initiatives, continued**

- Kentucky's School Report Card Dashboard
- Charter Schools
- Kentucky Academic Standards Revision
- Every Student Succeeds Act (ESSA)
- School Readiness Toolbox
- TELL Kentucky
- Dual Credit Scholarships

### **Career and Technical Education (P-12)**

- Career and Technical Education (CTE) Career Pathways
- Career and Technical Education Alignment
- Career Choices
- High Schools That Work
- TRACK
- Working with Exceptional Students in CTE



## Summary of existing initiatives, continued

---

### **Postsecondary Initiatives**

#### **KCTCS**

- KCTCS-TRAIN (part of Kentucky Skills Network)
- Regulatory Training
- Go2Work
- Community Education

#### **KHEAA Work-study program**

#### **University of Kentucky**

- Opportunity for credit-bearing internships (48 work hours = 1 credit hour)
- Pre-professional advising
- Experiential Education Program

#### **Eastern Kentucky University**

- Part-time job Program

#### **Western Kentucky University**

- Executive apprentice program

#### **University of Louisville**

- Cardinal Career Treks

### **Council Postsecondary Education (CPE)**

- Adult Education (KY Skills U)
- GearUp
- Kentucky Virtual Campus
- Kentucky Virtual Library
- Developmental Education

### **Career and Technical Education (Postsecondary)**

- New Skills for Youth
- Work-Based Learning (Kentucky Educational Excellence Scholarship (KEES))

### **Cabinet of Economic Development (Postsecondary)**

- KY FAME
- Kentucky Postsecondary Feedback Report

### **Labor Cabinet (Postsecondary)**

- Pre-Apprenticeship
- Registered Apprenticeship



## Summary of existing initiatives, continued

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### **Cabinet of Economic Development**

- Work Ready Communities
- Work Ready Skills Initiative
- Bluegrass State Skills Corporation (BSSC)
- Kentucky Skills Network
- Kentucky Career Centers 'Get Opportunity' (GO)

### **Cabinet for Health and Family Services**

- Kentucky HEALTH

### **Chamber of Commerce**

- Kentucky Workforce Center

### **Opportunity for Work & Learning**

- SEEC
- Life Education and Adjustment Program
- Source America
- NexTrac CEO

### **Goodwill**

- AbilityOne®/SourceAmerica®
- Adult Learning Center
- Donation Centers & Retail Stores
- Employment Services
- Entrance Criteria
- Goodwill Cars to Work®
- GoodWorks
- GTS Staffing
- Job Junction
- Kentucky Youth Career Center
- Power of Work
- Senior Community Service Employment Program
- Vocational Evaluation
- Work Incentives and Planning (WIPA)



# Observations on KY's Workforce

*Primary research gathered from interviews  
with Kentucky's workforce, education,  
economic development and business  
leadership*





## Discussions with workforce partners supported immediate traction and the extraction of insights for the strategic planning process

Throughout the strategic planning process, one-on-one and small group interviews were facilitated with 50+ Kentucky workforce development stakeholder organizations and 100+ Kentucky workforce development leaders to gain insights on the current workforce system's strengths, challenges and improvement priorities.

Participants were asked to address alignment of strategic priorities as well as tactical and strategic issues in today's system. Key questions focused on:

- *What is the vision for workforce in Kentucky and how is success measured?*
- *What assets differentiate Kentucky's workforce development landscape?*
- *What challenges and structural or tactical issues are currently impacting workforce development in Kentucky?*
- *How can we better coordinate and leverage existing workforce development efforts across all partners?*
- *How do we best align Kentucky's workforce development programs with the careers of the future while balancing job demands of today?*





## Regional interviews and focus groups provide additional qualitative data and context to focus the planning discussion

The following themes arose from one-on-one and small group interviews with 50+ Kentucky workforce development organizations and 100+ Kentucky workforce development leaders to gain insights on the current workforce system's strengths, challenges and improvement priorities:



### **THEME 1:** Enhancing and building on the current P-12 and postsecondary education system in Kentucky

Enhance existing infrastructure in our education system to better support the workforce system.



