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Quality Career Pathways

*Systems of “Offramps” from Education to
In-Demand Careers*

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Analyze & Publish

data, research,
promising practices

Support Action

in states and schools,
policy and practice

Convene & Engage

decision-makers in education,
government, business

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Unprepared and Unaware

Upskilling the Workforce for a Decade of Uncertainty

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The SREB Region's Economic Outlook

The Potential Impact of Automation and AI

Many American workers find themselves in a continuous struggle to keep up with advances in automation and artificial intelligence that could potentially displace them from a growing list of occupations. Nearly every day articles and online videos highlight new technologies. We learn about machines being tested to deliver packages to homes autonomously. A robotic interviewer in Sweden now questions job applicants in an attempt to eliminate human bias from the hiring process. And researchers are working on an ocular implant for humans to record everything their eyes see during the day.

As companies continue to incorporate new technologies, making machine learning and robotics common in almost all workplaces, more and more working adults need to adapt to computerized work activities. Many need to move into new jobs raising their skill levels, or they will be out of a job altogether. According to SREB's *Unprepared and Unaware: Upskilling the Workforce for a Decade of Uncertainty*, adults with the lowest levels of skills — typically those with a high school credential or less — are most vulnerable to these changes.



If states and industry leaders do not act quickly to prepare employees for these workplace transformations, 18 million or more adults will find themselves in low-paying positions or out of a job and increasingly reliant on public services. Businesses will struggle to fill middle- and high-skilled positions. Children — future workers — will face similar struggles and likely be unprepared for future positions, worsening these problems for states and businesses.

This brief was prepared by Meagan Crowe, policy analyst, under the leadership of Jeff Gagné, director of policy analysis, and Joan Lord, vice president of education data, policy research and programs.

Most of the
50 million workers
in the region will be
affected by automation
in the coming decades

If state and business
leaders do not act

18
million

workers and their
children could be unemployable or
stuck in low-wage jobs:
an endless cycle
of poverty

This multigenerational cycle, combined with rising workforce skill demands,
means more workers of all educational attainment levels will be:



unemployed or
underemployed



earning incomes below
the poverty level



reliant on
state services

Just 5% of jobs are completely automatable, but
44% of all work activities have automation potential.
In the top 5 industries the potential is often greater:



Note: The top five industries employ the most people.

37%
workers
highly vulnerable
to rising workforce
skill demands

59%
vulnerable workers
employed in the
top 5 industries
in 2016

Business & industry
will need increasing
numbers of workers
with middle & high
skills

Are students prepared?

