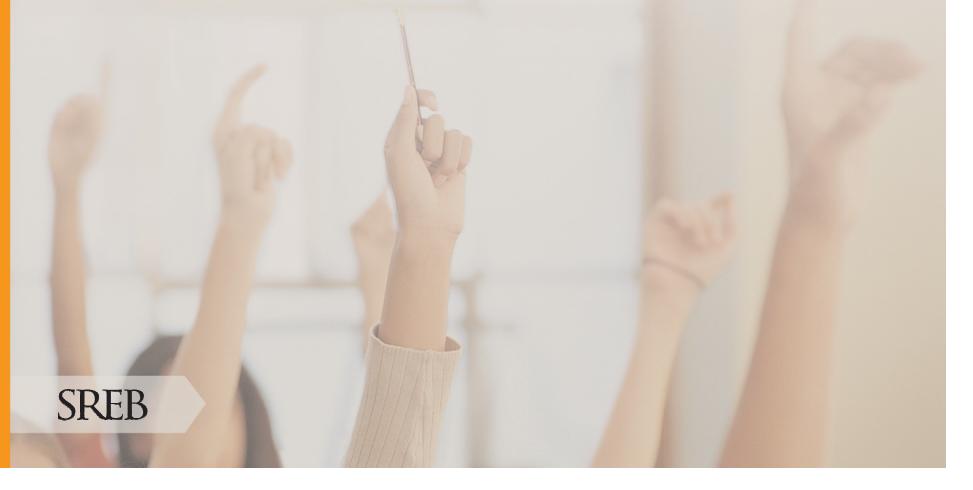
### Progress is Stalled: How You Can Accelerate the Pace

Presentation to SREB 2016 Annual Meeting Gene Bottoms, Senior Vice President

Gene.Bottoms@SREB.org



Better alignment between state workforce opportunities and college and career readiness is needed now.

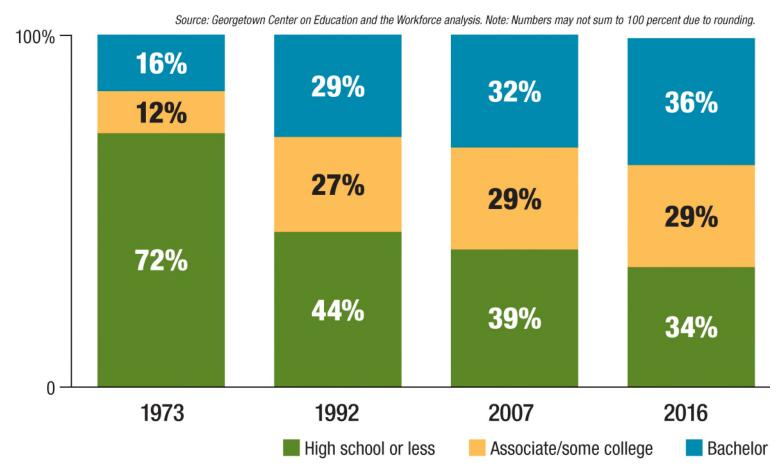
Since the 1970s, the U.S. has seen a steady rise in the education needed to obtain a good job.

Based on current trends, by 2020, 65 percent of all jobs will require some postsecondary education and training that leads to advanced credentials — i.e., associate or bachelor's degrees or higher.



