



Kansas Framework for Growth



Senate Commerce Committee – February 13, 2020

Marek Gootman, Brookings Institution

1. Process and Principles

The approach to developing a comprehensive strategy follows four phases

Phases	I Assess Kansas' competitiveness	II Develop and prioritize potential initiatives	III Design action plan	IV Test and refine strategy
Activities	▪ Evaluate economic performance relative to peers and to baseline ▪ Identify potential target industry sectors / subsectors ▪ Assess competitiveness factors (e.g., innovation, talent and workforce) ▪ Determine key assets and challenges in Kansas and each of its distinct regions	▪ Align on the portfolio of industry sectors and sub-sectors where KS has a competitive advantage ▪ Develop and prioritize initiatives that accelerate growth	▪ Develop action plans for prioritized initiatives ▪ Design appropriate operating model and governance structure	▪ Refine findings and strategies from feedback from diverse stakeholders ▪ Identify and engage partners for prioritized initiatives
Stakeholder engagement	Stakeholder interviews, workshops, and surveys to gather diverse perspectives			

The strategy will be built from insights across regional leaders, public engagement, expert interviews, and a mix of quantitative and qualitative research

Regional workshops



- [Seven regional workshops](#) across the state [engaging 250+ participants from October to December](#) across economic development, education, and industry leaders, reviewing Kansas' economic performance, the region's strengths and assets and discussing potential priority initiatives

Expert interviews



- [Targeted interviews of 50+ experts](#) supporting a range of analyses, including, but not limited to: KDC subject matter experts, Kansas thought leaders, business leaders, educators and reviewing best practice case studies
- [Ongoing thematic working sessions planned on priority topics](#) to engage subject experts in review of current context and initiative development

Macro-economic analysis



- [Analysis of macroeconomic data to assess current performance and competitiveness](#), isolating priority opportunities statewide and regionally:
 - Benchmarking macroeconomic performance to peers
 - Sector-based target industry identification and cluster analysis
 - Assessment of enablers of growth (e.g., innovation, infrastructure, business climate, talent)
 - Identification of best practices and relevant case studies to inform strategies
 - Review and synthesis of existing plans and strategies
- [Ongoing engagement with broader public to gather diverse perspectives and generate momentum for the effort:](#)
 - Public survey and website to share progress and gather insights
 - Public townhalls to share findings on key strengths and challenges for the State
 - Strategy roadshow to gather feedback on strategy

Public engagement



Business and industry perspective



- [Business Council formed, consisting of 20+ business leaders](#) in Kansas to share diverse industry perspectives and help shape the strategy
- [Interviews with business leaders across industries](#) to discuss key trends, challenges, and opportunities for impact

1. Process and Principles

2. Findings from the economic assessment

Macroeconomics

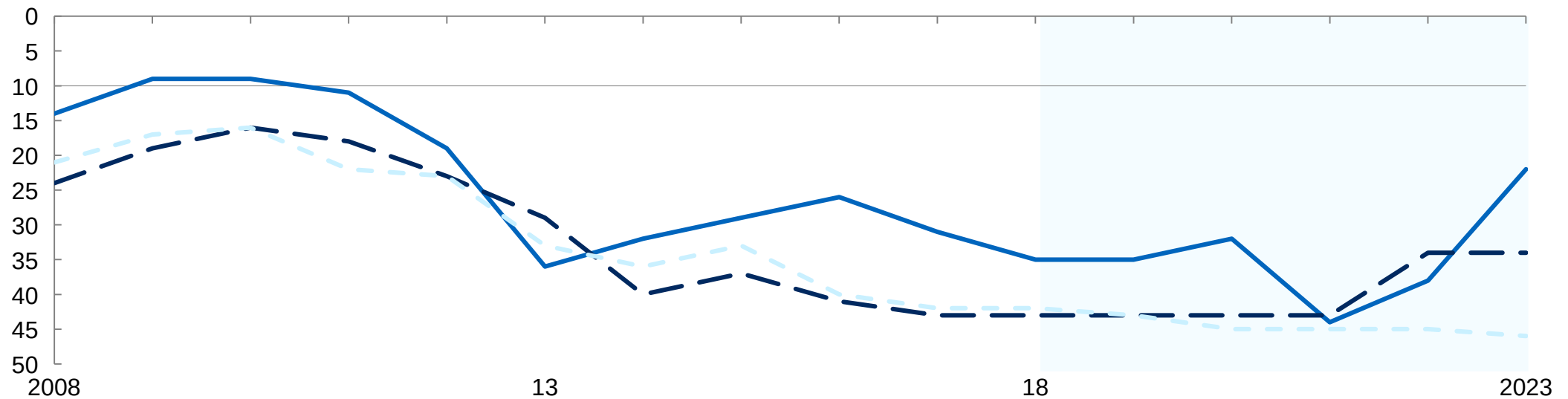
Strengths

Vulnerabilities

Over the past decade Kansas has fallen out of the top half of states, and is projected to continue struggling to keep pace with the nation

— GDP — Average wage — Forecast
— Employment

Kansas' growth rankings, Rank



Employment
growth rank

24

29

43

34

GDP growth
rank

14

36

35

22

Average wage
rank

21

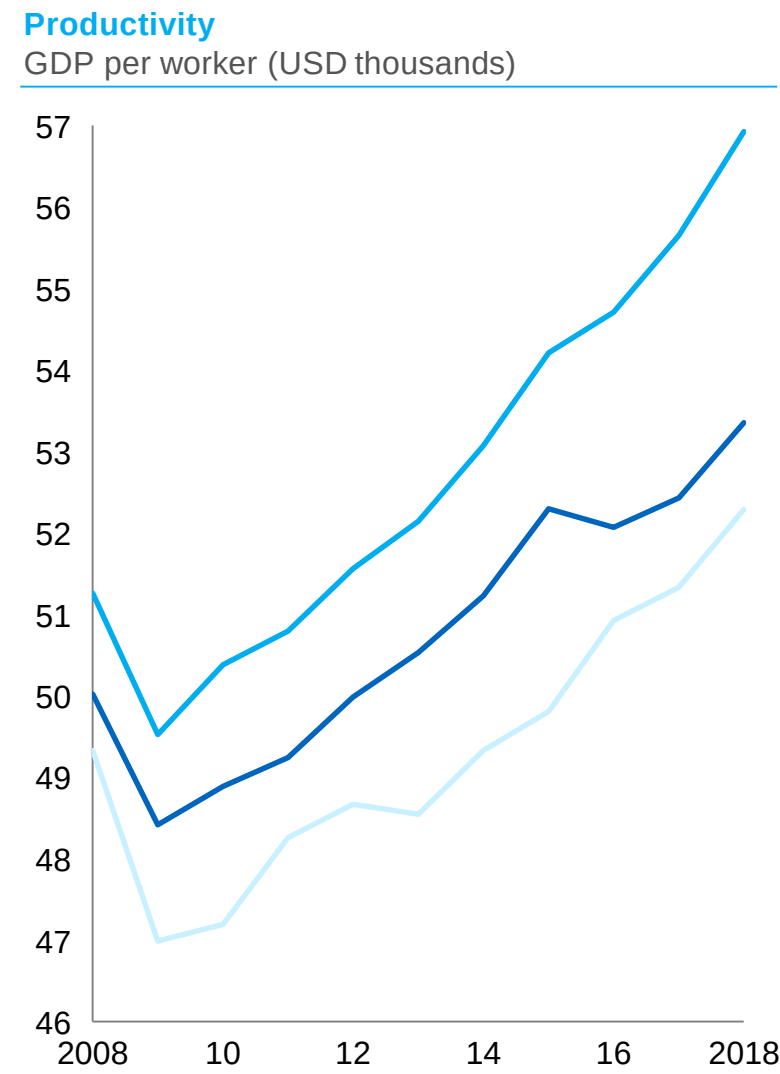
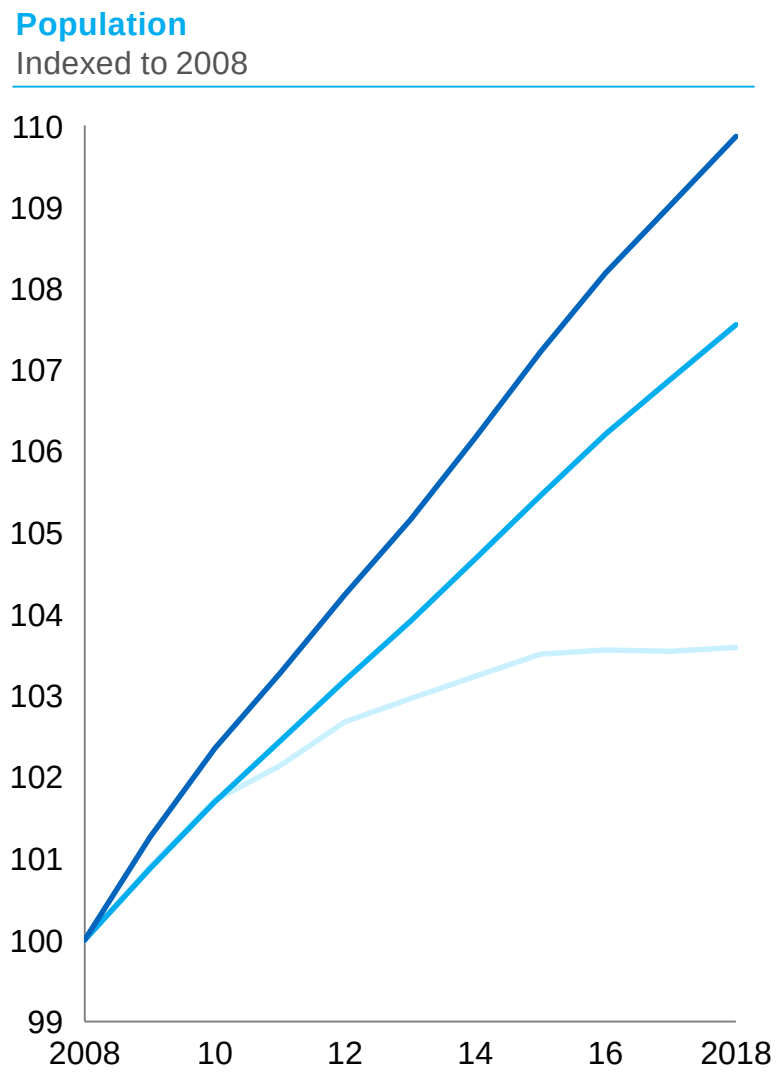
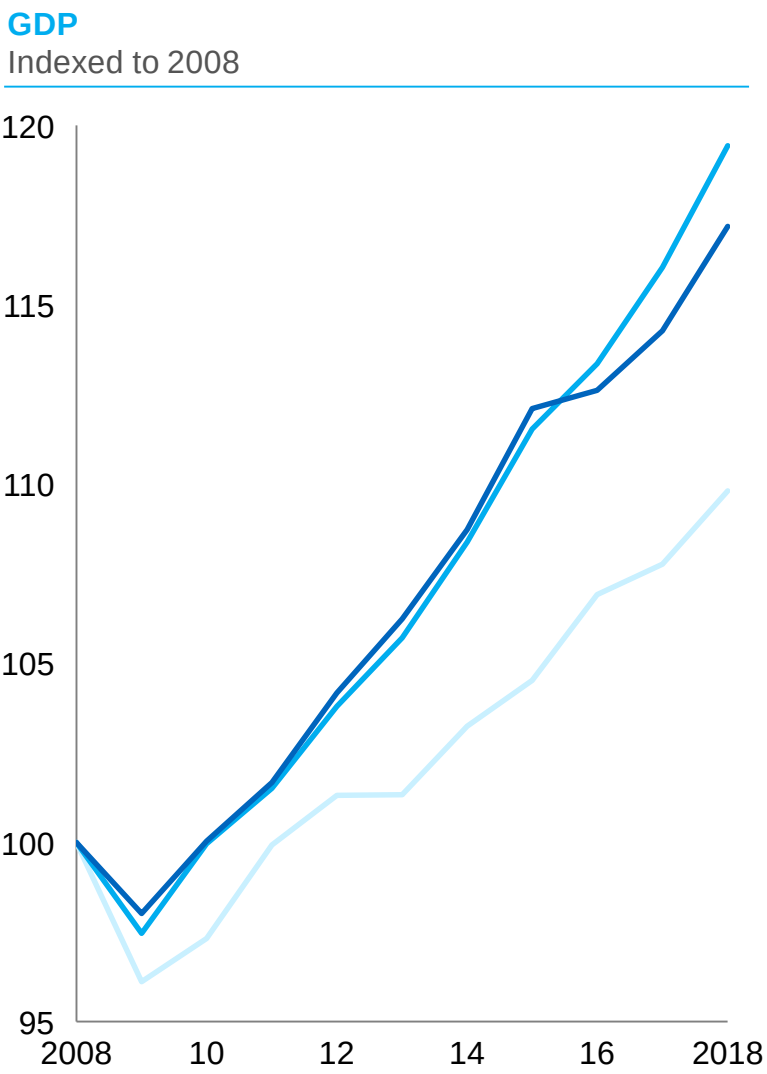
33

42

46

Kansas' economic growth and productivity trails the US and peer average

- Kansas
- United States
- Peer average¹



¹ Peers Arkansas, Georgia, Illinois, Iowa, Louisiana, Missouri, Nebraska, Nevada, North Carolina, Oklahoma, and Texas

SOURCE: Bureau of Economic Analysis, US Census, Moody's Analytics

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Kansas has several foundational strengths that can drive future competitiveness, but must address challenges to economic fundamentals



Strengths

11th in the country in graduate production

High quality of life in terms of affordability, safety, and schools

13th highest labor force participation in the nation

Location in the heart of the country and strong road systems

Increasing presence in the sectors driving growth (e.g. business services, logistics)