Parents today: 25 to 44 year-olds

37% had a high school credential or less in 2017

Of 8th graders whose parents had no education after high school

36% were below Basic on NAEP reading and

48% were below Basic on NAEP math

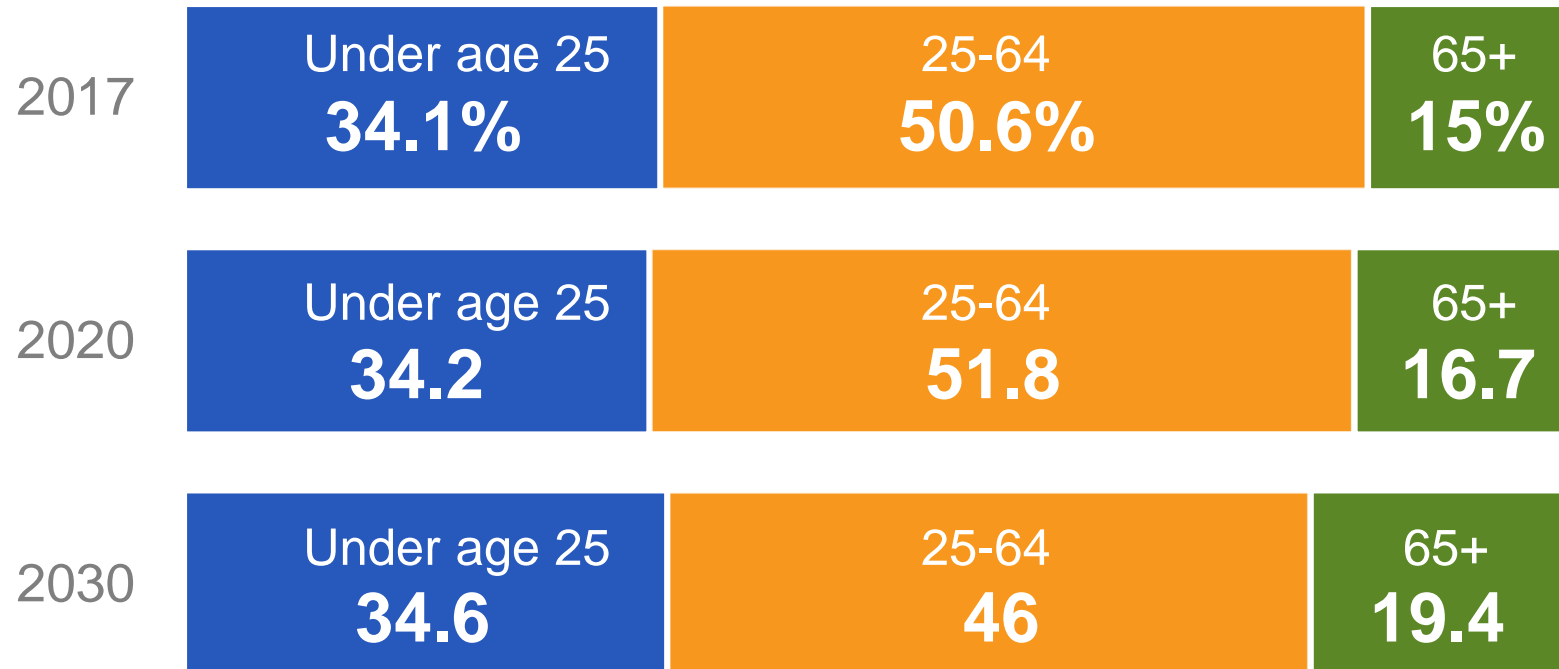
These percentages were just

22% 32%

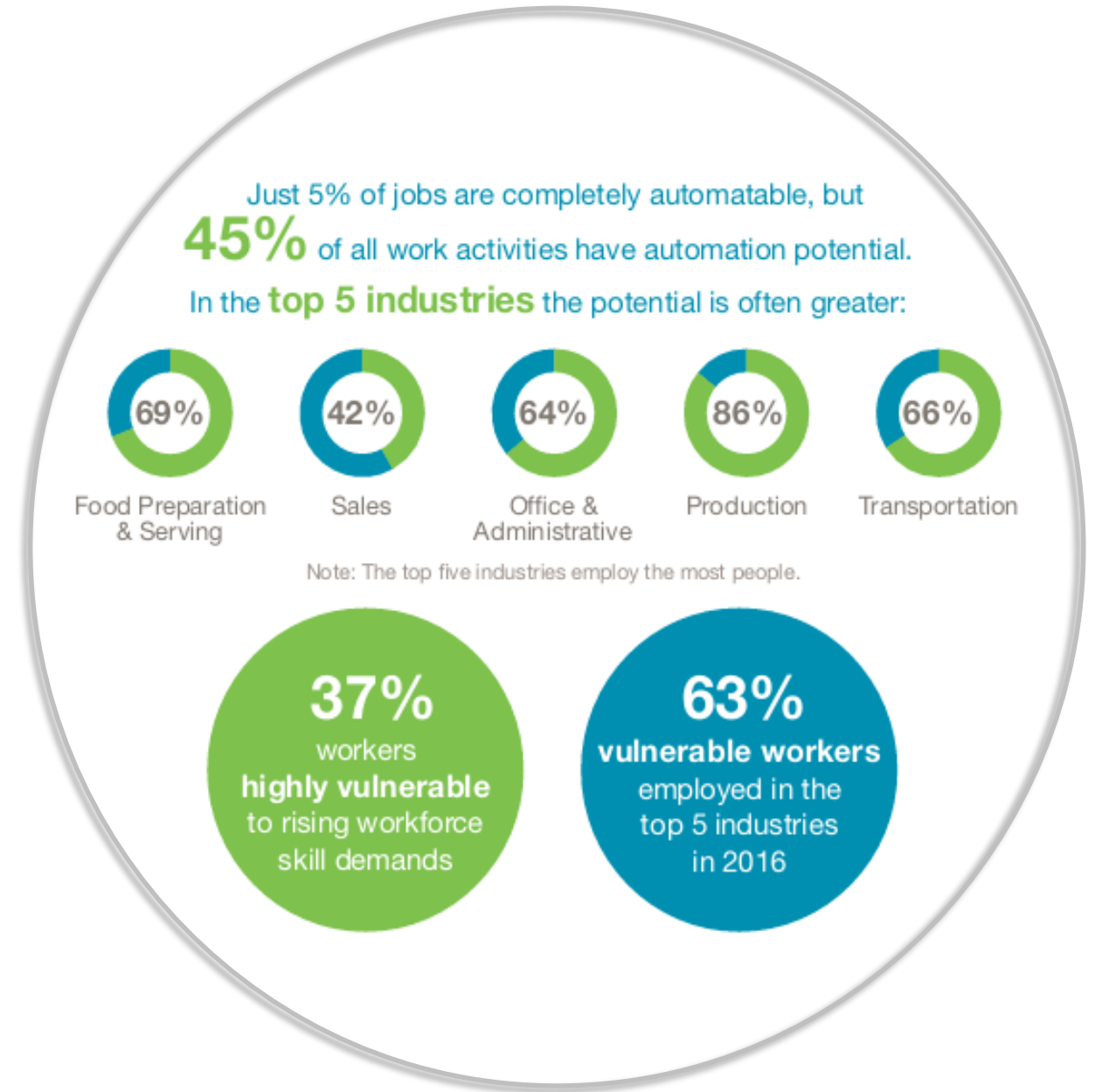
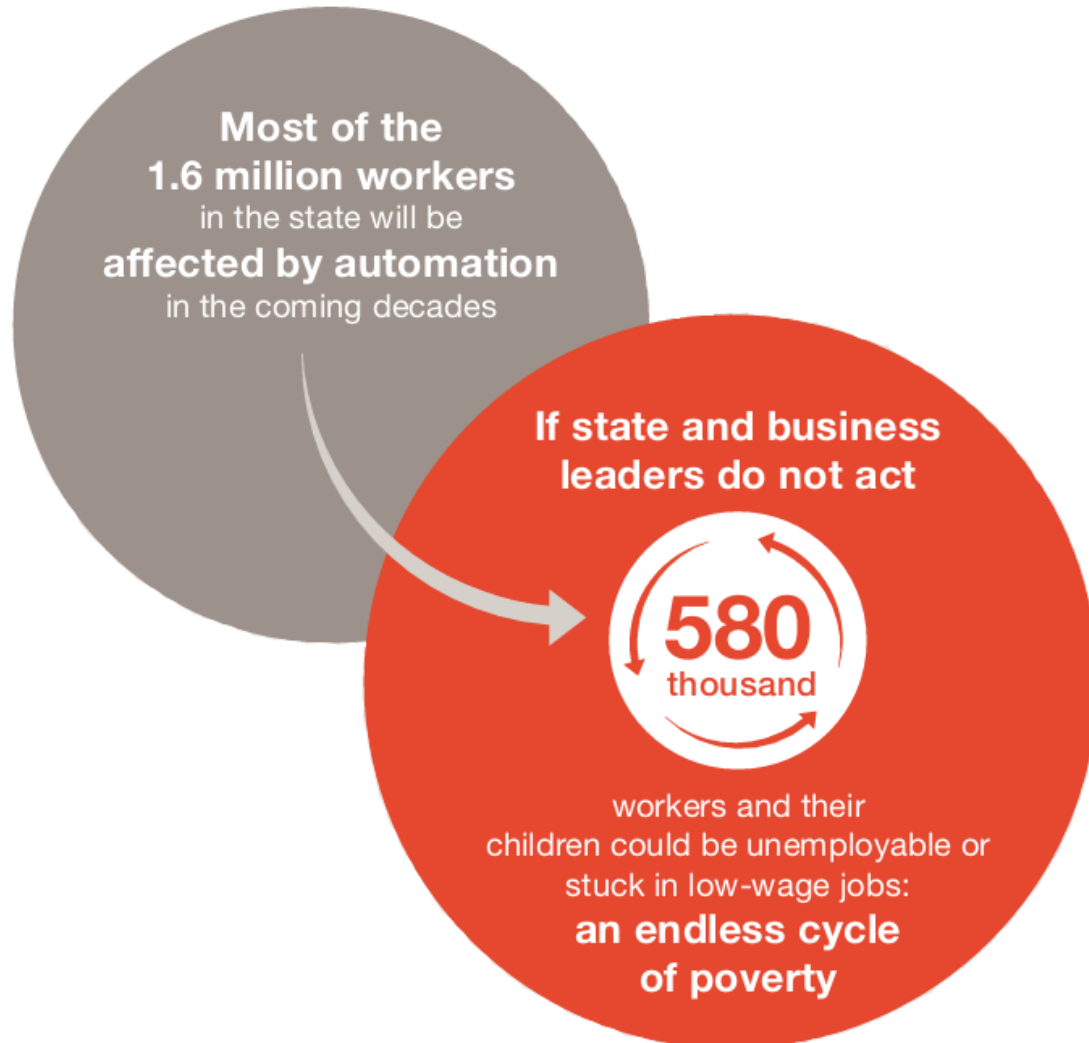
for students whose parents had
some education beyond high school