#### Rise in **Education Levels** for Jobs

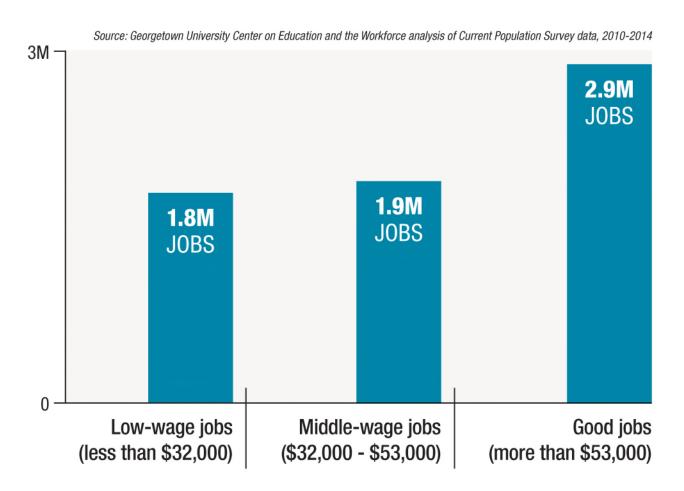
1973 to 2016





#### Jobs Added in the Economic Recovery

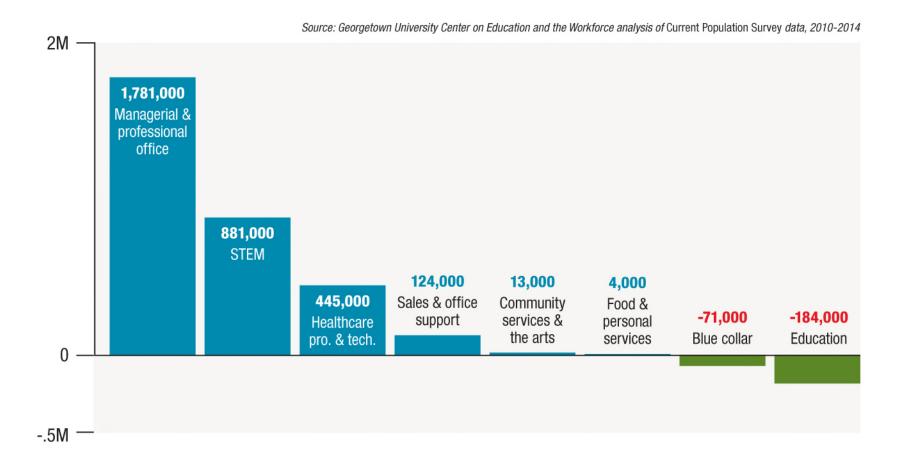
Good jobs account for 44%. Low-wage jobs stand at 29% (2010-2014)





### Areas Representing the Majority of Good Jobs

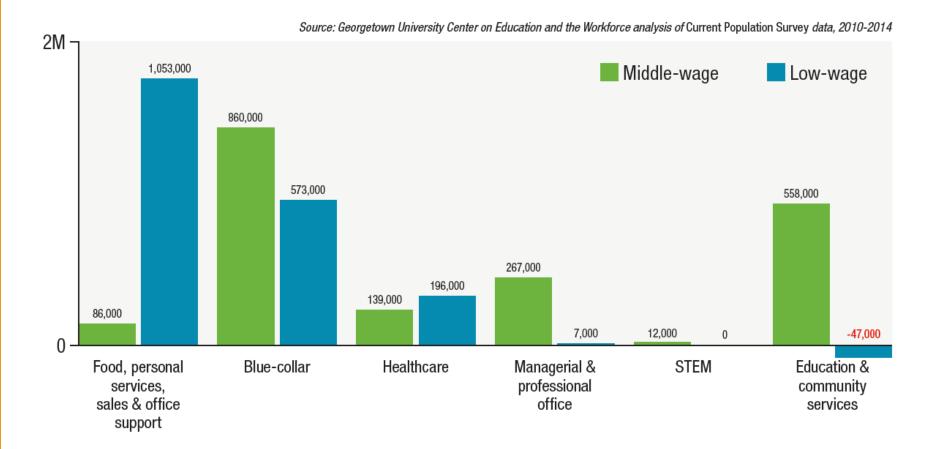
Employment change in high-wage occupations, 2010-2014