Efficient incentives program in both jobs and capital expenditure per dollar



Challenges

43rd in employment growth and 42nd in wage growth in 2018

Rural Kansas faces more acute challenges than the rest of the state

44th in migration to the State

39th in retention of college graduates in the nation

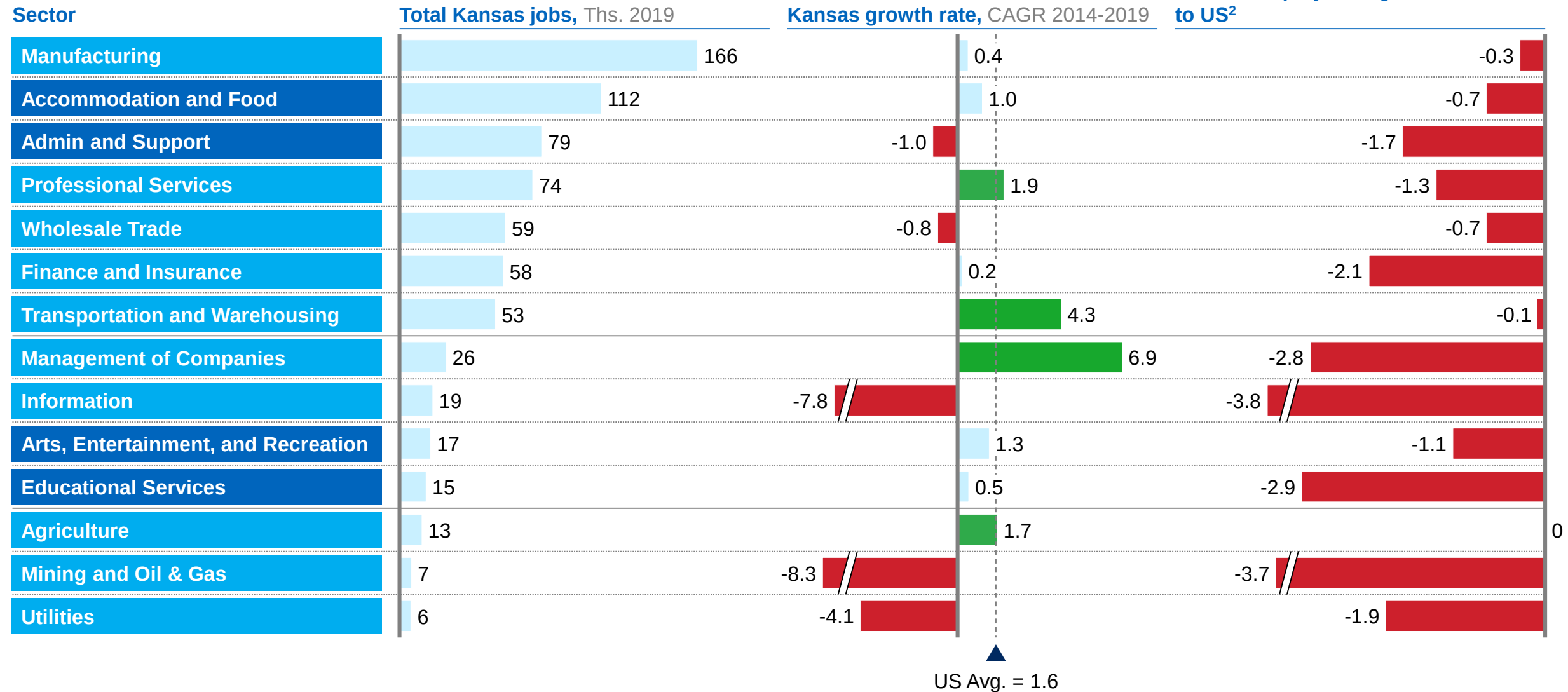
22% job displacement expected from automation by 2030

38th in start up creation in the country

Kansas' economy has experienced below average growth across many of the State's largest tradeable sectors

Tradeable¹ Semi-tradable

Kansas employment growth relative to US²

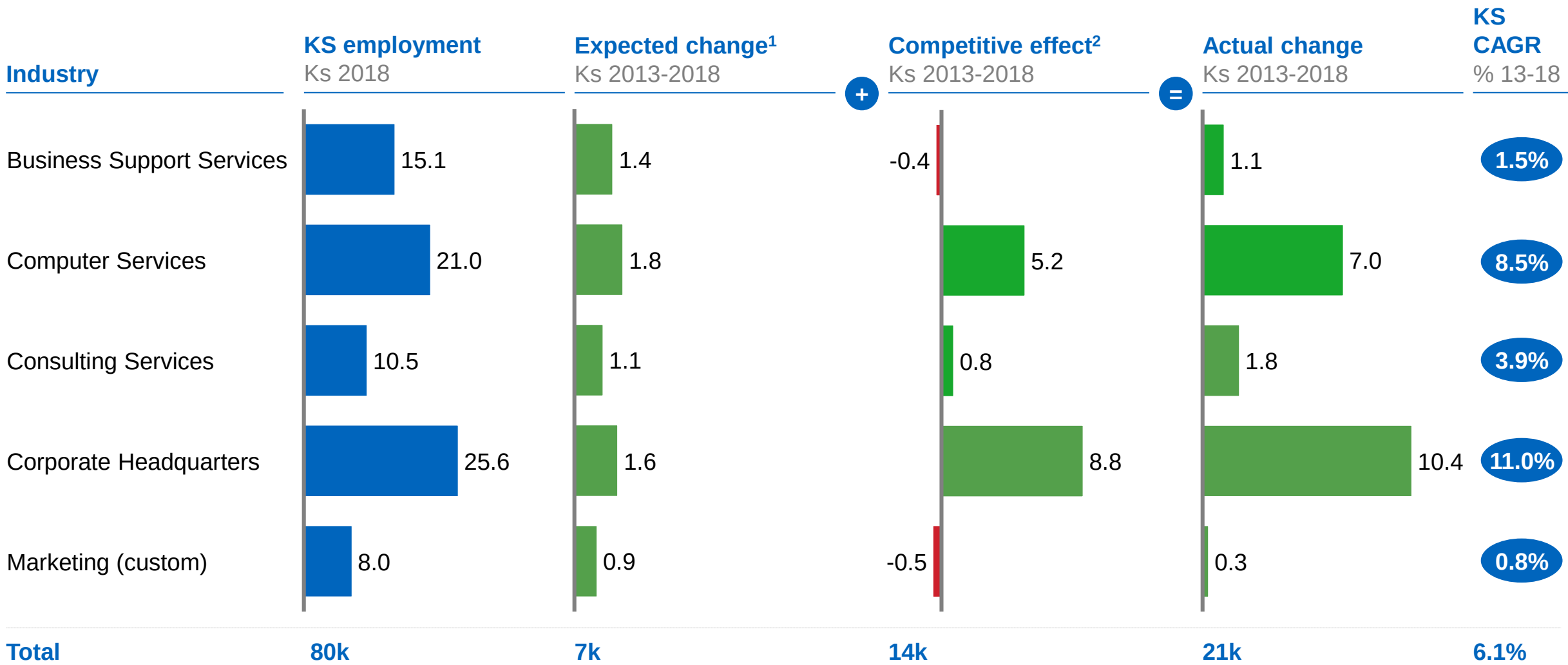


¹ Traded clusters are groups of related industries that serve markets beyond the region in which they are located. Local clusters, in contrast, consist of industries that serve the local market

² KS 5 year GDP CAGR minus US GDP CAGR

SOURCE: Kansas Department of Labor Statistics in Conjunction with US Bureau of Labor Statistics, Economic Modeling Specialists International (EMSI)

Kansas has outperformed U.S. trends in computer services and corporate headquarters, but has opportunity to capture more value in business support and consulting services



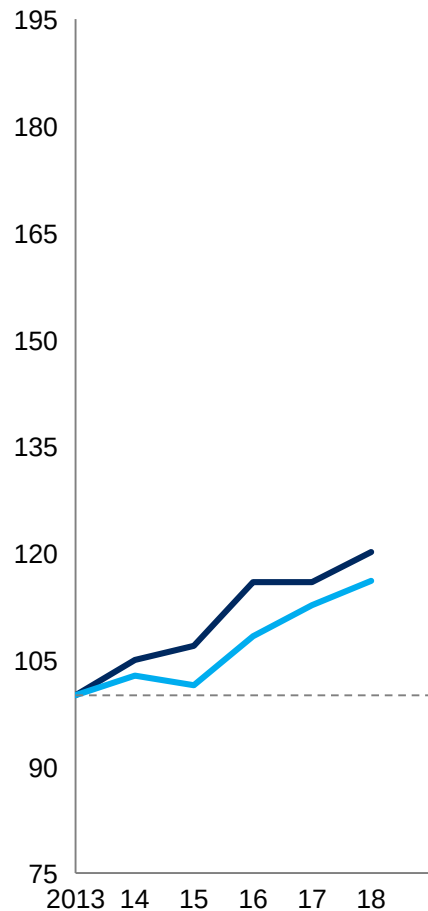
¹ The expected change in the industry if it followed national trends ² The over/underperformance of the sector in Kansas relative to national trends

Kansas performs strongly in electronic and catalog shopping, warehousing and storage, and trucking, but has lagged peers in ground transportation support activities and wholesale goods

■ KS ■ Peers¹

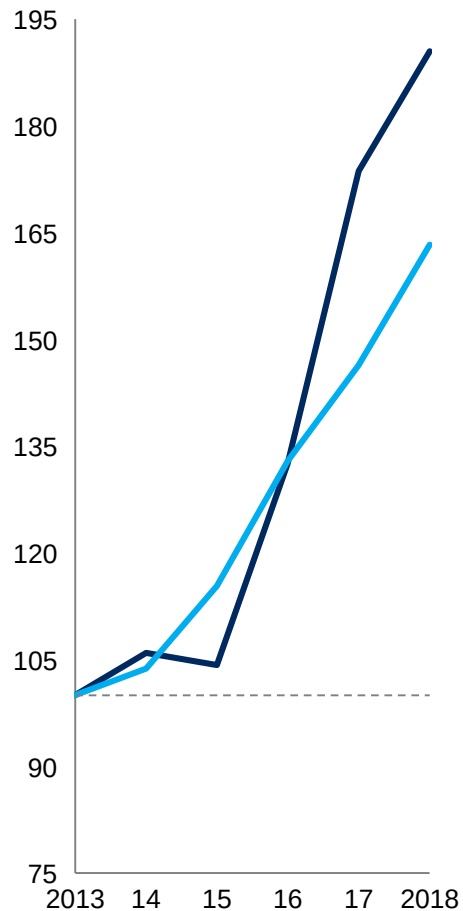
Electronic and catalog shopping

Employment indexed to 2013



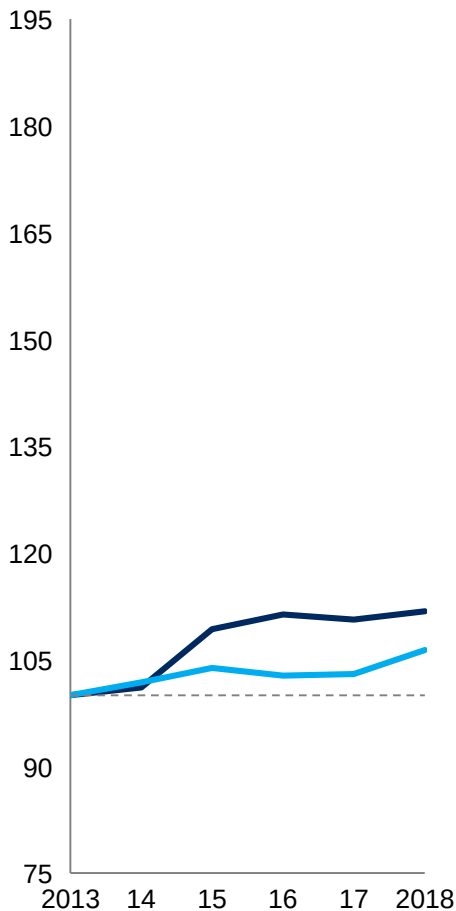
Warehousing and storage

Employment indexed to 2013



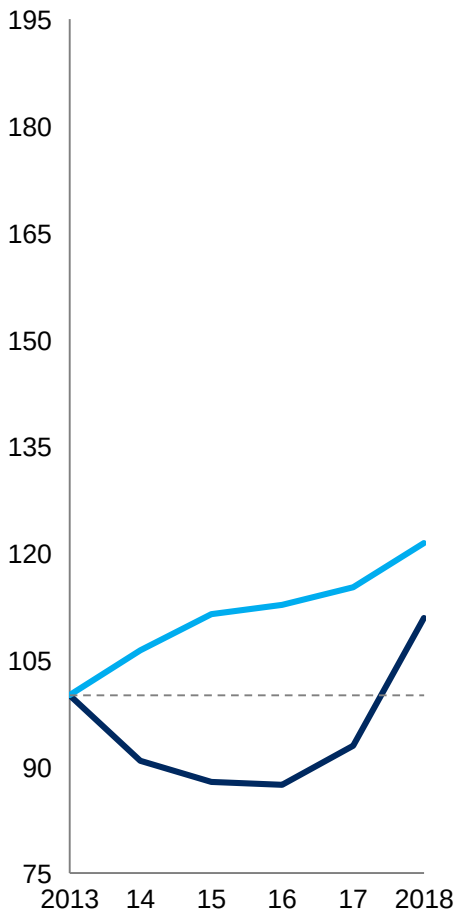
Trucking

Employment indexed to 2013



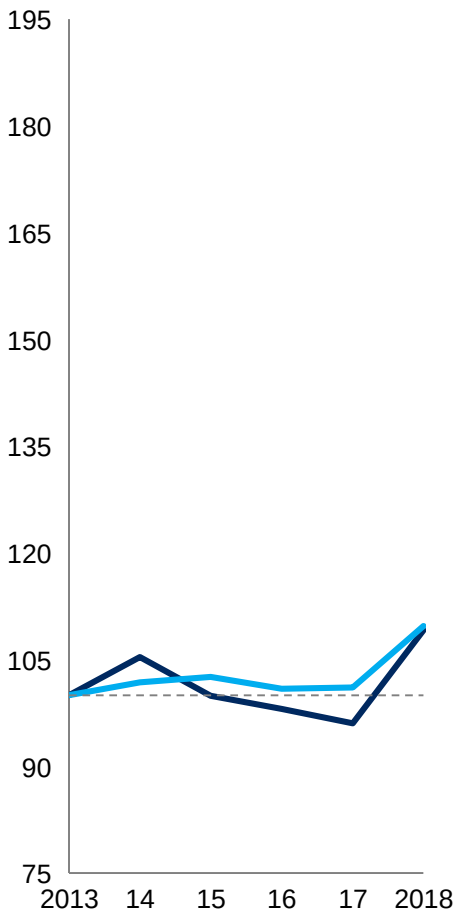
Ground transportation support activities