A More Dependent Population

By 2030, Oklahoma will have about 46 working-age adults to provide for every 54 dependents (children, youth and senior adults).

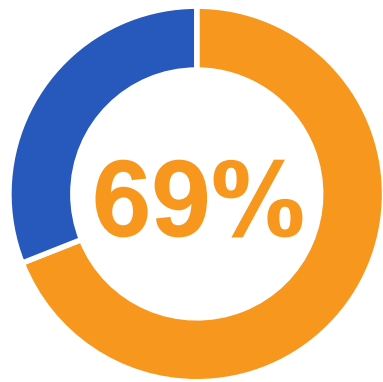


In Oklahoma:

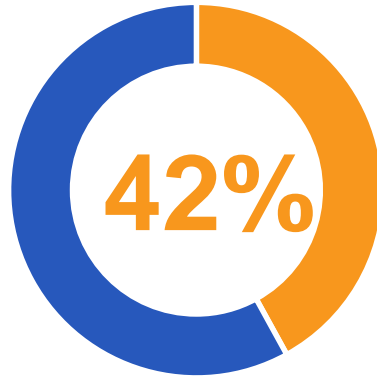


Pre-Pandemic Total Automation Potential

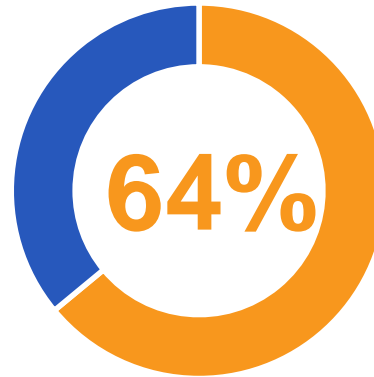
Work activities in the Top 5 Employing Industries