### Areas with Majority of Middle- and Low-Wage Jobs

Job growth recovery, 2010-2014





#### The Great Skill Mismatch

Job Openings Rise, Hiring Slows



**Looking for Jobs** 

**Help Wanted** 

**SREB** 

## **Skills most needed** to succeed in a changing workforce



#### APPLIED KNOWLEDGE

- Reading
- Writing
- Mathematics
- Science
- Technology
- Critical Thinking



#### **PERSONAL SKILLS**

- Integrity
- Initiative
- Dependability & Reliability
- Adaptability
- Professionalism

#### **PEOPLE SKILLS**

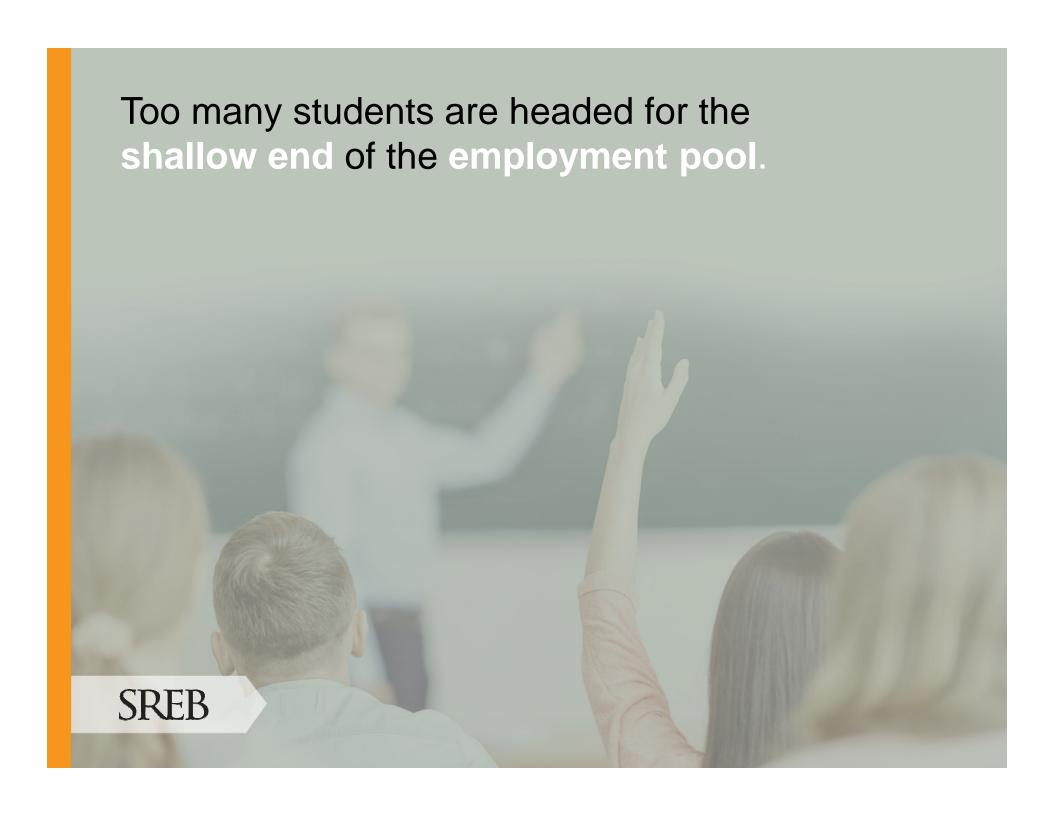
- Teamwork
- Communication
- Respect



#### **WORKPLACE SKILLS**

- Planning & Organizing
- Problem Solving
- Decision Making
- Business Fundamentals
- Customer Focus
- Working with Tools & Technology

**SREB** 



We're preparing
60% of students for
the 33% of jobs
that are low-wage.

We're preparing
40% of students for
the 67% of jobs that are
good- and middle-wage.

**60%**Shallow learning

40%
Deeper learning

**SREB** 

**Shallow Education** 



### **Deeper Learning**



## **Unemployment Rates** of Three Groups

Select SREB states, 2015

Source: Bureau of Labor Statistics

	Under Age 25	All Workers	Adults PS Certified
State A	10%	4%	7%
State B	13%	5%	15%
State C	15%	6%	8%
State D	16%	6%	4%



### Pathways vs. Expectations

#### National transcript outcomes of 2013 HS graduates

Source: Education Trust.