Promote Earlier & Continuous Education



Integrate Career & Technical Education



Continually refresh education and training continuum



### **THEME 2:** Increasing employer and business leadership and engagement in workforce development

Increase employer leadership throughout the workforce development system; establish and promote a business services point-of-contact at the state and local levels.



Increase Employer Leadership and Engagement



Consider Both Current and Future Workforce Needs



Expand Apprenticeships & Internships



### **THEME 3:** Improving alignment and collaboration of state and local workforce development efforts

Remove silos and build alignment amongst workforce developers, creating a true "one voice" and "one mission" that speaks for the entire system holistically



Increase Alignment and Resource Sharing



Improve System Oversight and Accountability



Define and Support the True End Customer






Promote the Resources and Tools Available



## Theme #1: Enhancing and building on the current P-12 and postsecondary education system in Kentucky



Participants emphasized the importance of aligning P-12 and postsecondary opportunities with the needs of employers and the careers of the future.

	What We Heard	What We Found
 <b>Promote Earlier &amp; Continuous Education</b>	More of Kentucky's children should be participating in preschool programs; students should be exposed to career options earlier in their education; and all Kentuckians should be accessing training opportunities to adapt and learn throughout their career.	In KY, only 41% of children attend pre-school, which correlates to 50% not being ready to start kindergarten at grade level. Historically, low educational attainment garners low-wage work. Although 65% of Kentucky's projected near-term job growth may not require postsecondary education, growth in low-skill occupations will continue to slow, thus emphasizing the need for continuous education and training.
 <b>Integrate Career and Technical Education</b>	P-12 school districts, Kentucky Community and Technical College System (KCTCS), Area Technical Centers (ATC) and Career and Technical Training (CTE) have taken significant steps to collaborate but they are still independent of each other. The individual institutions often work independently of each other.	Kentucky has 53 ATCs serving 129 school districts throughout the Commonwealth. At the same time, KCTCS is Kentucky's largest provider of workforce education and training, including 16 colleges and 70 campuses and serves more than 40% of Kentucky's undergraduates.
 <b>Continually Refresh Education and Training Continuum</b>	Many respondents indicated concern around alignment of education and training with current and future workforce needs. Educators and training providers indicated a strong willingness to adapt and refresh curriculums – quickly – but indicated that it can be hard to quickly funnel career demand data back to educators.	Kentucky recently established Senate Bill 1 (KRS 158.6455) which requires each local workforce investment board – in conjunction with local economic development organizations – to compile a ranked/prioritized list of industry recognized certificates/credentials that are shared with the KWIB and Department of Education to better align education to local industry needs. In August 2017, the Kentucky Center for Education and Workforce Statistics (KCEWS) expanded to include both education and labor market information for the Commonwealth of Kentucky.








## Theme #2: Increasing employer and business leadership and engagement in workforce development



Those interviewed communicated the need to increase employer engagement throughout Kentucky's workforce development system.

	What We Heard	What We Found
 <b>Increase Employer Leadership and Engagement</b>	Employers need to be actively engaged throughout all aspects of workforce development. Their involvement is necessary to set the stage for the 'new normal' which is both a highly trained and highly trainable workforce.	There is significant active engagement of employers currently in Kentucky; they serve on local WIBs, the KWIB, chambers of commerce, and business community groups and associations. They also get involved by presenting at schools and career fairs and participate in apprenticeship and internship-based programs and 'work and learn' opportunities. Yet some respondents indicated that it still doesn't seem that the education and workforce systems are producing the workforce needed by Kentucky's employers.
 <b>Consider Both Current and Future Workforce Needs</b>	Many interviewees express concern that Kentucky is focused on filling immediate workforce needs at the expense of preparing the workforce for the jobs of the future.	According to the Education and Workforce Development Cabinet, there were approximately 200,000 open jobs in Kentucky at the end of October 2017. While there is a need to fill those job openings and increase Kentucky's participation rate; individuals interviewed cited the need to focus on the upskilling and ongoing learning for all Kentuckians, given that it is projected that by 2020, approximately 60% of workers will need some level of post secondary education.
 <b>Expand Apprenticeships &amp; Internships</b>	Employers should engage more in apprenticeship programs within their local areas allowing youth to participate in the workforce as early as possible, as involvement from youth (HS students) in the workplace has been declining. Examples of programs that have been successful and driven by employers include KY FAME, "Work and Learn", and tuition reimbursement.	Kentucky has registered apprenticeships programs and offers a Tech Ready Apprentices for Careers in Kentucky (TRACK) youth pre-apprenticeship program that provides secondary students with career pathway opportunities into Registered Apprenticeship programs. In FY' 2016, Kentucky had 154 apprenticeship programs with 3,310 participants, compared to the national average of 410 programs and 7,162 participants.