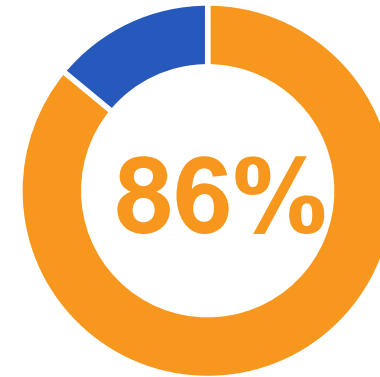
**Food Preparation
and Serving**



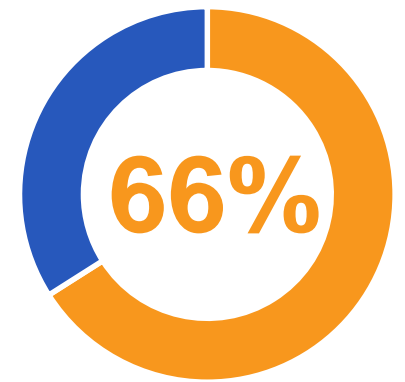
Sales



**Office and
Administrative**



Production



Transportation

By 2025 – no longer 2030 - accelerated digital adoption due to the pandemic could eliminate the full-time equivalence of

- **57,000 positions** at the most conservative rate,
- **435,000 positions** at a midpoint rate, or
- **832,000 positions** at the fastest estimated rate.

Percentage of the Workers that are Vulnerable During the Pandemic in Each Top 5 Industry



...together, they make up one-third of the total workforce in Oklahoma.

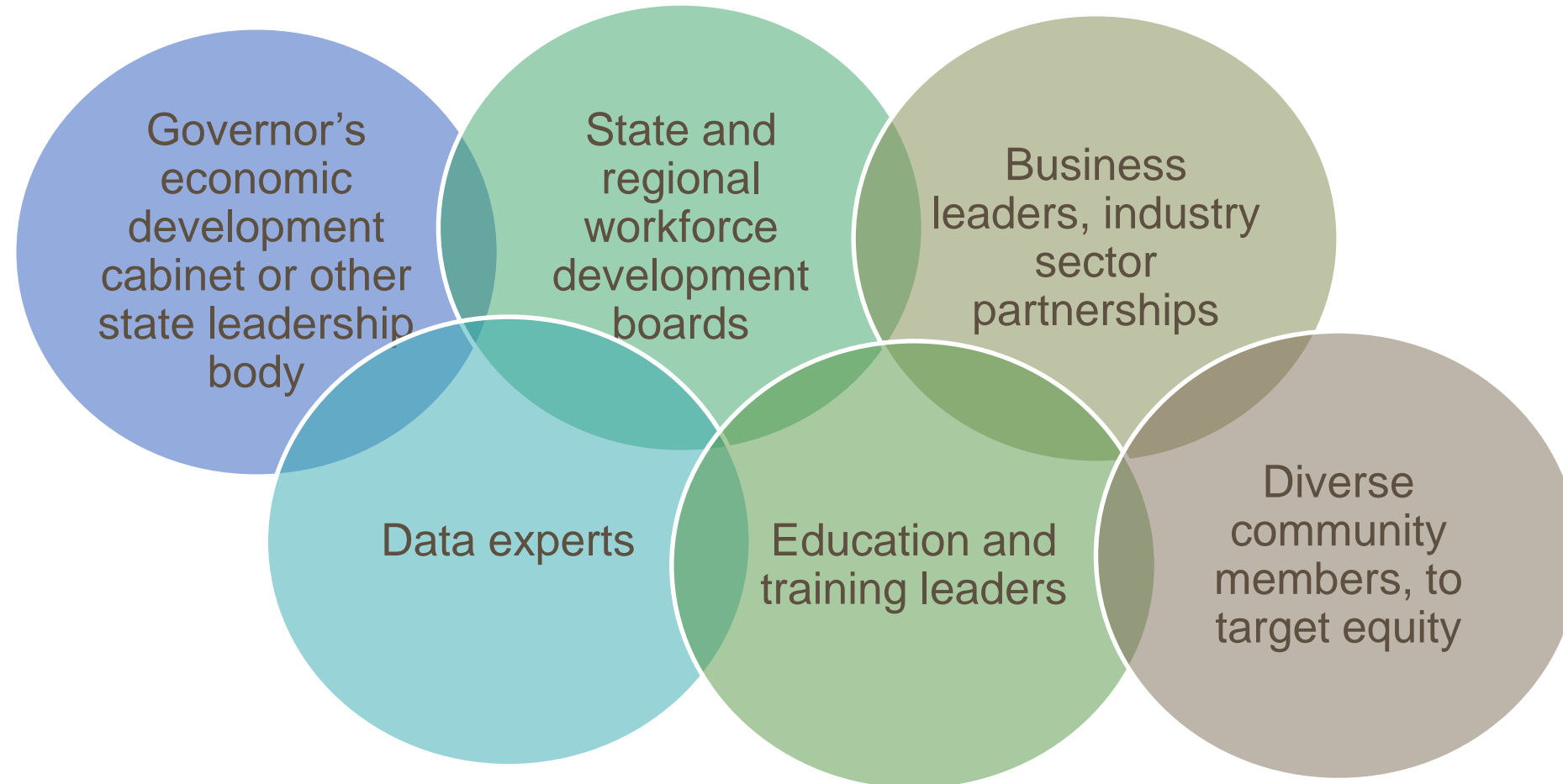
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Importance of Workforce Data