Employment indexed to 2013



Wholesale (all goods)

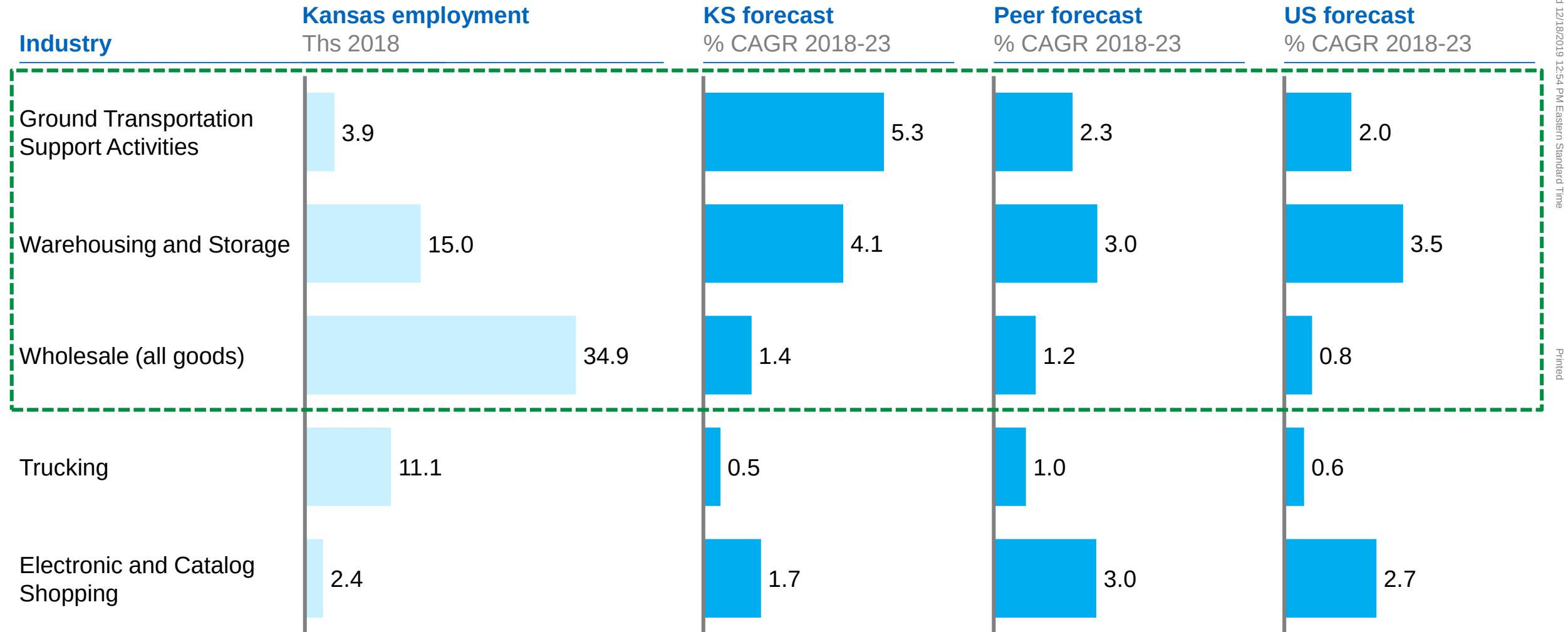
Employment indexed to 2013



¹ Peers include Arkansas Georgia Iowa Illinois, Kansas, Louisiana, Missouri, North Carolina, Nebraska, Nevada, Oklahoma, Texas

Over the next five years, Kansas is forecasted to outperform peers' and U.S.' growth rates in all subsectors except trucking and electronic and catalog shopping

--- KS forecasted job growth higher than U.S.



Job demand has been highest in skilled positions, with nurses the most unmet need

Unmet employer needs¹ Avg. Monthly Hires

Unique job postings in Kansas by top-10 occupations with unmet need in 2018, Number

Associate's or some college (Middle skill)



Web Developers	76%	24%	212
Computer User Support Specialists	18%	82%	449
Radiologic Technologies	43%	57%	102
Cardiovascular Technologies and Technicians	71%	29%	39
Electrical and electronics Engineering Technicians	42%	58%	57
Industrial Engineering Technicians	52%	48%	42
Diagnostic Medical Sonographers	55%	45%	40
Environmental Science and Protection Technicians, Including Health	51%	49%	34
Respiratory Therapists	20%	80%	46
Clinical Laboratory Technologies and Technicians	7%	93%	119

Bachelor's+ (High skill)

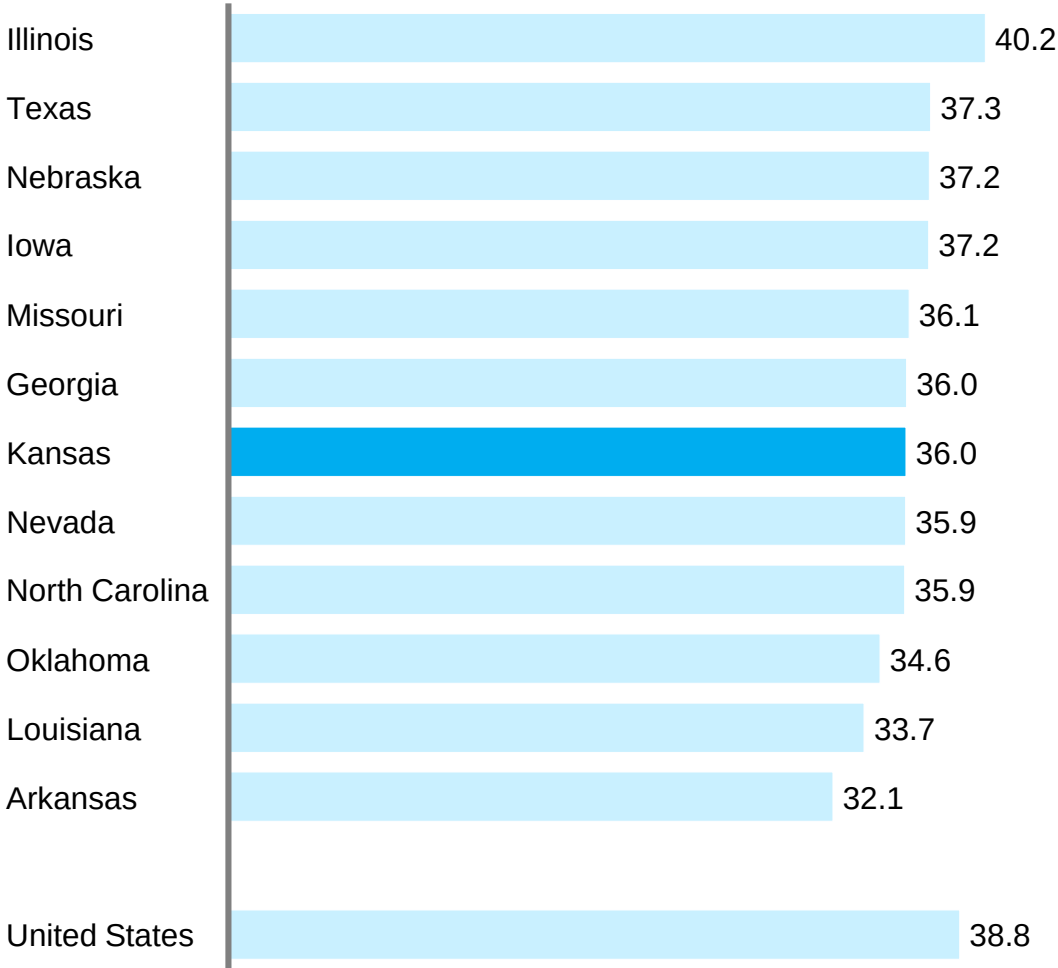


Registered Nurses	59%	41%	2,528
Teachers and Instructors, All Other	81%	19%	478
Business Operations Specialists, All Other	51%	49%	662
Computer Occupations, All Other	81%	19%	379
Software Developers, applications	56%	44%	534
Sales Managers	70%	30%	424
Marketing Managers	78%	22%	324
Physical Therapists	66%	34%	289
Medical and Health Service Mangers	53%	47%	298
Family and General Practitioners	87%	13%	173

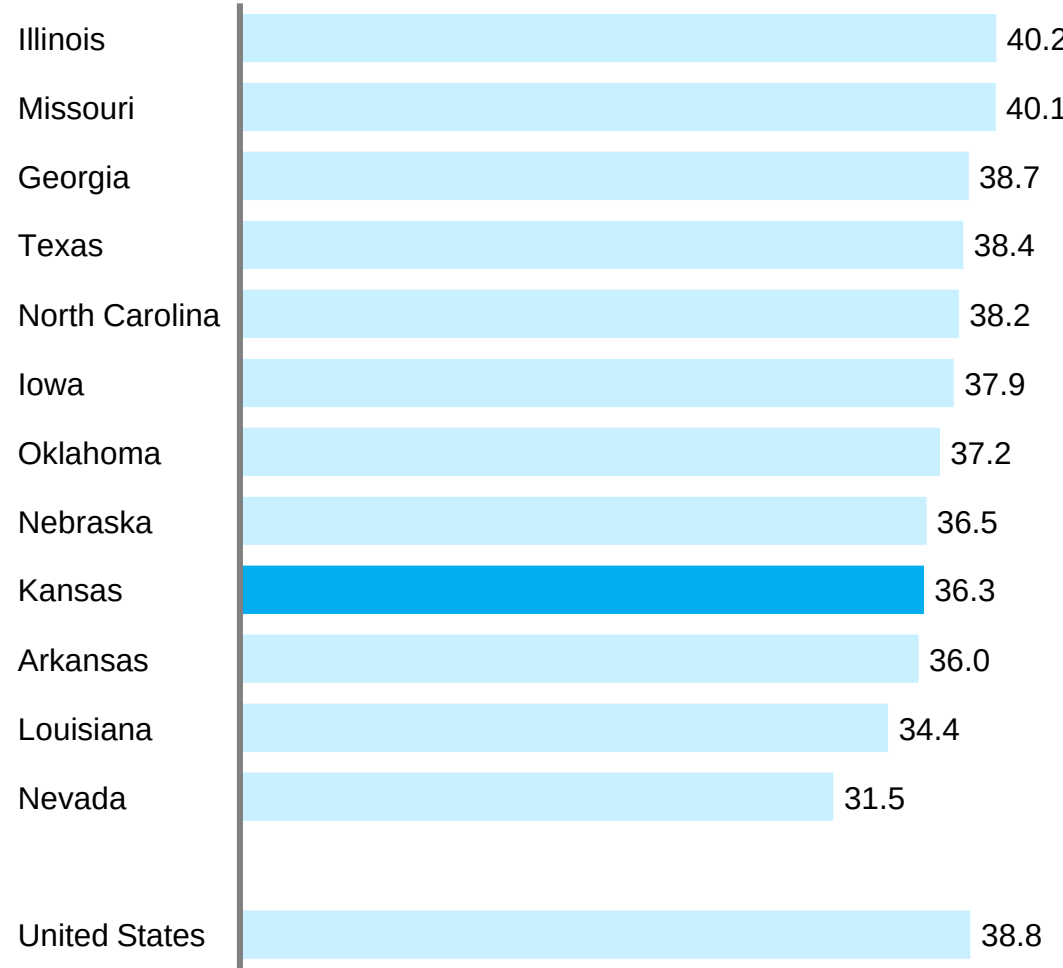
¹ Employer needs (i.e., unique job postings) not met by number of hires

Wages in Kansas are not competitive compared to peers and the US, even after adjusting for cost of living

Median annual wage, \$ Ths, 2018



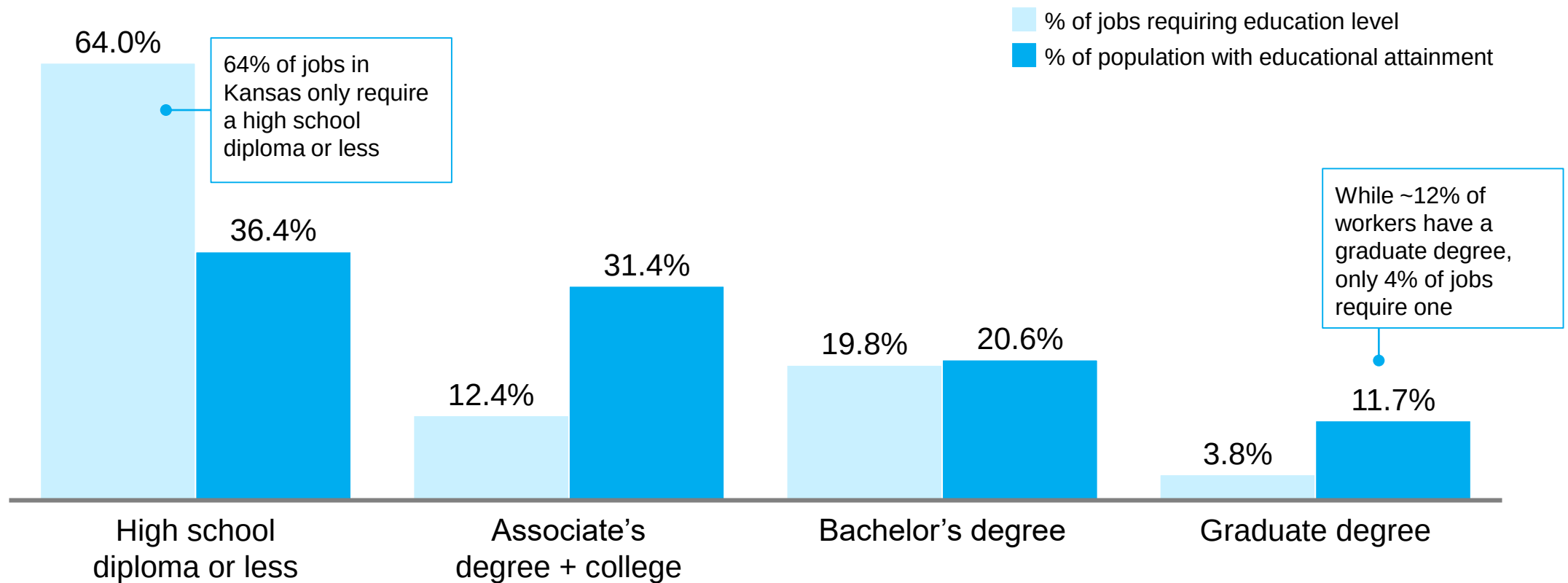
Cost of living adjusted median annual wage, \$ Ths, 2018