## Theme #3: Improving alignment and collaboration of state and local workforce development efforts



Many participants communicated the immediate need to build alignment amongst the various Kentucky workforce development organizations, creating a true “one voice” and “one mission” that speaks for the entire system holistically.

What We Heard		What We Found
 <b>Increase Alignment and Resource Sharing</b>	There is inconsistency and competing priorities across the various workforce funding grants that leads to ambiguous goals, siloed decision making, and budget guidelines/ constraints. We need to better align the efforts of the all stakeholders (cabinets, Kentucky Workforce Innovation Board, local WIBs, educators, and employer) to effectively improve the workforce system. Regional collaboration and resource sharing should be strongly encouraged.	Although almost \$1.2 Billion was appropriated for education and workforce development across several different programs and efforts, budget documentation does not track program spend at a level that is meaningful to assess program outcomes, alignment to strategic priorities or value for spend.
 <b>Improve System Oversight and Accountability</b>	There does not seem to be aligned performance measures of workforce development across cabinets making it difficult to consistently measure the programs and make data based decisions on programs that are working and those that are not.	Other than Federally mandated performance measures and accountability requirements, there is not a Kentucky-based workforce development performance and accountability system. At the same time, there is minimal traceability of workforce spending as it relates to return on investment. Use of manual data sources is required in order to draw a distinct, yet subjective conclusion on the performance results of workforce programs and initiatives.



## Theme #3: Improving alignment and collaboration of state and local workforce development efforts, continued



Many participants communicated the immediate need to build alignment amongst the various Kentucky workforce development organizations, creating a true “one voice” and “one mission” that speaks for the entire system holistically.

### What We Heard

### What We Found



#### Define and Support the True End Customer

Interviewees indicated that workforce development has always had the issue of the ‘dual customer’: employers and job seekers. Instead of balancing each, some interviewees suggest a shift to focus more on employers as customers.

Employers are struggling to fill talent gaps; job-seekers are seeking sustainable wages and career opportunity. The workforce system has traditionally tried to balance the needs of both customers, in a time of funding pressure. Kentucky’s recent decision to integrate social services and workforce development, through the community engagement requirement of its Medicaid program offers an opportunity to provide enhanced support for job-seekers (through social service programs) while workforce development efforts focus on employer engagement.



#### Promote the Resources and Tools Available

In order to get workforce development buy-in from employers, the system has to produce results and share them with the public and business communities. Communication needs to be better aligned across all cabinets and local areas, especially as new programs and initiatives are planned and implemented. Currently, the system is confusing and both employers and job seekers are not always sure of what resources are available.

There are numerous workforce organizations, programs, and initiatives throughout the Commonwealth that have positively impacted the workforce system – both at state and local levels, driven by private and public entities. However, expedited implementation, irregular communication, and lack of performance results has impacted buy-in and success of those specific programs while at the same time adding more confusion to an already complex system. Kentucky lacks a “one voice” and “one mission” consortium.



## Appendix

*Additional detail gathered during the  
Environmental Scan effort*





# Strategic Planning Team

*Roster of individuals who contributed to the  
KWIB Strategic Planning effort*





## KWIB Strategic Planning Team

The following Kentucky workforce development leadership team drove the creation of the Kentucky Workforce Development Strategic Plan.