Pathway / curriculum completed	% who completed	% who planned bachelor's or higher	% who planned associate or higher
College and Career Ready	8%	77%	11%
College Ready	31%	78%	12%
Career Ready	13%	52%	22%
No Cohesive Curriculum	47%	61%	17%



#### Career and Technical Education Concentrations

High Schools That Work schools, 2014

	College-ready core + Rigorous career pathway pathway	College-ready core + Weak career pathway	Weak academic core + Career-ready pathway
Completed all of HSTW-recommended academic core	15%	14%	71%
1. Met college-readiness standards			
Reading	81%	64%	40%
Math	81%	64%	50%
Science	78%	62%	45%
2. Percentage with postsecondary aspirations			
BS degree or higher	73%	63%	46%
AA/AS/Postsecondary training	19%	20%	24%



# High school career pathways must be aligned with postsecondary and workforce opportunities.

The number of students choosing CTE career clusters has **declined** since 2007, especially in high-demand clusters.

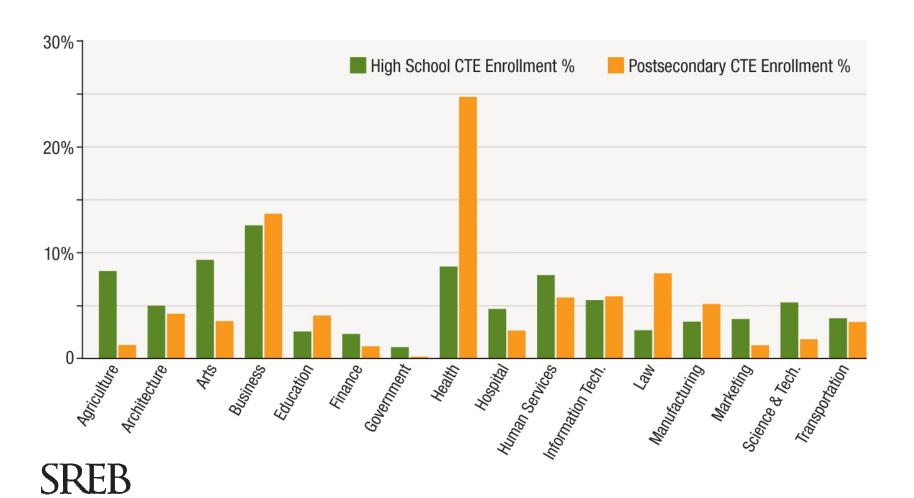
There is a **disconnect** between career pathway enrollments and labor market opportunities.

There are **disparities** between high school CTE concentrations and postsecondary career clusters.



## Career and Technical Education (CTE) **Enrollments** — High School vs. Postsecondary

Five-year average percentages (2011-2015) by career cluster



### Projected Needs in Computer Science Workforce

By 2020 for computer science-related occupations

Occupation	Percent of Total by Education Level				
Occupation	Total	HS	SC	AA	BA+
Computer software engineers, applications	593,000	3	7	6	84
Computer software engineers, system software	453,330	3	7	6	84
Database administrators	113,640	3	7	6	84
Computer systems analysts	597,800	2	17	0	81
Operations research analysts	63,690	8	6	9	77
Computer programmers	358,530	8	9	12	71



## A vision for new high schools that work:

### **Accelerated Career Academies**

Connecting high school, postsecondary studies and the workplace



#### The road to the **middle class** begins with:

- 1 Increasing greatly the college- and careerreadiness of high school graduates
- 2 Structuring career pathway programs that
  - span high school and postsecondary studies
  - align with good career opportunities
  - are combined with a college-ready academic core



#### **Actions** States Can Take

Developing career pathways that align with the workforce and postsecondary studies