Unified Vision of Workforce

1. Engage state leadership bodies and partners
2. Analyze data in rapid cycles
3. Prioritize and coordinate action

Engage leadership bodies and partners



Prioritize and Coordinate

Also thinking about...



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Characteristics of Quality Career Pathways

Career Pathways

Driven by labor market demand and comprised of 5 essential elements, rigorous, relevant career pathways include:

- College-ready academic core with challenging technical studies
- Align three stages of learning
- Create quality guidance systems beginning in the middle grades
- Access to accelerated learning options
- A more prosperous future

Steps in Developing Career Pathways

1. Identifying and Engaging Key Stakeholders and Defining Goals of the Career Pathways System
2. Mapping and Assessing Career Readiness Policies, Programs, and Industries
3. Identifying Knowledge, Skills, Dispositions, and Competencies for Careers
4. Planning for Implementation and Continuous Improvement

Career Pathways Programs of Study

Lessons Learned:

- Change is HARD
- Historical Barriers: School - College - Industry
- Compete vs. Collaborate
- Poor Communication
- Declining Resources
- Inefficient Program Alignment & Delivery
- Time is the Enemy: 12-month process
- Persistence Required

The challenge

How do we provide more young people with an education that connects the classroom with the workplace and prepares them to succeed in **postsecondary education *and* in-demand careers?**

The solution

Transform education with rigorous, relevant **career pathways** that align secondary, postsecondary and workplace learning and lead to **postsecondary credentials** that help individuals secure good jobs.

Double the percentage of young adults who earn **postsecondary credentials** by age 25 over the next decade.

Georgia's Pilot *Nursing Career Pathway*



Georgia's Pilot *Nursing Career Pathway*

Level	Credential	Employment
High School CTAE-College Prep. (9-10) College Ready (11) College Credit (11-12) 26-hours Dual Credit Nursing Prerequisites & Universal Transfer	HS-Diploma: Life-Learner Industry-Valued-Certification Nursing Assistant	Entry Employment NA High Wage-In Demand Economic Sector
Technical College 68 credit hours	Advanced Credential LPN-Diploma (35) Associate Degree ASN:LPN-to-RN (33)	Family Sustaining Wage Jobs LPN Career Track RN
University 42 credit hours	Bachelor Degree BSN (30) + (12) State Requirements	Career Advancement BSN

COVID-19 makes our future ‘the next exit’