Kansas' economy has few high-skill opportunities for workers with a bachelor's degree or higher

Comparing educational attainment to labor market education requirements

Percent of total



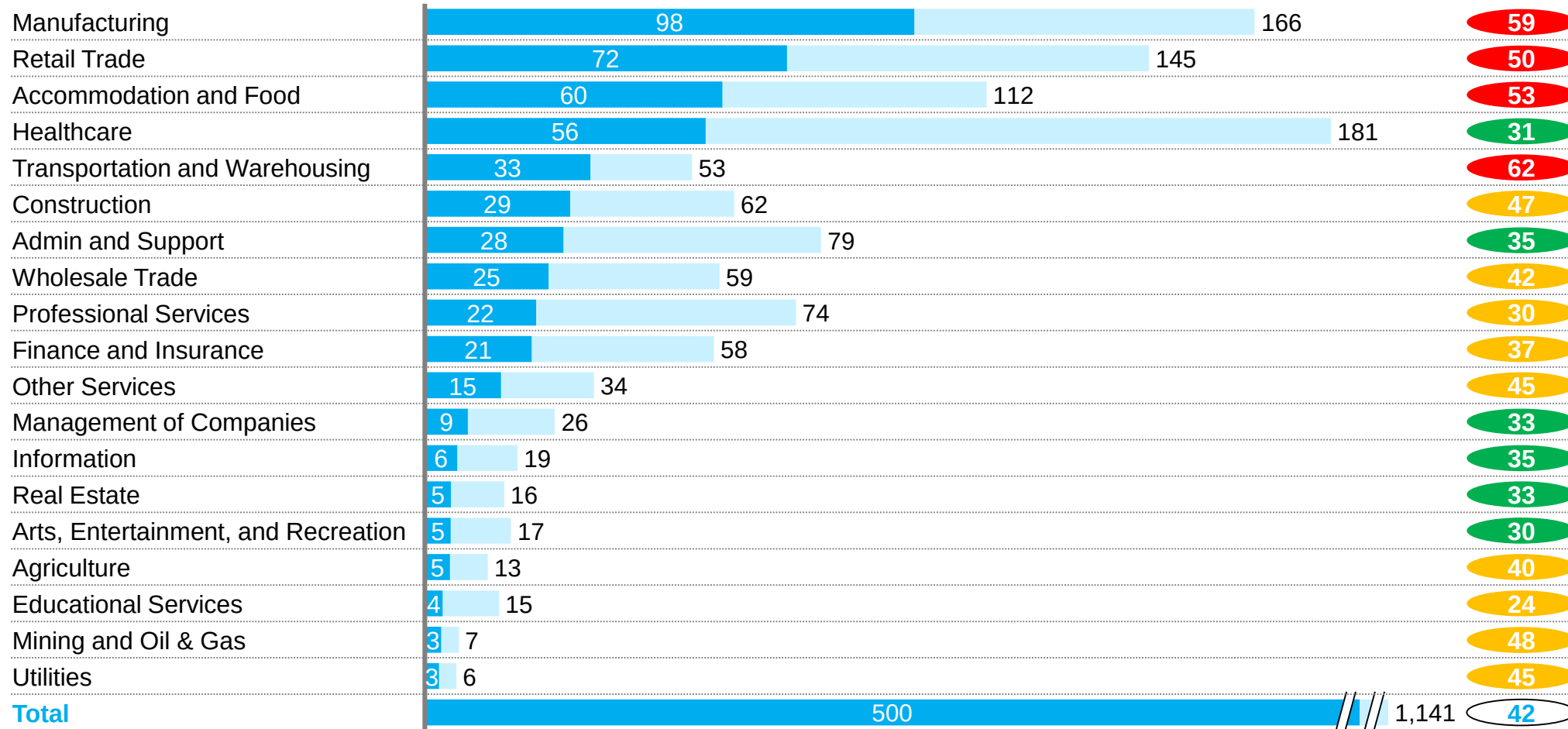
Approximately 44% of Kansas' labor force, could be impacted by automation, including three of its top four sectors

Automation potential

High Medium Low

Estimates of number of jobs¹ impacted by industry in Kansas, 2019, Thousands

Automatable (FTE equivalent) Not automatable



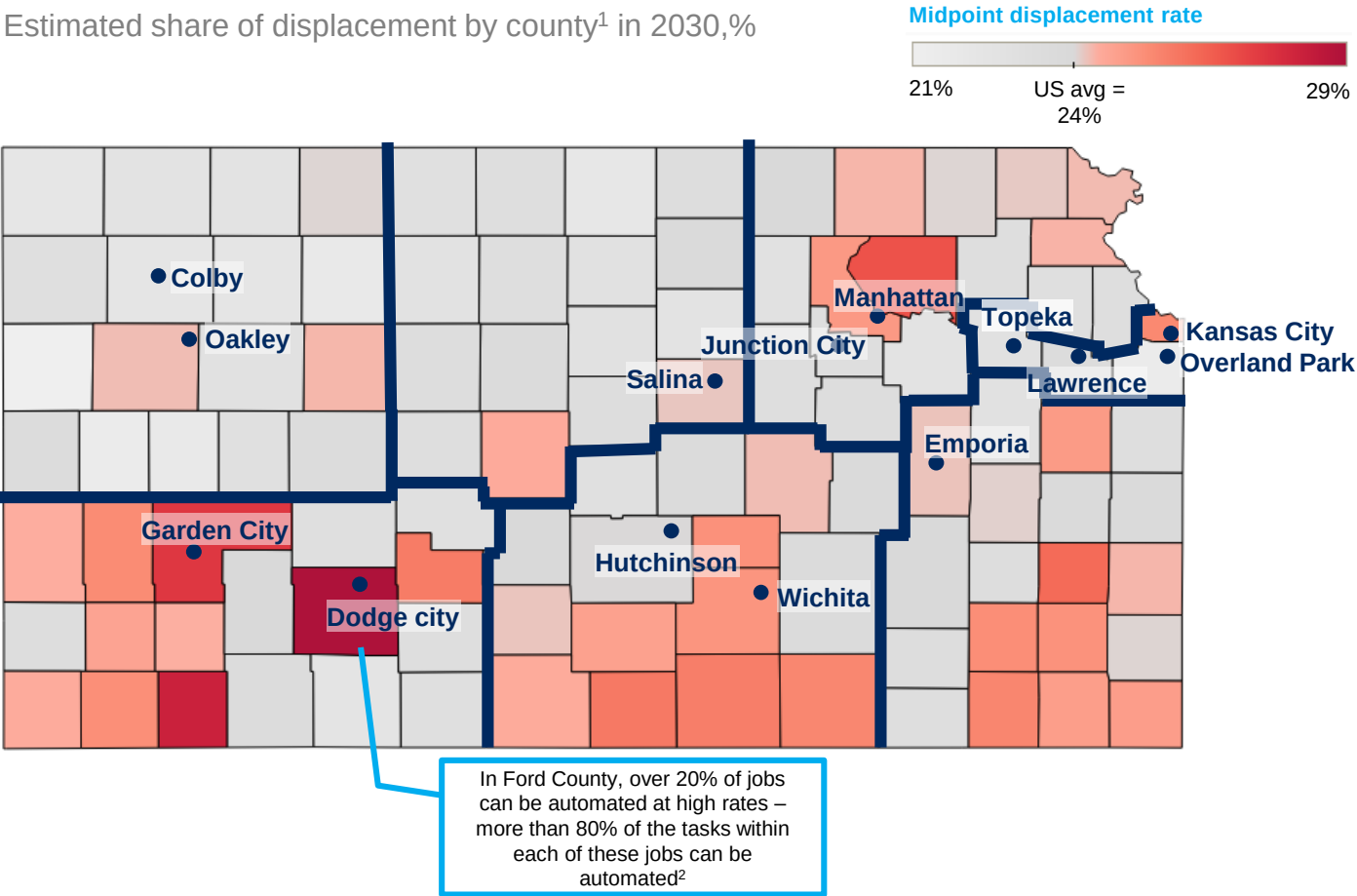
- Largest impacts from automation will come in sectors where larger portions of the work are predictable physical labor, and data collecting and processing
- As tasks are automated away, focus may be a needed on redeploying or retraining workers, and adapting business models to reflect new cost structures

¹ Does not include public sector jobs, except schools, hospitals, and USPS

Kansas is estimated to experience 22% displacement from automation, with some geographies and occupations hit harder than others

Midpoint displacement rate¹ for Kansas

Estimated share of displacement by county¹ in 2030,%

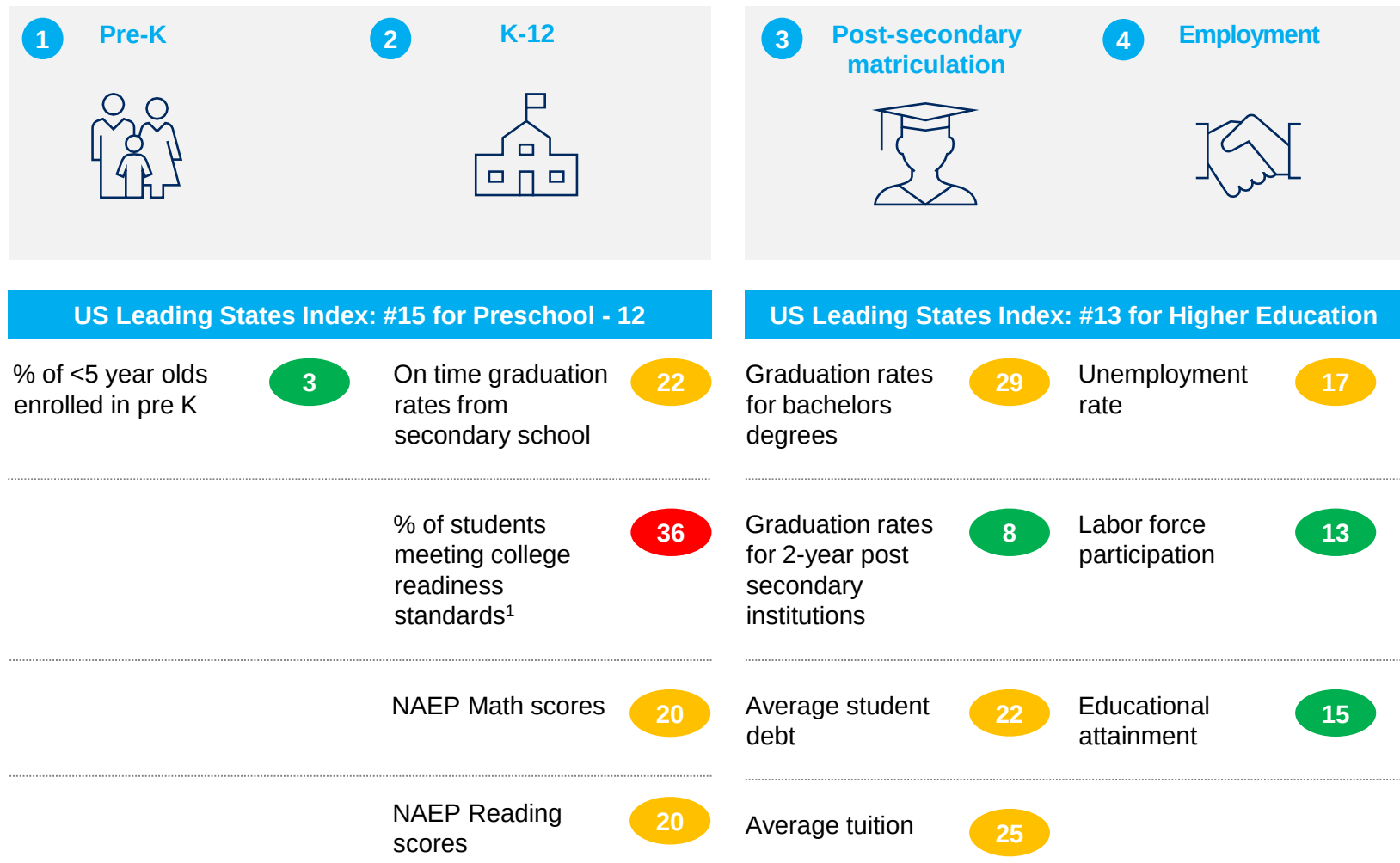


Jobs lost by occupation in Kansas – midpoint adoption scenario, (2017-30, K)		Displacement rate, %
Secretaries and administrative assistants	10	30
Retail salespersons	10	23
Stock clerks and order fillers	9	46
Bookkeeping, accounting, and auditing clerks	9	49
Cashiers	9	24
Aircraft structure, surfaces, rigging, and systems assemblers	8	44
Office clerks, general	7	34
Combined food preparation and serving workers	7	22
Farmers, ranchers, and other agricultural managers	6	17
Waiters and waitresses	6	25