KWIB Members	KWIB Strategic Plan Steering Committee
Governor Matt Bevin	Sec. Scott Brinkman – Governor's Office
Sen. Jimmy Higdon – Kentucky State Senate	Adam Meier – Governor's Office
Rep. Jim DeCesare – Kentucky House of Representatives	Hugh Haydon – Kentucky Bioprocessing
Hugh Haydon (Chair) – Kentucky Bioprocessing	Kim Menke – Toyota Motor Manufacturing Kentucky
Kim Menke – Toyota Motor Manufacturing Kentucky	Amy Luttrell – Goodwill Industries
Carla Webster – Conduent	Pat Murphy – United Parcel Service (UPS)
Chris Reinersman – DHL	Dave Adkisson – Kentucky Chamber of Commerce
Peter Feil – Stober Drives	Sec. Hal Heiner – Education and Workforce Development Cabinet
Heidi Marguis – Humana	Sec. Terry Gill – Cabinet for Economic Development
Adam Hinton – Hinton Mills	Sec. Vicki Glisson – Cabinet for Health and Family Services
Robert Southard – Southern Star Central Gas Pipeline	Dr. Jay Box – Kentucky Community and Technical College System
Pat Murphy – United Parcel Service (UPS)	Dr. Stephen Pruitt – Department of Education
Danette Wilder – SealingLife Technologies	
Torsten Langguth – Dr. Schneider Automotive	
Kevin Smith – Beam Suntory (Jim Beam Brands)	
Amy Lutrell – Goodwill Industries	
David Boggs – Opportunity for Work and Learning	
Terry Sexton – Boilermakers Local 105	
Scott Pierce – Engineering Trade Union Affiliate	
Bernard Miles – Electrical Workers Union Affiliate	
Sec. Hal Heiner – Education and Workforce Development Cabinet	
Sec. Terry Gill – Cabinet for Economic Development	
Sec Derrick Ramsey – Labor Cabinet	
Mike Bunchanon – Warren County Judge-Executive	
Thomas Watson – Mayor, City of Owensboro	
Dr. Stephen Pruitt – Department of Education	
Dr. Aaron Thompson – Council on Postsecondary Education	
Melissa Aguilar (Executive Director)	



# Interview Participants

*We thank the workforce, education, economic  
development and industry leaders from  
across the Commonwealth who contributed  
their time and insights on the Kentucky labor  
market and its challenges and opportunities*



## Interview Participants Thank you for your participation and input!

This following table includes the organizations that participated in the interview and/or focus groups as part of the strategic planning process:

Organization
Beam Suntory (Jim Beam Brands)
Bluegrass Workforce Investment Board
Boilermakers Local 105
Bowling Green Chamber of Commerce
Cabinet of Health and Family Services – DCBS
Catalent Pharma Solutions
Citizen of Kentucky
City of Owensboro
Commerce of Lexington
Conduent
Council on Postsecondary Education
Cumberland County Workforce Investment Board
Department of Workforce Investment
Dr. Schneider Automotive
Electrical Workers Local 761
Goodwill Industries of Kentucky
Green River Workforce Investment Board
Hinton Mills
Humana
P-12 / Career & Technical Education
Kentucky Adult Education
Kentucky Association of Manufacturers
Kentucky Bioprocessing
Kentucky Career Centers
Kentucky Center for Education and Workforce Statistics