Pay attention to the Council of Chief State School Officers' (CCSSO) grant for career pathway needs assessments:

Delaware North Carolina

Kentucky Oklahoma

Louisiana South Carolina

Mississippi Tennessee



#### Six Areas of Focus

Addressed by state needs assessments for career pathways

- 1. Labor market data
- 2. Rigor and quality in career pathway programs of study for all students
- Career-focused accountability system
- 4. Scaled pathways that culminate in credentials of value
- 5. Alignment of state and federal funding streams
- 6. Cross-institutional alignment



#### Accelerate the Pace: Redesign Senior Year

Blend high school and postsecondary studies

- Allow students to earn 30 hours of college credit
- 2. Blend college and high school studies
- Retain the senior-year high school experience
- **4. Personalize** the design for:
  - Earning an advanced credential
  - Earning 30 hours toward an associate or bachelor's degree
  - Creating a transitional bridge between high school and postsecondary education.



#### Accelerate the Pace: Give Accountability Points

Award them to each career pathway student who:

- Completes a true college-ready core and at least
   4 quality courses in a career pathway
- Meets college readiness standards in literacy and math or meets career academic readiness standards in literacy and math (KY)
- Meets technical readiness standards by acquiring a credible industry credential that earns significant credit toward an advanced postsecondary credential or degree (FL)



#### Accelerate the Pace: Give Accountability Points

Award them to high schools that:

- Adopt new career pathway programs aligned with growing job opportunities (DE)
- Redesign existing pathways to reflect changing workplace requirements and provide more advanced postsecondary credits (TN)
- Redesign the senior year so it leads to an advanced credential or significant credit toward an associate or bachelor's degree (GA)



## Kentucky College & Career Readiness Measures

College Ready (1 Point) A student must meet benchmarks on one of the following	Career Ready (1 point) A student must meet benchmarks on one from each of the following columns		· ·	Points) must meet one from <u>each</u>
	Career Ready Academic	Career Ready Technical	College Ready Academic	Career Ready Technical
ACT or COMPASS or KYOTE	ASVAB or WorkKeys	KOSSA or Industry Certificate	ACT or COMPASS or KYOTE	KOSSA or Industry Certificate



## Kentucky Career Ready: Accelerating Change

College and Technical Career Ready		
2011-2012	13%	
2012-2013	18%	
2013-2014	27%	
2014-2015	33%	

Academic and Technical Career Ready Only			
2011-2012	8%		
2012-2013	12%		
2013-2014	18%		
2014-2015	21%		



## Kentucky half-point Bonus: Accelerating Readiness for Career-Oriented Students

Administrators, counselors, and teachers provide students with a **program of study** that includes:

- a college-prep academic core
- a four-course sequence of CTE courses

CTE teachers are trained to design more rigorous assignments with embedded applied academics.



## **Accelerating Readiness:** Fix Low-Performing Middle Grades and High Schools

**Redesign** low-performing high schools with rigorous pathways that

- align with a solid academic core
- lead to postsecondary credentials that help secure good jobs

**Restructure** low-performing high schools to include elements in the "Credentials for All" report • See: SREB.org/CTECommission

**Reform** middle schools feeding into low-performing high schools using "A New Mission for the Middle Grades" report

Align students' assignments with grade-level work

Create a strong career and college counseling program



## **SUMMARY** Accelerate the Pace to Meet Workforce Needs

- Align more high school and postsecondary pathways to high-demand and high-paying career fields
- Combine a college-ready core with a career pathway program of study
- Redesign the senior year to allow prepared students to earn an advanced credential or significant credit toward a AA/AS/BS degree.



## **SUMMARY** Accelerate the Pace of Change by:

- Redesigning assignments in the middle grades and high school in all core academic courses to state college- and career-readiness standards
- Establishing an **accountability system** that values both college- and career-readiness standards
- Using SREB's CTE commission report as a framework for redesigning low-performing middle grades and high schools