¹ Total jobs lost divided by total jobs 2030
² Jobs with the highest expected full time employee impact in Ford County, KS include: Meat, poultry and fish trimmers; Slaughterers and meatpackers; Helpers – production workers; Heavy & tractor-trailer truck drivers; and Packaging and filling machine operators

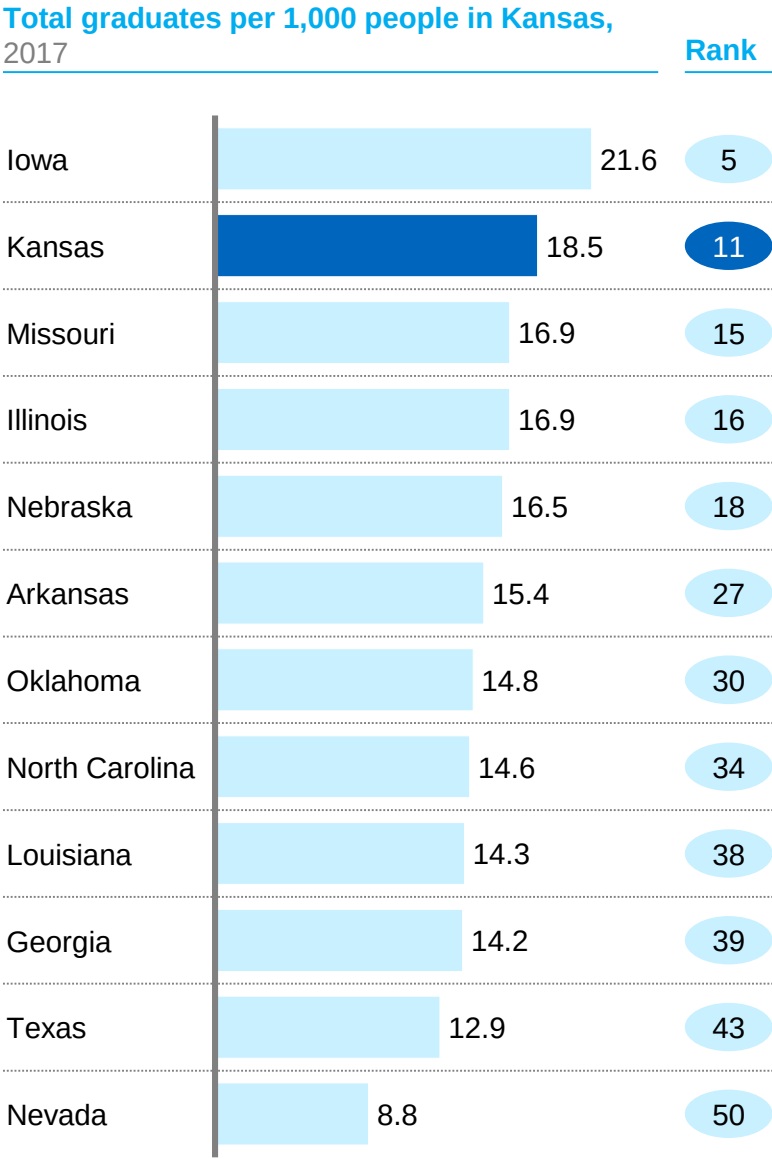
Kansas has strong performance across the education pipeline, particularly in pre-K and post-secondary education

Kansas' performance compared to other states across the pipeline

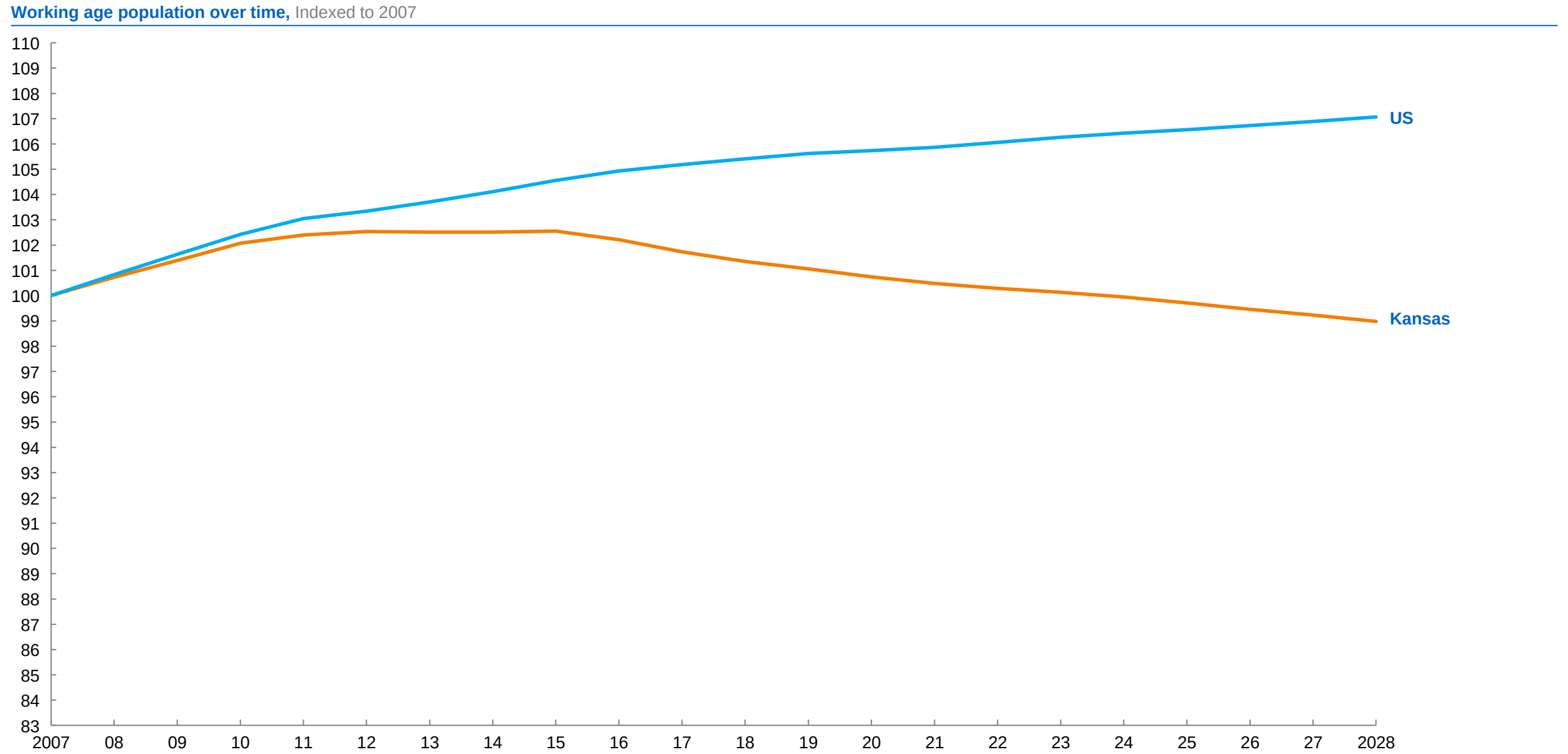


KS state rank in US

Top 15 # Middle 15 # Bottom 20

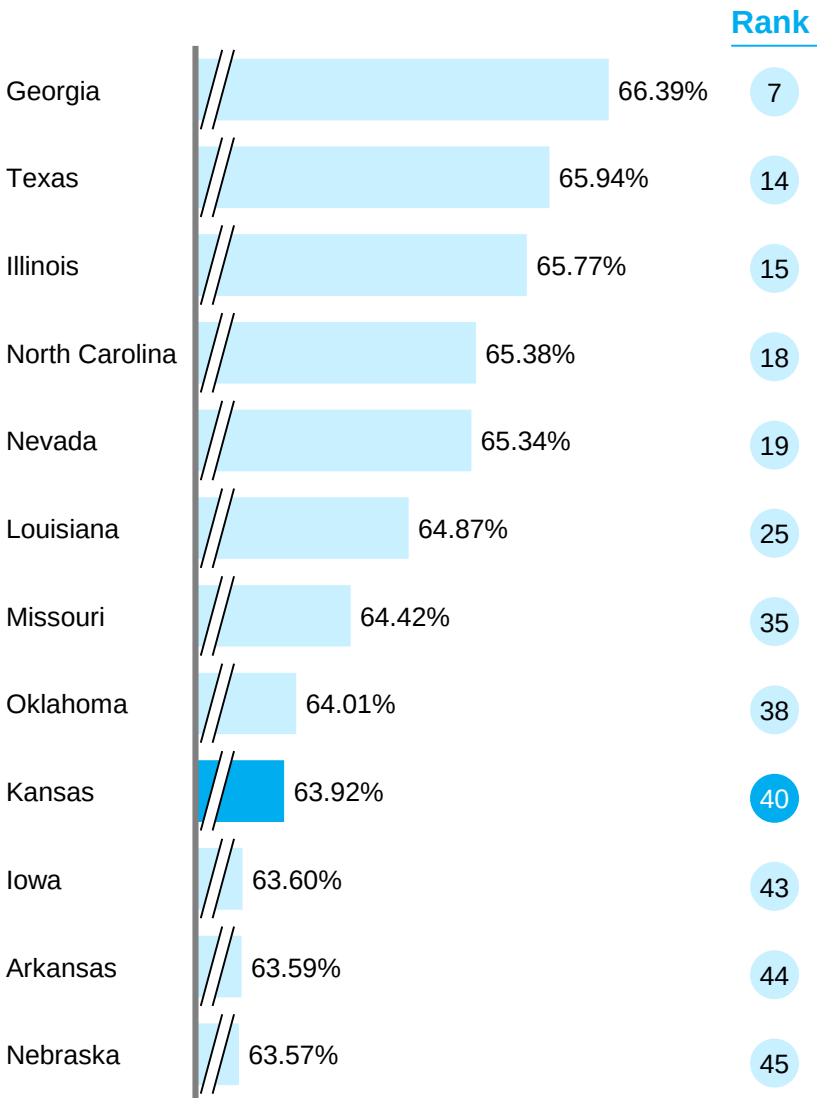


Kansas trails most peers in working age population, and it is expected to continue declining

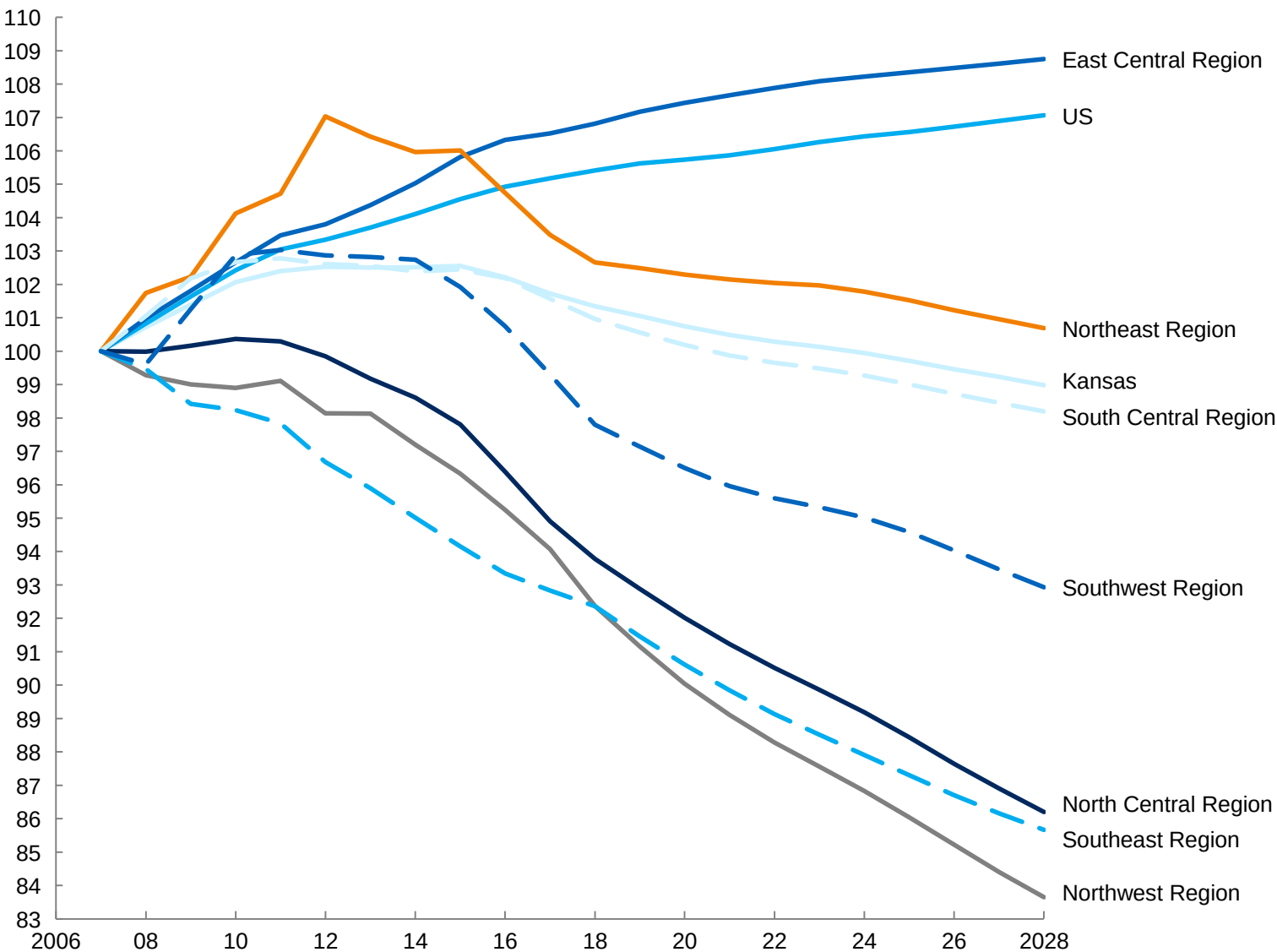


Kansas trails most peers in working age population, and it is expected to continue declining