## Interview Participants (cont'd) Thank you for your participation and input!

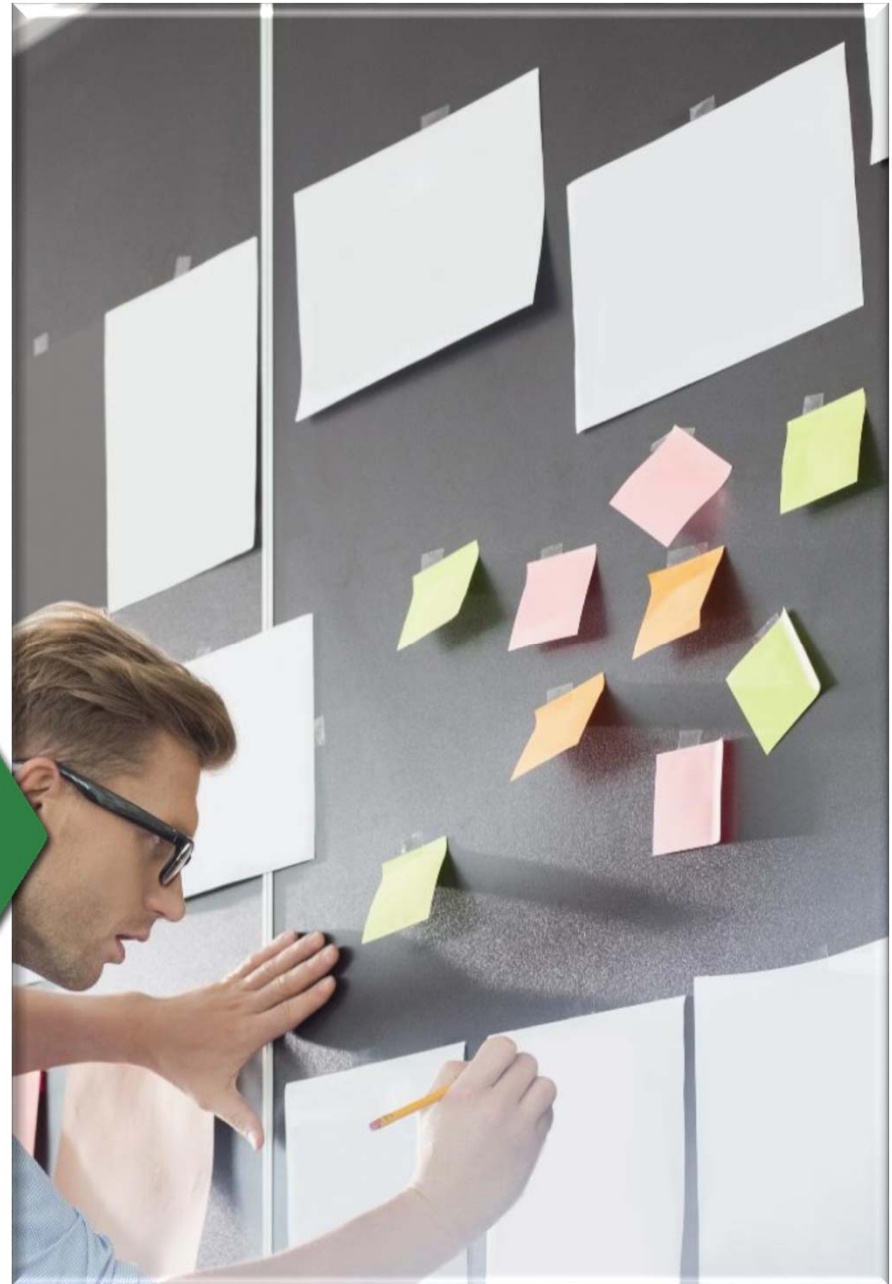
This following table includes the organizations that participated in the interview and/or focus groups as part of the strategic planning process:

Organization
Kentucky Chamber of Commerce
Kentucky Commission on Proprietary Education
Kentucky Community & Technical College System
Kentucky Department for Libraries & Archives
Kentucky Department of Economic Development
Kentucky Department of Military Affairs
Kentucky Labor Cabinet
Kentucky State Representative
Kentucky State Senator
Lincoln Trail Workforce Investment Board
Northern Kentucky Workforce Investment Board
Office of the Governor – Executive Office
Office of the Lt. Governor
Opportunity for Work & Learning
SealingLife Technology
South Central Workforce Investment Board
Southern Star Central Gas Pipeline
Stober Drives
TENCO Workforce Investment Board
Toyota Motor Manufacturing Kentucky
United Parcel Services
United Way / 211
Warren County
Western Kentucky Workforce Investment Board



# Existing Initiatives & Details

*Descriptions of current Kentucky workforce  
development initiatives and programs*





## Existing Initiatives: Pre-K - 12

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### Early Childhood Initiatives