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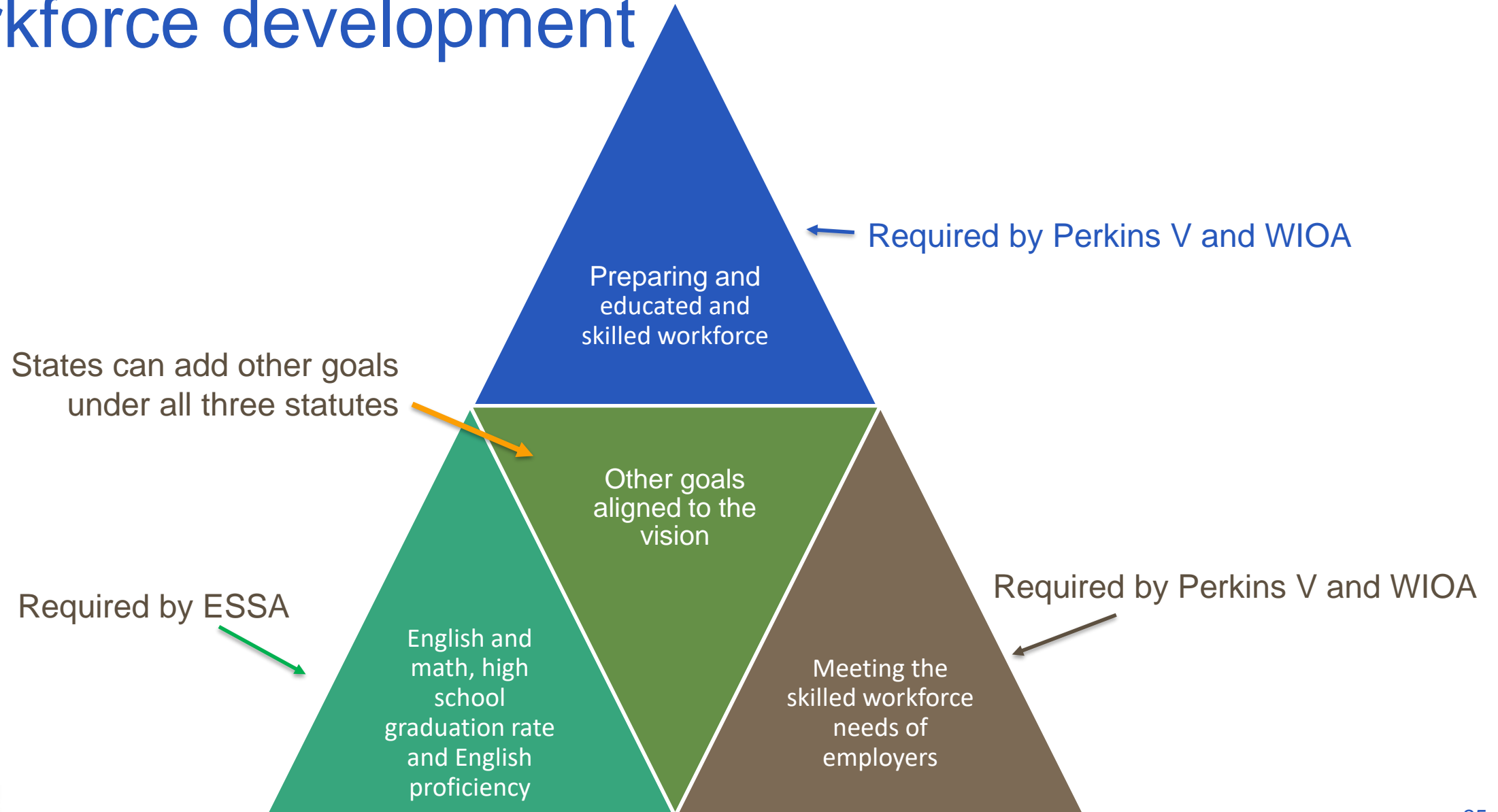
Working Toward a Unified Vision