2018 Working age population by state (15-64), %



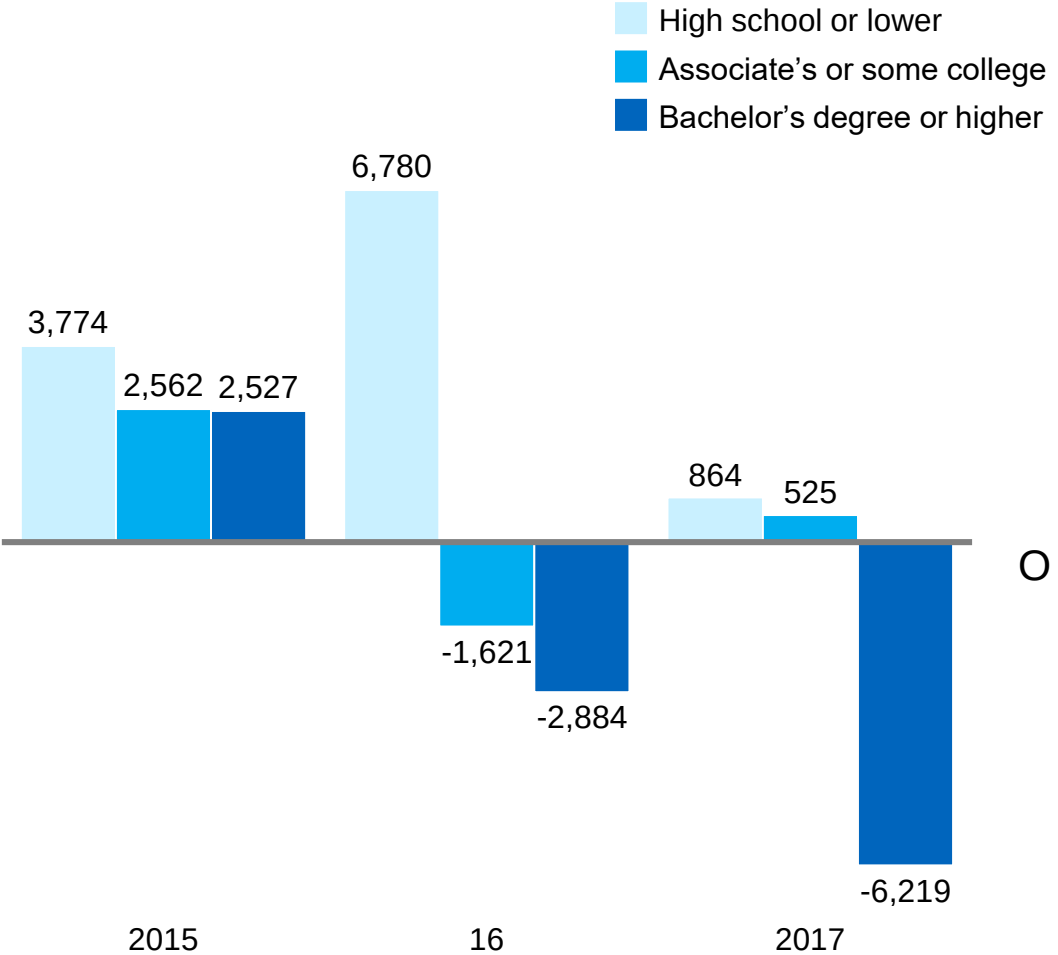
Working age population over time, Indexed to 2007



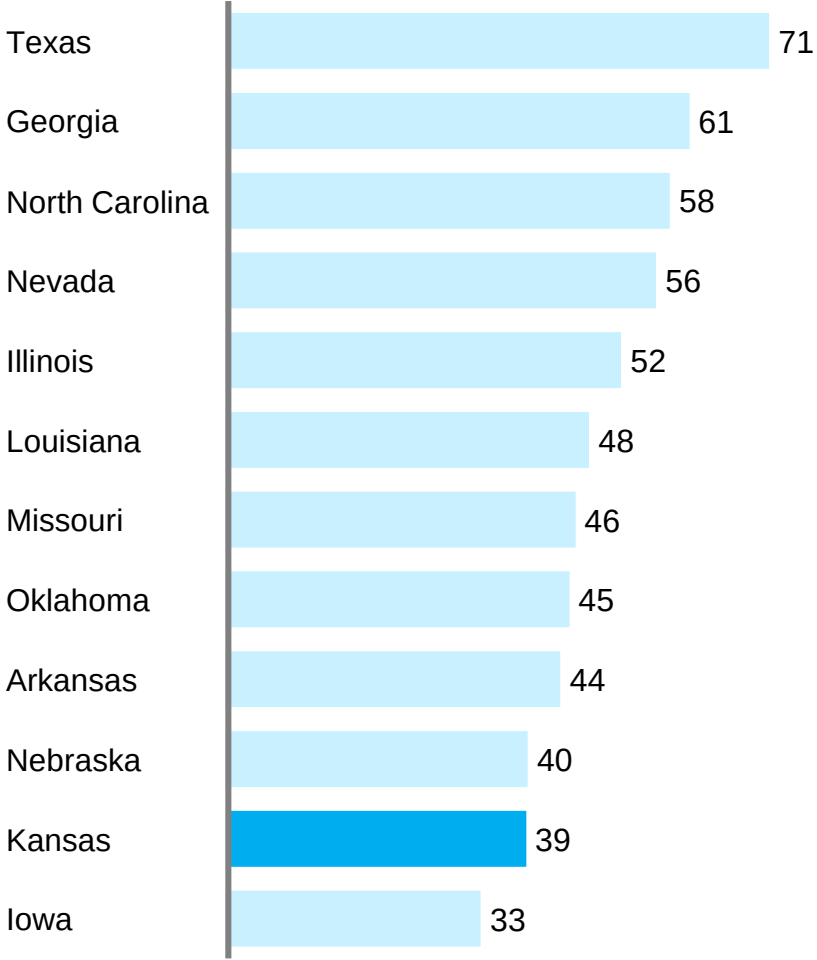
Source: U.S Census, Moody's Analytics

Over the past few years, Kansas has seen many of its higher-educated population leave the State

Net migration by educational attainment in Kansas,
Population age 25 years and over



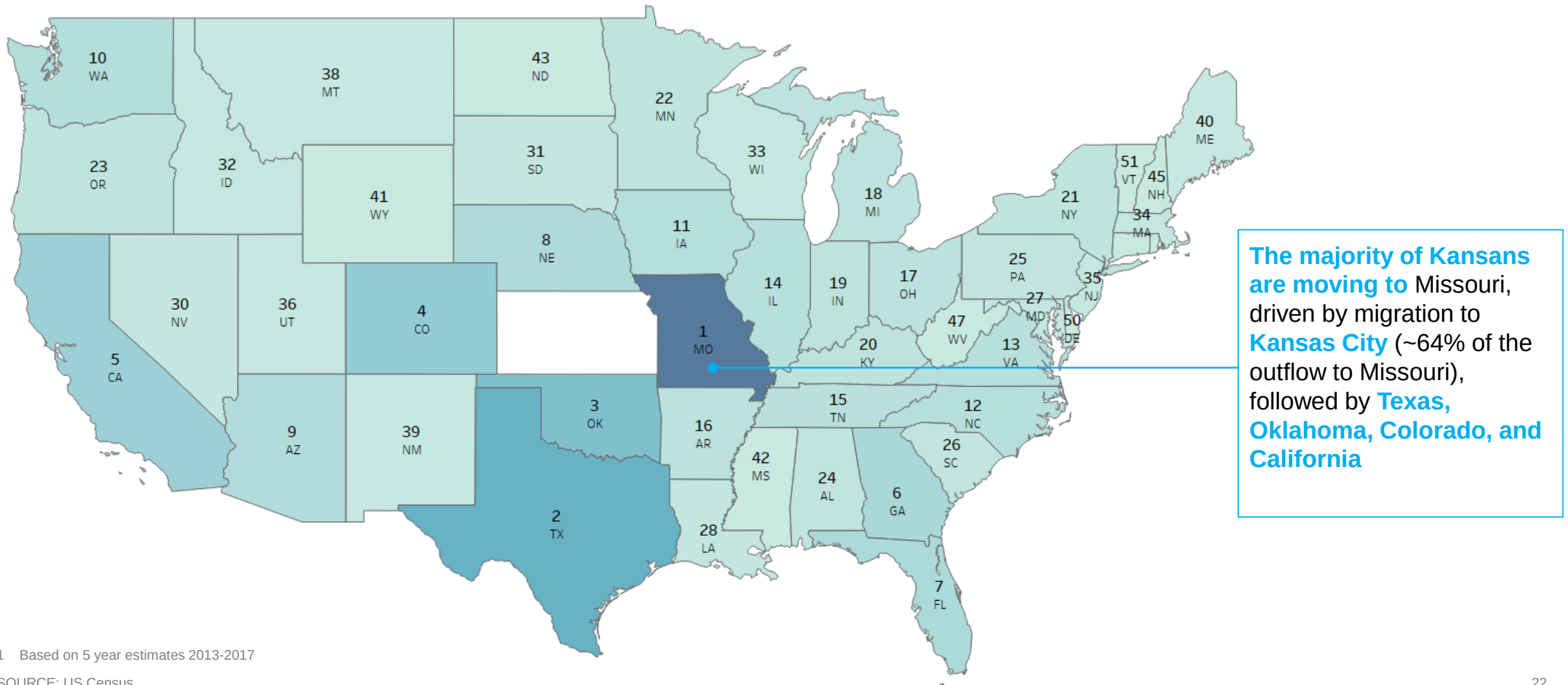
Graduates that live in state where they graduated,
Percent, 2018



~22% of Kansans are moving to Missouri, the vast majority moving to Kansas City, followed by Texas and Oklahoma

Where are Kansans moving?

2017¹ Kansas population outflow to other US States, Rank

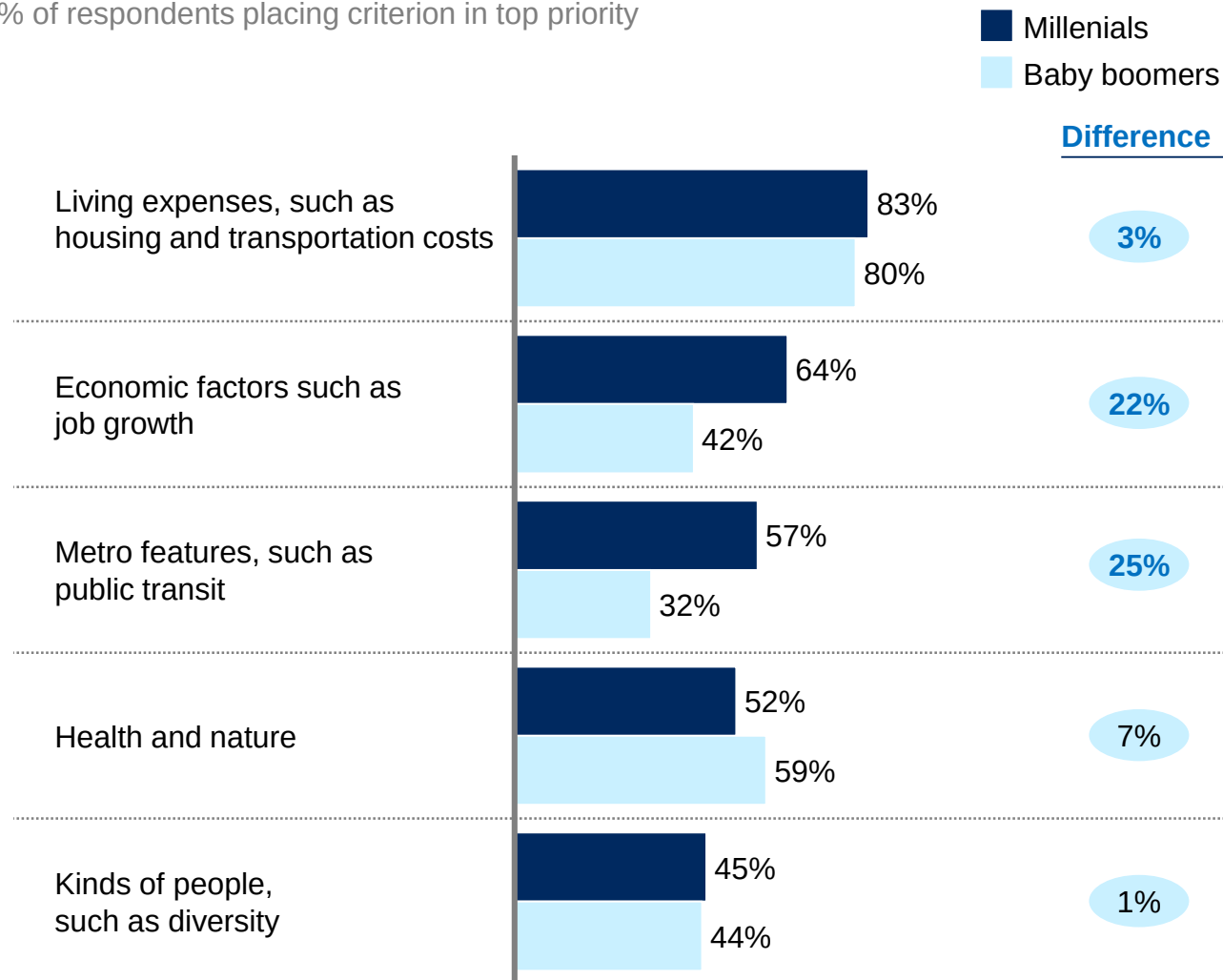


¹ Based on 5 year estimates 2013-2017

Millennials indicate a preference for areas with adequate living expenses, strong economic outlook, and metro features

Millennials are looking for affordable places connected to transit...