- **Pre-School Partnership**  
Grant program to incentivize public/private partnerships to develop full-day programs for at-risk CCAP eligible children
- **STARS Preschool Improvement Program**  
Voluntary program for certified preschools to be enrolled in quality rating improvement system administered by the Cabinet for Health and Family Services
- **Early Childhood Regional Training Centers**  
10 Centers statewide providing trainings, workshops, on-site consultations, library materials, etc. for early childhood community
- **Preschool Program Review (P2R) Process**  
Department of Education administers onsite visits and class observations, RTC districts submit annual data on preschool sites and RTC visits to be evaluated according to the Early Childhood Environment Rating Scale
- **United Way Born Learning Academies**  
\$1.4 million state investment in early childhood - first step of funding 24 academies is the beginning of a four-year expansion of 150 academies across the state.
- **Top Early Learning Challenge**  
\$44M grant being used to enhance high-quality early learning environments, assisting families to better prepare their children for kindergarten and measuring results.

### K-12 Initiatives

- **21st Century Community Learning Centers**  
Funds out-of-school programs for students from high-poverty, low-performing schools to help them meet state and local standards in core academic subjects
- **School Improvement**  
\$7M federal grant for local educational agencies to provide adequate resources for students and raise achievement in lowest-performing schools
- **Read to Achieve**  
\$50K apiece two-year grant for 300 schools to design and implement reading intervention programs that address needs of K-3 students reading at low levels
- **Mathematics and Science Partnership**  
Funds partnerships between high-need school districts and STEM faculty in higher education to enhance content knowledge and teaching skills of math and science classroom teachers
- **Math Achievement**  
\$50K grant for 90 schools to hire one full-time mathematics intervention teacher and training for an intervention team that addresses needs of students in K-4 failing to meet grade level
- **Next Generation Science Standards**  
Partnership with Achieve, Inc. to adopt new standards for K-12 science education and develop greater interest in science and encourage students to choose science and technology careers





## Existing Initiatives: Pre-K - 12

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### **K-12 Initiatives (cont.)**

- **Energy Technology**  
Grant for local school districts to establish energy technology engineering career pathways for students to enter postsecondary related programs and related careers
- **Kentucky's School Report Card Dashboard**  
Provides detailed information about each school and district, including test performance, teacher qualifications, student safety, awards, parent involvement and much more
- **Charter Schools**  
House Bill 520 cleared the way for the first charter schools in Kentucky
- **Kentucky Academic Standards Revision**  
Public feedback is being sought as part of the review/revision process of the Kentucky Academic Standards in English/language arts, mathematics, health and physical education (PE)
- **Every Student Succeeds Act (ESSA)**  
New federal education law provides Kentucky more flexibility and allows the state to design a more effective accountability system that encourages improved learning opportunities, achievement, and readiness for all students
- **School Readiness Toolbox**  
Resource guide for working with families, early childhood providers, and community partners to increase kindergarten readiness

### **K-12 Initiatives (cont.)**

- **TELL Kentucky**  
The TELL survey is designed to gather input from teachers, counselors, principals, and other administrators who know best the working conditions in Kentucky's schools.
- **Dual Credit Scholarships**  
Dual credit allows high school students to receive both high school and postsecondary credit at the same time for a course that is approved. The course may be delivered at the high school or postsecondary school. The Kentucky Dual Credit Scholarship Program allocates \$15 million over the next two school years to all school districts across Kentucky for any junior or senior to earn dual credit for up to two courses, at no cost to the student.

### **Career and Technical Education (CTE)**

- **Career and Technical Education (CTE) Career Pathways**  
Career Pathways are systemic frameworks for transforming our educational institutions by proactively addressing the needs of students and employers across the learning continuum.
- **Career and Technical Education Alignment**  
Developed by CTE Consultants, in collaboration with Program Teachers, the resources support a model framework with connections to National Standards, Kentucky Academic Standards, and KOSSA Standards.