States' Workforce Needs

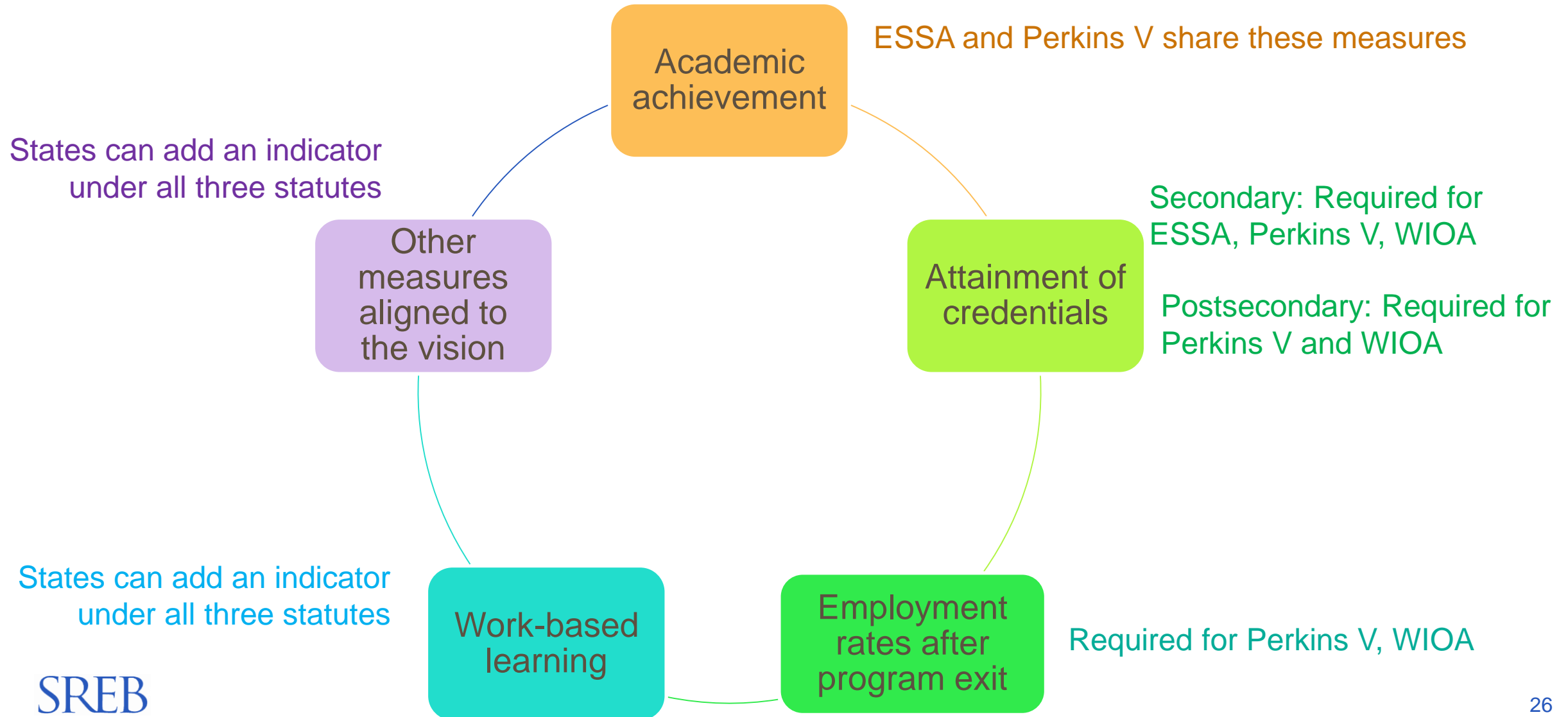
A systemic approach to preparing students for careers and postsecondary options:

- at all education levels
- align federal ESSA, Perkins V and WIOA efforts and use funding wisely
- with agencies working together to develop seamless pathways that lead to meaningful credentials and degrees

Set one “north star” vision for K-12, CTE and workforce development



Use the required accountability systems to set a coherent set of performance expectations toward the vision



Ensure that your programs help everyone take part in achieving the vision

Career pathways

- Share labor market data
- Target the same set of in-demand industries
- Use a shared set of criteria and processes to develop high-quality pathways
- Get K-12 students involved earlier

Work-based learning

- Focus funds on WBL in the most in-demand fields
- Articulate what high-quality work-based learning looks like

Equity

- Collaborate on professional learning, plan together, share resources
- Coordinate support services
- Engage shareholders together

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