% of respondents placing criterion in top priority



...and Kansas ranks middle of the pack among best states for Millennials

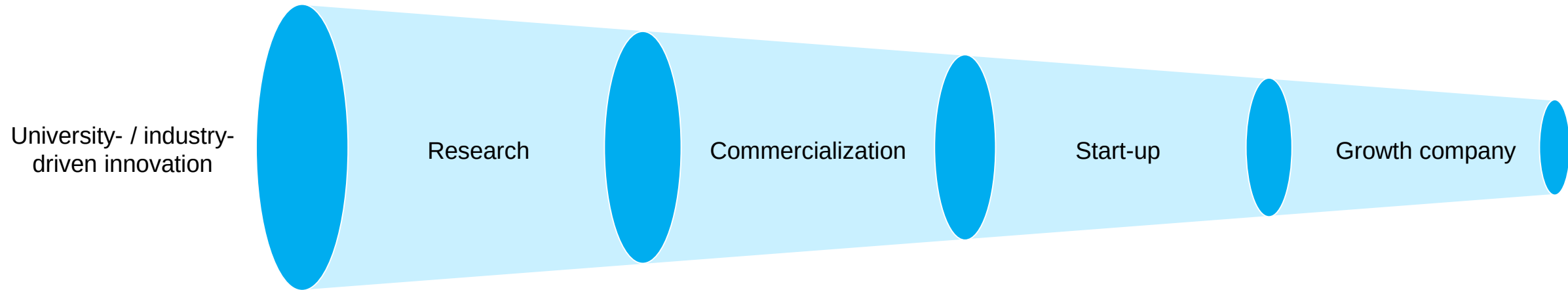
	Rank
Affordability (Cost of living, purchasing power, avg. monthly earnings, housing, and childcare)	20
Education & health (Shares of Millennials with: high school diploma, insured, health status, health practitioner visits per year)	27
Attractiveness (Share of Millennials: total, living with their parents, singles-friendliness, family-friendliness)	34
Economic health (Millennial population growth, average earnings, unemployment, entry level jobs per Millennials, student loan debt, and poverty)	33
Civic engagement (Millennial voter turnout and volunteer rates)	12
Crime and safety (Corrections and public safety)	32
Transportation (Commute time, public transit usage, road quality, bridge quality)	11

1 Net activity density, presence of mixed-use center, walkability and street network connectivity

SOURCE: American Planning Association, Investing in Place Report May 2014; New Jersey Future, ALICE: A Study of Financial Hardship in New Jersey 2018

Kansas has relatively poor outcomes across the innovation pipeline, particularly in research and start-up creation

Innovation Pipeline



Kansas rank

Academic science/engineering R&D, percent of GDP

26

Patents per 1m people

22

Rate of new entrepreneurs

23

Established small business density

19

Business R&D as % of private industry output

23

Startup density

31

High growth company density

25

Survival rate³

17

1 The number of jobs created in the first year of business

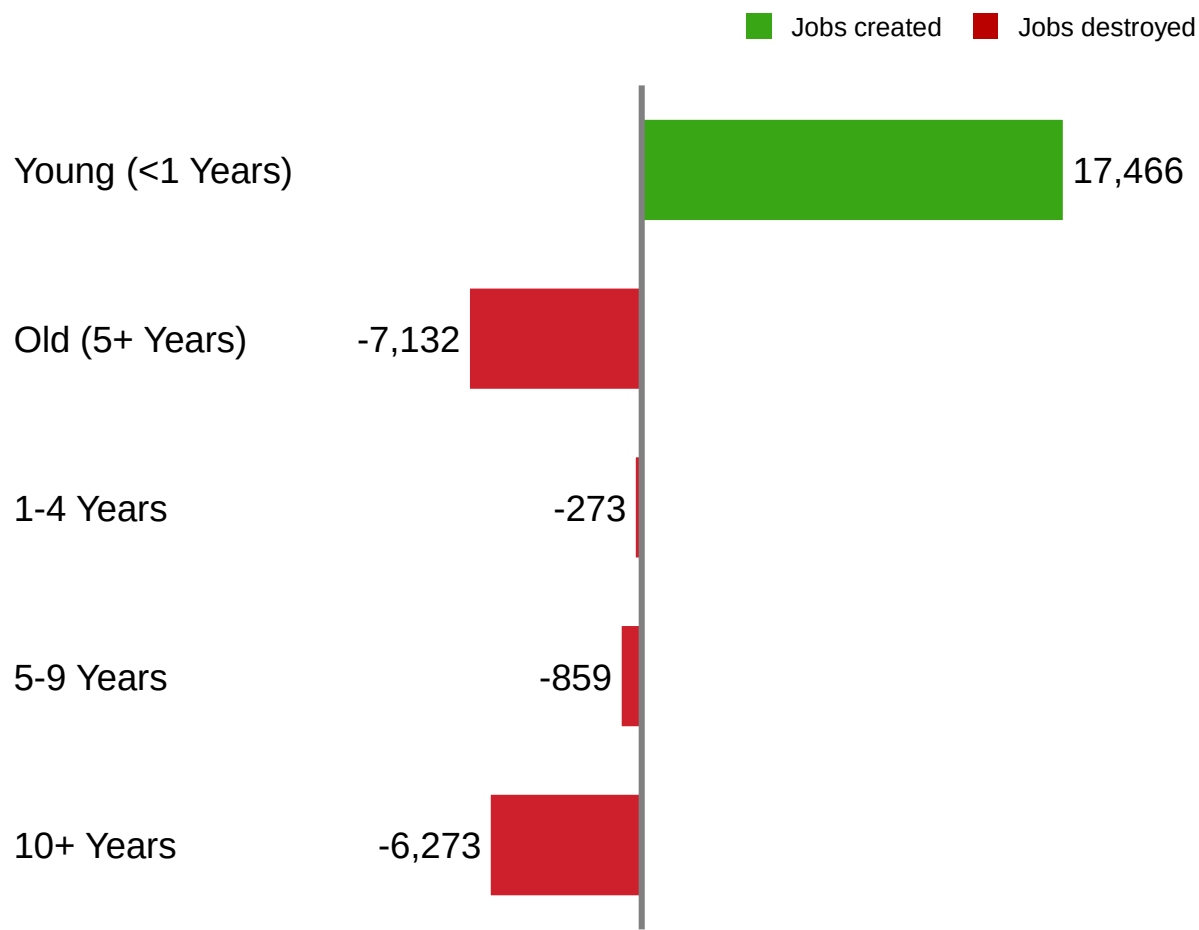
2 The percentage of new entrepreneurs who created a business out of choice instead of necessity

3 The rate of survival in the first year of business

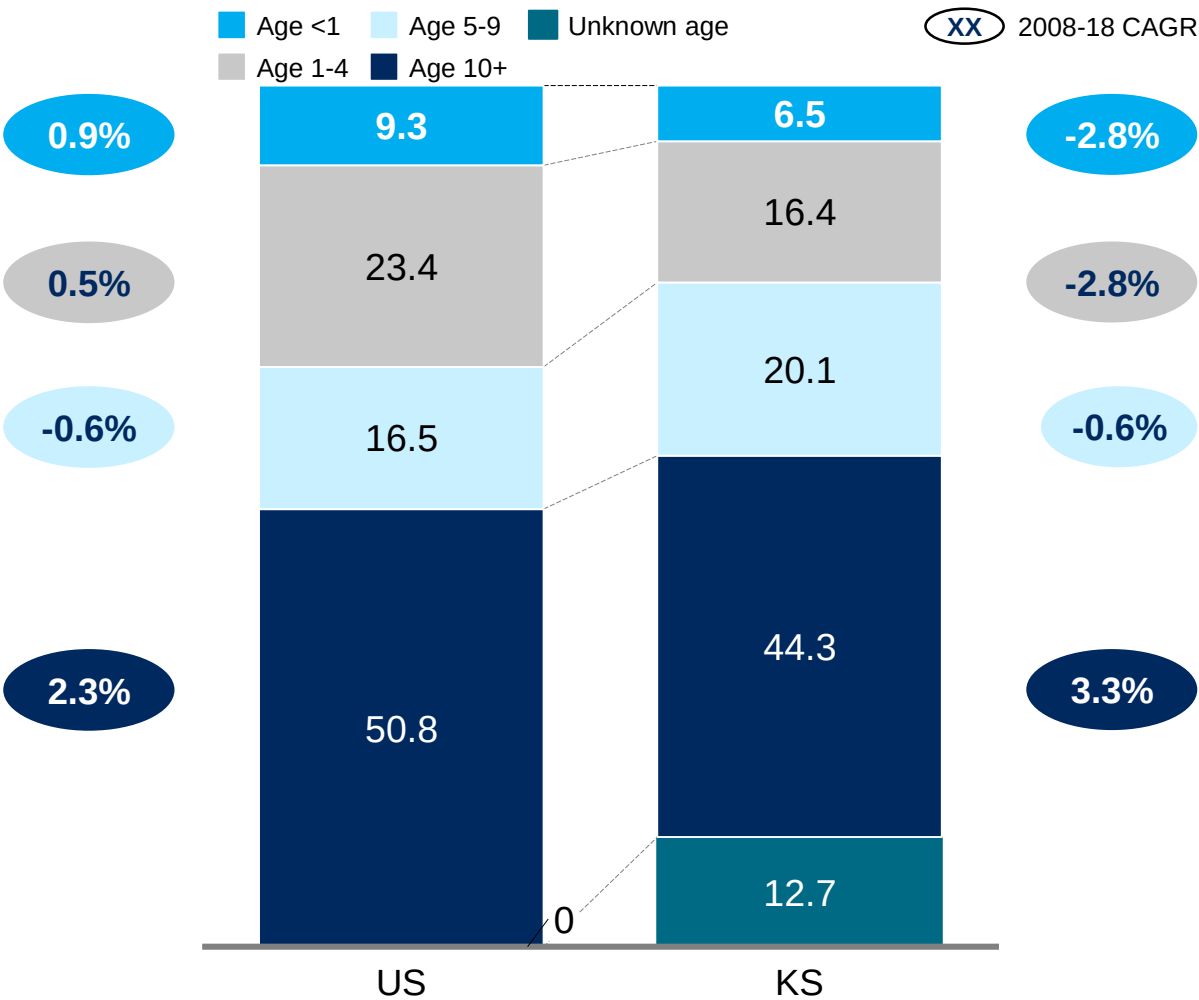
SOURCE: Kauffman Foundation, National Science Foundation, US Census, US Patent and Trademark Office, Moody's Analytics, US Small Business Administration

Young companies have driven job creation in the U.S. over the past decade, but Kansas has a lower share of them in its economy

2008-2018 net job creation by company age in the U.S., in thousands



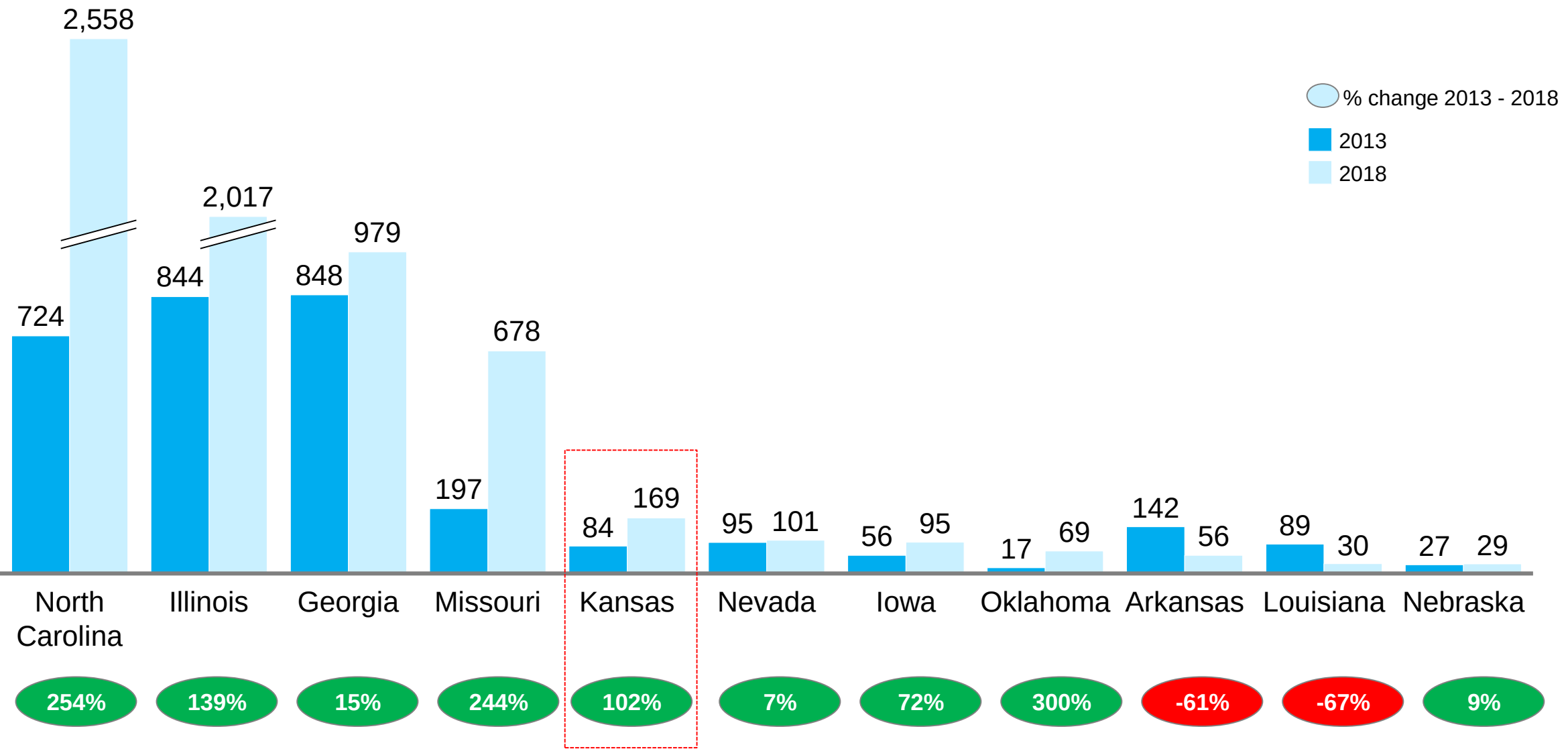
Distribution of companies by age in KS and the U.S. in 2018, %



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Despite recent growth, venture capital funding in Kansas continues to lag behind its peers

Venture capital funding (all stages) by State, 2013 and 2018, in USD Mil.