## Existing Initiatives: Pre-K - 12

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### **Career and Technical Education (CTE) (cont.)**

- **Career Choices**  
Career Choices in the middle school is an exploratory course which introduces students to a broad range of career opportunities.
- **High Schools That Work**  
Southern Regional Education Board initiative to provide a framework of goals, key practices, and key conditions, which is designed to blend the essential content of traditional-college preparatory studies with quality career/technical studies to raise student achievement.
- **TRACK**  
The Tech Ready Apprentices for Careers in Kentucky (TRACK) youth pre-apprenticeship program is a partnership between the Kentucky Department of Education's Office of Career and Technical Education and the Kentucky Labor Cabinet to provide secondary students with career pathway opportunities into Registered Apprenticeship programs.
- **Working with Exceptional Students in CTE**  
The Office of Career and Technical Education collaborates with the Office of Teaching and Learning to ensure we have strategies that help us uphold our Mission for all students. We encourage all leadership and staff to do the same. Exceptional Children include Special Needs, English Learners, Gifted and Talented, Blind - VI and Deaf - HH students. For specific information and strategies for working with these and other students, please refer to our



## Existing Initiatives: Postsecondary Education

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### **KCTCS**

- KCTCS-TRAIN (part of Kentucky Skills Network)  
Companies receive funding to assist with the cost of providing workforce training and assessment services to current, as well as, potential employees
- Regulatory Training  
Provides continuing education for those to maintain licensure
- Go2Work  
Profession-tailored 2-yr programs (on campus or online) to attract job-seekers in pursuing continuing education with KCTCS
- Community Education  
Workshops to boost soft/life skills; Wellness, finance management, home management, computing skills, self-employment skills

### **KHEAA Work-study program**

- Partners with 5 local universities, enable students to gain career related experience while attending school. (Employers benefit in receiving a reimbursement for every hour a student works part-time during school and full-time during holidays)

### **Eastern Kentucky University**

- Part-time job program  
Grant funded program that assists students in finding off-campus employment

### **University of Kentucky**

- Opportunity for credit-bearing internships (48 work hours = 1 credit hour)
- Pre-professional advising  
Dental, law, medicine, pharmacy, optometry
- Experiential Education Program  
Assist in connecting students and employers in developing career-related learning opportunities in internship, cooperative education (co-op), or externship experiences.

### **Western Kentucky University**

- Executive apprentice program  
9-month mentorship and coaching program to help students build career confidence and create a portfolio worthy of a job offer or graduate school acceptance letter

### **University of Louisville**

- Cardinal Career Treks  
Opportunity for students to get an in person understanding of how the company operates, how employees grew to the roles they are in, and a job shadow opportunity for attendees



## Existing Initiatives: Postsecondary Education

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### **Council Postsecondary Education (CPE)**

- **Adult Education (KY Skills U)**  
Local KYAE Skills U programs provide free academic instruction aligned to college- and career-readiness standards, as well as offer preparation and coaching for next steps (i.e., college and career) for: Individuals without a high school diploma; High school graduates with academic or employment skill-building needs; English language learners; Individuals participating in integrated education and training; and Individuals in corrections facilities
- **GearUp**  
Six-year grant program for college-readiness
- **Kentucky Virtual Campus**  
One-stop listing and platform of all online courses (partners with 4-yr and 2-yr postsecondary institutes)
- **Kentucky Virtual Library**  
Online resources portal: GED-prep, company finances, etc.
- **Developmental Education**  
Boost college readiness: implement benchmarks for high schools, monitor outcomes of students

### **Career and Technical Education (CTE)**

- **New Skills for Youth**  
Vision includes a regionalized Governance and Delivery of CTE that:
  - is employer-led through regional workforce areas and ensures cross-institutional involvement,
  - encompasses career pathways that have seamless transitions from secondary to postsecondary education,
  - involves shared resources and funding among all partners, and
  - provides valuable industry certifications and credentials that are recognized by business and industry
- **Work-Based Learning (Kentucky Educational Excellence Scholarship (KEES))**  
The KEES program encourages career education in high school students by allowing co-op courses and work experience to go towards eligibility for college scholarships

### **Cabinet of Economic Development**

- **KY FAME**  
A statewide apprentice program combining education and actual workplace experience. KY FAME is a collaboration among Kentucky businesses and educational institutions to train the workforce of the future.



## Existing Initiatives: Postsecondary Education

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### **Cabinet of Economic Development (cont.)**

- Kentucky Postsecondary Feedback Report  
The Kentucky Center for Education and Workforce Statistics released the 2014 Kentucky Postsecondary Feedback Report. This is the first report of its type in the nation that takes a deep look into what happens to our graduates after they leave college. The report provides critical information for students and parents to help them make decisions about what they want to study.

### **Labor Cabinet**

- Pre-Apprenticeship  
Pre-apprenticeship is designed to prepare individuals to enter and succeed in a Registered Apprenticeship program.
- Registered Apprenticeship  
Registered Apprenticeship is a proven approach for preparing workers for jobs while meeting the needs of business for a highly-skilled workforce. It is an employer-driven, “learn while you earn” model that combines on-the-job training, provided by the employer that hires the apprentice, with job-related instruction in curricula tied to the attainment of national skills standards. The model also involves progressive increases in an apprentice’s skills and wages





## Existing Initiatives: Steady State Employment & Special Populations

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### **Cabinet of Economic Development**

- **Work Ready Communities**  
A measure of a county's workforce quality. To date, 26 counties have been certified as Work Ready Communities and 42 counties have been certified as Work Ready in Progress. Another 34 counties have begun the process of applying for certification.
- **Work Ready Skills Initiative**  
Kentucky has awarded \$100 million in statewide bonds to 40 applicants through the Kentucky Work Ready Skills Initiative (KWRSI) to build a highly trained, modernized workforce to meet the needs of employers and promote sustainable incomes for Kentuckians.
- **Bluegrass State Skills Corporation (BSSC)**  
Provides incentives to support Kentucky business' efforts to help new and existing employees stay competitive through flexible, employer-driven skills-upgrade training.
- **Kentucky Skills Network**  
Formed by the governor this year to assist Kentucky companies in hiring and training employees. Partnership among the Education and Workforce Development Cabinet, the Cabinet for Economic Development, the Labor Cabinet and KCTCS to develop a global economy that will attract new, high-demand jobs and fortify the talent pipeline.

### **Cabinet of Economic Development (cont.)**

- **Kentucky Career Centers 'Get Opportunity' (GO)**  
\$6 million federal grant program to provide on-the-job training, customized training and apprenticeships. The program also offers coaching, counseling and direct job placement to help connect long-term unemployed laid-off workers with available jobs.

### **Cabinet for Health and Family Services**

- **Kentucky HEALTH**  
Kentucky HEALTH (Helping to Engage and Achieve Long Term Health) to the Secretary of the Department of Health and Human Services, Sec. Sylvia Burwell. This innovative and common sense approach waiver will put Kentuckians on a path to better health outcomes, ensure long term sustainability of the Medicaid program and familiarize members with commercial insurance and prepare them for self-sufficiency.



## Existing Initiatives: Steady State Employment & Special Populations

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### **Chamber of Commerce**

- Kentucky Workforce Center  
The Center will develop employer-led initiatives to build a workforce that is more closely aligned to the needs of business and strengthen the voice of employers in their partnerships with policymakers and educators. Focus is on Industry Collaboratives, Business Leadership, Essential Skills, Network Development, Measuring Progress

### **Opportunity for Work & Learning**

- SEEC  
SEEC administers vocational evaluations and assessments- resulting in better job retention and higher job satisfaction among both employees and employers alike.
- Life Education and Adjustment Program  
Focuses on teaching the soft skills that are fundamental in obtaining and maintaining employment; geared toward individuals who may have work experience, but have had difficulty maintaining employment due to their lack of effective life management skills.
- Source America  
Partnership with the national Source America program; OWL receives Federal contracts and creates opportunities where individuals with disabilities can acquire job skills

### **Opportunity for Work & Learning (cont.)**

- NexTrac CEO  
Partnership with Bluegrass WIB; provides vocational and employment services to out-of-school youth, ages 16-24, who may not be eligible through traditional sources.

### **Goodwill**

- AbilityOne®/SourceAmerica®
- Adult Learning Center
- Donation Centers & Retail Stores
- Employment Services
- Entrance Criteria
- Goodwill Cars to Work®
- GoodWorks
- GTS Staffing
- Job Junction
- Kentucky Youth Career Center
- Power of Work
- Senior Community Service Employment Program
- Vocational Evaluation
- Work Incentives and Planning (WIPA)