SOURCE: Pitchbook

1. Process and Principles
2. Findings from the economic assessment
3. Draft Strategy Pillars

Empower individuals,
businesses and communities to achieve
prosperity in Kansas by...

Developing a
portfolio of
target sectors
where Kansas
has a
competitive
advantage:

-  Become a leader in **business services** to create more high wage jobs in a growing sector
-  Take advantage of geographical position to become a U.S. leader in **distribution, transportation, and e-commerce**
-  Maintain and grow expertise in the **aerospace sector**, particularly in disruptive technologies in the industry
-  Advance growth in innovative and thriving sub-sectors in the **food and agriculture industries**
-  Remain on the forefront of **advanced manufacturing** to build the goods, materials, and machines of the future
-  Push boundaries in promising **disruptive technologies** by capitalizing on unique assets¹



Win the talent war to attract and retain top talent and prepare our workforce for the jobs of the future



Build an innovation ecosystem to make Kansas a home for entrepreneurs, start-ups, and innovators



Invest in a rural “playbook” to revitalize rural communities and enable shared prosperity through collaboration



Promote placemaking and liveability to make Kansas’ cities great places to live, work, and play

1. Disruptive technologies covered within each relevant target sector

Kansas' needs to enact a bold set of initiatives to punch above its weight again

1

To achieve its aspiration, Kansas will need to consider a bold set of initiatives

- In the face of these challenges, Kansas has set an ambitious aspiration to meet **become a top 10 economic growth leader in the next 10 years** while ensuring that the growth is **sustainable, resilient through economic downturns, and is shared across all regions**
- **To achieve this aspiration, the State will likely need to:**
 - **Develop a portfolio of target sectors where it has a competitive advantage** by finding pockets of growth in legacy sectors (e.g., precision agriculture), and doubling down on high growth / high wage sectors (e.g., business services)
 - Invest in strategies to **enable cross-cutting economic growth**

2

Kansas needs to develop a portfolio of target sectors where it has a competitive advantage

- Deepen strengths to lead the nation in **professional and technical services** to create more high wage opportunities in a growing sector
- Take advantage of geographical position to become a U.S. leader in **distribution, transportation, and e-commerce**
- **Maintain and grow expertise in the aerospace sector**, particularly in disruptive technologies in the industry
- Advance growth in innovative and thriving sub-sectors in the **food and agriculture industries**
- **Remain on the forefront of advanced manufacturing** to build the goods, materials, and machines of the future
- Push boundaries in promising **disruptive technologies** by capitalizing on our unique assets

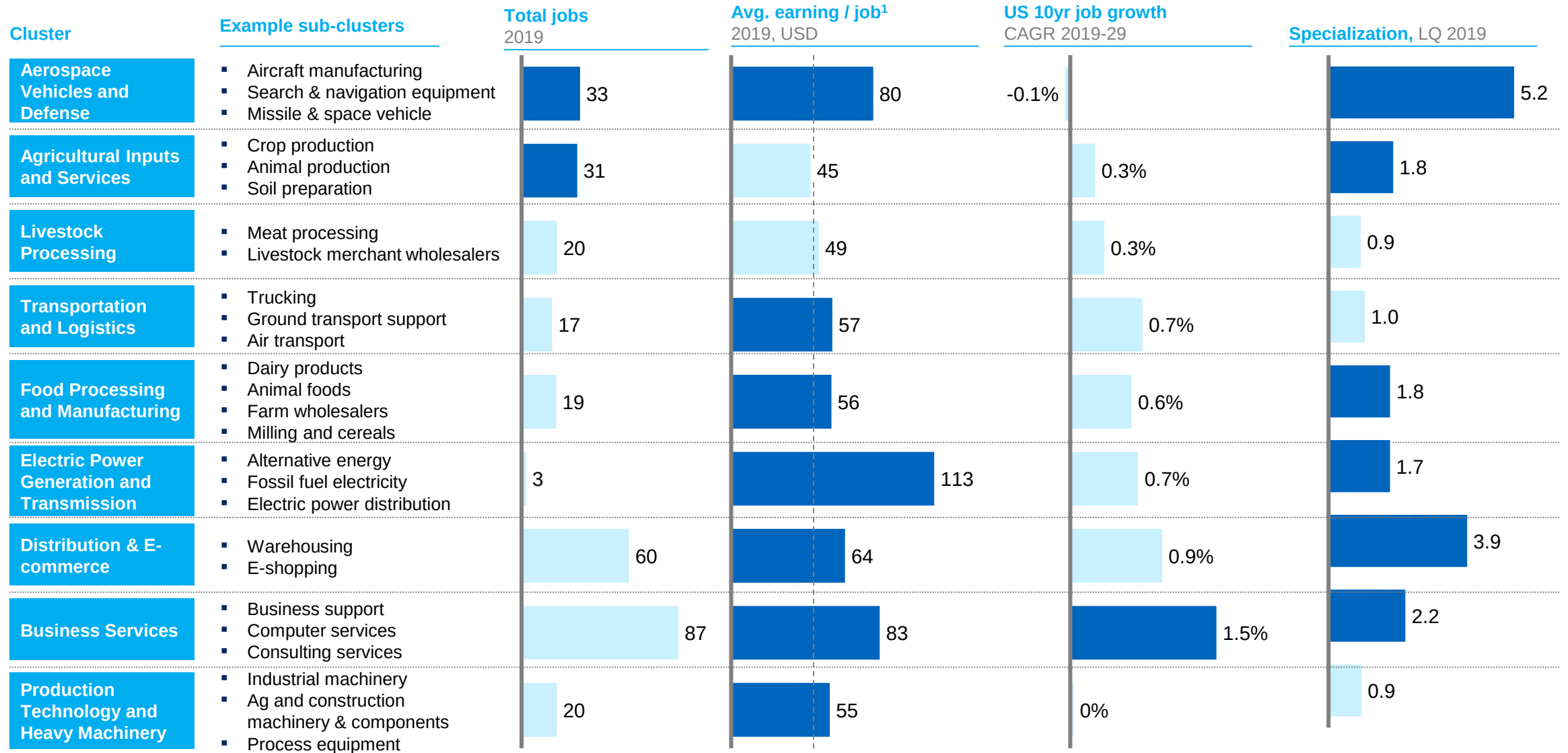
3

Kansas should invest in strategies to enable cross-cutting economic growth

- **Win the talent war** by attracting, retaining top talent and strengthening our talent and skill production
- **Build an innovation ecosystem** by improving commercialization and start-up outcomes
- **Invest in a rural “playbook** by empowering community collaboration and connectivity – at scale – for shared prosperity
- **Develop urban vibrancy** by enhancing the vitality and liveability of downtowns and urban areas

Kansas may be able to support job creation and long-term economic growth by focusing on several target sectors

■ Strength



▲ KS Avg = 46

1 Weighted current wages and salaries in Kansas

SOURCE: US Bureau of Labor Statistics, US Bureau of Economic Analysis, Economic Modeling Specialists International (EMSI), Moody's Analytics

Potential initiatives

Business services



- **Become the home of corporate HQs in the nation** by attracting the U.S. locations of foreign companies
- Create **focused attraction efforts for computer services** through talent sourcing and financial incentives
- Build **business service Centers of Excellence** around key sectors in Kansas (e.g. advanced analytics for agriculture)
- Create a **business tech talent program** to attract talent for high-potential occupations

Aerospace



- Make **Kansas a best in class maintenance and repair provider**
- Expand the **State's aerospace training curricula and employer driven training programs**
- Expand Kansas' position as **a leader in aerospace innovation** by leveraging specialization and assets (e.g., NIAR)

E-commerce, transportation



- **Work with companies to retrain drivers** to manage autonomous vehicles and emerging forms of last-mile delivery
- Incentivize **logistics companies to offer internships** to students at four-year universities or technical schools
- **Bolster air transportation** to win multimodal logistics deals
- Work with developers to **invest in prospective site development** in highly connected areas

Food & agriculture



- Develop **the premier animal health services corridor** in the world by expanding business and research
- **Promote the development of ag-technology in Kansas** through increased research funding and support for ag-tech startups
- Become **a leader in sustainable agriculture** (e.g. improved water irrigation technologies) and **continue build trust and transparency** for Kansas' agriculture products

Advanced manufacturing



- **Support companies digitizing legacy systems** by helping to invest in the technology, facilitate the transition, and train employees
- **Incentivize out-of-state manufacturers developing innovative solutions** (e.g., advanced robotics) to relocate to Kansas
- **Create or expand partnerships between technical colleges and manufacturers** to give middle-skilled workers access to classes on basic coding and data analysis

Promising sectors

Potential driver initiatives to accelerate growth

Potential initiatives

Talent



- **Find innovative incentives to attract and** retain top talent (e.g., housing solutions, ease licensing requirements)
- **Strengthen job pipeline** for Kansas graduates to keep more of the talent we produce
- **Bridge the skill gap** for in demand and high wage positions (e.g., coding, automated machinery operation)

Innovation



- **Develop innovation hubs** around Kansas' anchor universities to improve commercialization outcomes
- **Expand support services** and **access to capital** for Kansas entrepreneurs
- **Improve the culture of innovation** in Kansas through company sponsored innovation competition expansion of innovation classes

Rural revitalization



- **Provide at-scale investment for rural clusters** to promote downtown revitalization, innovation, and education in rural communities
- **Double-down on growing industries** where rural communities have a competitive advantage
- **Invest in physical and digital infrastructure** to improve connectivity rural communities (e.g., broadband)

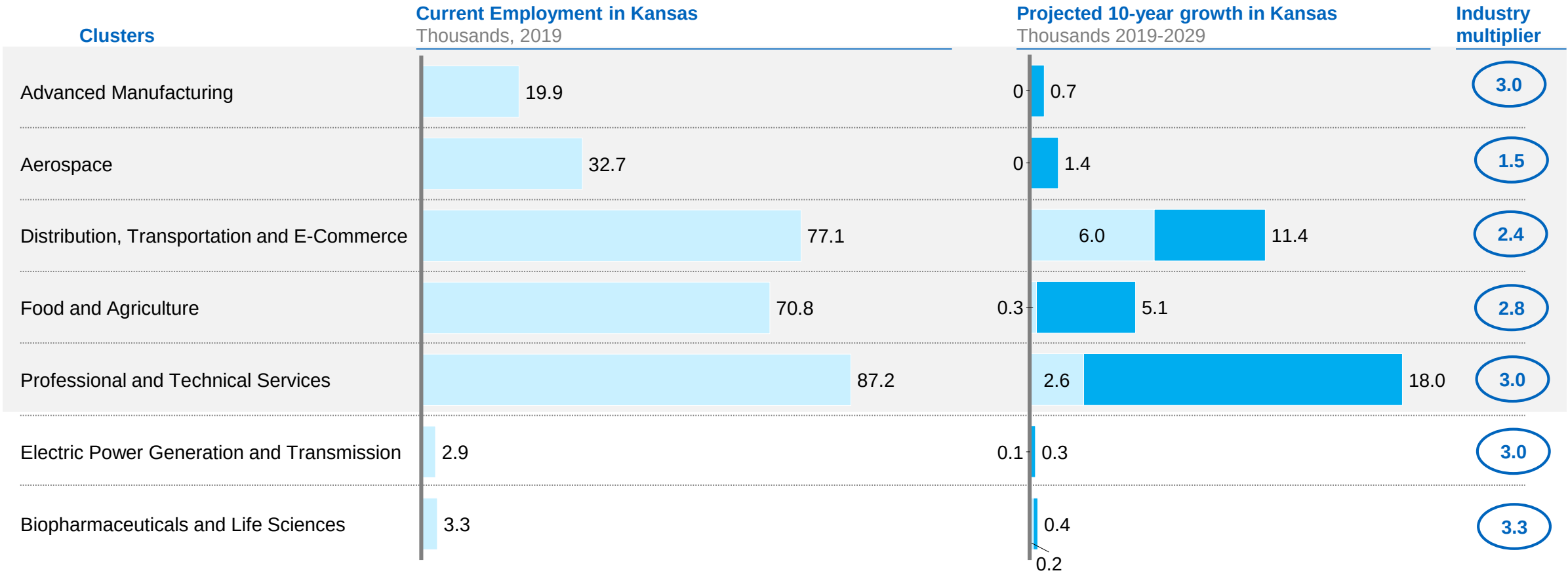
Placemaking



- **Invest in the downtowns of the future** (e.g., walkability, micro-mobility, main street revitalization, lifestyle amenities, and technology solutions)
- Make a sustained and concerted effort to **develop a vibrant urban core** in Kansas that rivals the urban growth hubs of the U.S.
- **Collaborate with corporations, developers, localities, and state agencies** to promote vibrant placemaking

If clusters achieve competitive growth, the portfolio of primary clusters can enable Kansas to add up to 25k direct jobs over the next 10 years, and almost 95k including indirect jobs

Priority cluster
Low High



Total

Cluster total

288k

9 - 37k

With an average multiplier of nearly 2.6, the primary clusters have the potential to drive 94K new jobs in Kansas

1 Assumed CAGR takes the min and the max value from three scenarios: Kansas' 10 year forecast, the US 10 year forecast, and the peer maximum 10 year forecast
Note: only includes direct jobs

1. Process and Principles
2. Findings from the economic assessment
3. Draft Strategy Pillars
4. Next Steps

Key next steps as the Framework for Growth continues



- 1 Continue engaging and gathering the perspectives of diverse stakeholders across the State**

- 2 Continue to develop and prioritize initiatives**

- 3 Develop more detailed action plans for prioritized initiatives**

- 4 Draft a public report with key findings and proposed strategies**



BUILDING A BRIGHTER FUTURE TOGETHER

#KANSASGROWTH

WICHITA, KANSAS